MOBILE GROUP BLOGGING IN LEARNING

A CASE STUDY OF SUPPORTING CULTURAL TRANSITION

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Abstract

A mobile group blog is an example of a Web 2.0 social space, as well as a tool for the instant collection of contextual information, the immediate sharing of information and later reflection. Records in the form of multimedia created through mobile blogging can assist people to keep a versatile representation of artefacts they encounter on the move in everyday life. Overseas students are an example of a large group of people whose cultural learning could be supported by this technology. They could share contextual information and their own stories with other people currently experiencing the host culture, as well as people who do not have the opportunity to experience the host culture first-hand.

To examine and evaluate how the mobile group blog could be applied in learning, a case study was conducted involving overseas students. This research explored the suitability, appropriateness and benefits of a mobile group blog in assisting overseas students to manage their culture shock. It illustrates how the mobility of mobile devices assists the capture of contextual information on the move when overseas students start adapting to the new environment. The group blog site provided a platform to share and exchange their experiences and thoughts, as well as a resource of information on authentic cultural transition for future students. Four sub-studies were conducted around this theme.

The first two studies investigated the demands and needs of a mobile group blog application in cultural transition.

The third study investigated real and practical mobile blogging activities with a group of twelve Chinese overseas students who had newly arrived in Nottingham.

The fourth study was conducted in China. In this study, a number of Chinese students who intended to study abroad were asked to evaluate the contents of the mobile group blog created by the twelve Chinese mobloggers in Study three.

Findings from the four studies reveal the possibilities, suitability, strengths and weaknesses of the mobile group blog in assisting cultural transition. The thesis also presents positive feedback from participants as well as feedback on the limitations of this application. Then as added value to this research, it also suggests future educational applications of the mobile group blog.

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Chapter 1- Introduction

The past decades have seen the rapid development of Information Communication Technology (ICT) in everyday life. Digital technology enables widespread communication at a distance and flexible access to massive volumes of information. The appearance of ubiquitous electronic technology and wireless networks has led to the widespread deployment of mobile devices which allow us to access and manipulate information anytime and anywhere (Roussos, Marsh and Maglavera, 2005). Many network operators launched third generation (3G) networks in 2004 and 2005, and these promise fast, broadband−width connections (Attewell, 2005). Rapid developments in mobile technology, particularly in the increasing availability of low-cost mobile and wireless devices and the associated infrastructure, offer people greater mobility and flexibility for obtaining information and acquiring knowledge. Technology, with its capabilities and convenience, is increasingly driven by the demands and desires of people in today's community. People are increasingly attracted more and more to the idea of becoming connected a trend which pushes back the boundaries of societal mobility. The information explosion in this digital society offers both challenges and opportunities for people to learn and socialize. Learning through socializing in everyday contexts has become increasingly possible and important, with the support of a mobile technology-facilitated environment.

1.1 RESEARCH BACKGROUND

This overview of the effects of technology, especially mobile technology on the minutiae of daily life addresses the opportunities for learning provided by mobile technology and social software.

1.1.1 Mobile technology and opportunities

Mobile technology is becoming highly versatile in terms of both hardware and software. "Ubiquitous computing", a term coined by Mark Weiser, keeps people continuously connected to others as well as to Internet applications and services (Weiser, 1991). Mobile technology extends the opportunity for people to embrace the Internet in their everyday life for

information exchange globally. The word 'mobile' not only suggests that technology is now becoming portable but also that people themselves are mobile and they therefore need connection, communication and interaction while on the move. Mobile technology is designed and developed for the purpose of connecting people on the go, supporting contextual communication and providing real-time information sharing. It has become an increasing part of people's everyday life and also now enters into their learning.

The integration of ubiquitous and wireless networks and the convergence of contemporary media and communication have led to the widespread deployment of mobile devices. Mobile technology has been applied in communication, entertainment, exercise, and travel. Everything accessible through mobile devices in the future will also be tailored to geographic location, thereby allowing people to access relevant information wherever they happen to be in the world. Globally and locally, manufacturers are aiming to get people to utilize mobile devices. Nokia, in its agenda of 2015 (Nokia, 2008), envisages that people will be able to share spatial, temporal, social and environmental information through adaptive mobile applications and services. Motorola CEO Ed Zander pledged the Motorola mission to make everything mobile: communication, music, photos, Internet, television and especially allowing people to create their own content wherever they want (Ogg, 2007). Without doubt, the development of mobile technology is contributing to creating, delivering and sharing digital content anytime and anywhere.

As communication devices become more mobile, and as lifestyles adapt to this mobility, learning can also be transformed. People may require innovation in learning approaches, pedagogy, strategy, and policy. As education in the 21st century becomes increasingly both global and individual, the challenge is to make growing use of ubiquitous technology to fill the gap between traditional education and more personalized learning systems.

1.1.2 Mobile technology in learning

We spend much of our everyday lives listening to and registering, more or less accurately, the events around us, and then trying to reconstruct the most important and necessary pieces of information that could be more valuable. Unlike a mechanical readout from existing stored

knowledge, this process is significantly creative. Computational devices can assist in human record-taking, particularly when multiple streams of related information result in experiencing information overload. Documenting all available information and knowledge for later review or reflection enables people to outsource the cognition of registering and remembering to use mobile devices. By enabling the creating, optimizing, delivering and sharing of artifacts through mobile technology, learning is resourced.

Mobile computing can support learning in authentic contexts, at any time anywhere. This leads to another term, namely 'mobile learning'. Mobile learning refers to using mobile devices for educational purposes. O'Malley et al defines mobile learning as:

"Any sort of learning that happens when the learner is not at a fixed, predetermined location, or learning that happens when the learner takes advantage of the learning opportunities offe*red by mobile technologies."* (O'Malley,Vavoula, Glew, Taylor, Sharples and Lefrere, 2003, p6)

'Mobile', as many people understand it, means 'portable' and 'movable'. Learning, in a broader sense, may thereby occur anytime, anywhere. Mobile technology brings added convenience to acquiring information for learning. Information thus can be captured and collected through mobile technology at anytime, anywhere for knowledge acquisition.

Piaget believed that all children have a biological predisposition to explore their environment and thereby construct knowledge through active exploration (Piaget, 1954). Piaget and Vygotsky regarded cognitive development as a slow and steady move away from everyday cognition towards a scientific reasoning (Smith, Dockrell and Tomlinson, 1997). In fact, throughout their life a person may encounter challenging experiences every day and thereby continuously learn from the world. In this way, learning is a feature of everyday activity, an integral part of human life, and it embodies and enriches the very soul of the human being (Jackson, 2004). The 21st century will witness an explosion of human knowledge and technology. Students can no longer know everything through traditional institutions. Learning never ceases when people leave school and it can happen at any time anywhere, including in their everyday social lives.

1.1.3 Social software in learning

Like mobile technology, social software that encompasses one or more elements such as support for conversational interaction between people or groups, social feedback and social network (Boyd 2005), has also been successful in meeting the needs of users who wish to share their experiences in everyday life. The blog is one of these popular applications. The blog is an easy-to-maintain web site regularly edited by individuals, or a group of people, in reverse-chronological order. It contains entries of commentary, descriptions of events, or other material such as graphics, audio and video. The content of blogs can range from personal diaries and opinion sites to amateur publishing on sports, politics, events and reviews. This social software also becomes mobile. Some blog sites like Twitter[1], allow bloggers to share thoughts and feelings instantaneously with friends and family: this is much faster than e-mailing or postal mail.

Social software coupled with wireless mobile technology potentially provides the basis for enhancing learning in an environment that stimulates reflection, critique, collaboration and user-generated contents.

1.2 PROBLEM STATEMENT

The aim of this dissertation is to explore how the integration of mobile technology and social software could assist learning in everyday life; the mobile group blog is one such application. The mobile group blog enables a number of people to post entries to the blog site through mobile devices. This research specifically focuses on a group of Chinese overseas students as an example of this type of (out of school) learning – one where many benefits can be gained if the technology proves successful. The new technology-mediated learning could be one solution for assisting overseas students in adjusting to (that is, learning the local culture) and solving problems in everyday life. This research, in applying the mobile group blog assisted learning, could then provide a model for other forms of learner assistance in more formal or traditional settings of education.

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[1] Twitter website: http://twitter.com/

1.2.1 The track of mobile technology in learning

Learning starts at the moment of a person's consciousness about the world and continues beyond the end of the student's formal education. Learning opportunities exist at all ages and in numerous contexts: at work, at home and through leisure activities, not merely through formal educational channels such as school and university. The rapid development and globalization of a scientific and technological knowledge-based economy requires people to continue their learning for social change, in order to keep pace with the changes in their lives. The demand for high-skilled workers, in particular high-skilled information and communication technology workers in global society has increased due to the engagement of new technology (Worldbank, 2003). People are required to update their knowledge regularly to the changing world.

Learning in informal settings in everyday life is unlike learning in the classroom. It has more instability, uncertainty and non-sustainability - as well as flexibility and randomness. Mobile technology is well-suited to everyday learning because, as previously stated, it can be used to capture and deliver information at any time and any place. Using mobile technology in the context of learning may assist the learner to resolve uncertainties, explore flexibility, and cater for randomness.

However, we notice that mobile learning originated from classroom-based learning. In the 1990s, some organizations and universities in Europe and Asia began to develop and evaluate mobile learning for students, such as the Palm Education Pioneer project (Mark, 2003). Nevertheless, at this early stage, mobile learning focused more on the transition of knowledge from existing media such as textbooks to mobile devices. Further, there was no literature on learners' experiences on mobile learning at that time (Kukulska-Hulme and Traxler, 2005);mobile learning was purely receptive to learners.

Later, from 2000, more mobile applications in formal and informal learning settings (such as MOBIlearn[2], MyArtSpace[3] and m-Learning[4] in the UK) have been implemented and evaluated.

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[2] MOBILearn project website: http://www.mobilearn.org/
[3] MyArtSpace project website: http://www.ookl.org.uk/web/index.php

In this way, the practices of mobile learning took its first steps out of the classroom and started paying attention to learners, involving greater interaction between the learner and mobile devices, not only providing learners with more knowledge but also awakening their initiatives for seeking knowledge.

Nowadays, with location aids and sensor technology, people can gain more knowledge from their social contexts, learning from what they see, what they hear, or what they talk about with others, rather than solely from mobile devices. With the advantage of mobile technology, instant communication between different locations could provide greater opportunity of acquiring knowledge from many different contexts. Learning with mobile technology is thus a new stage of generating knowledge from the real world; retrieving knowledge through technology and applying knowledge back to the real world. Mobile technology assists in reducing the time of this process, coming from and going back to the real world and breaking the barriers of physical borders. So what could new practices of mobile learning achieve?

1.2.2 Mobile group blog is a solution

 For creating and sharing new knowledge through communication, a learning community is a social context in which to promote learning goals. In the past, due to physical isolation, the communication and connections among community members were not always efficient. Mobile technology solves the problem by bridging people in different locations, supporting people's instant communication when they are on the move. Mobile devices can save the memory of generated knowledge. The online space of a blog provides the place to store knowledge for people to share and retrieve. The mobile group blog has all these features: collecting new generated knowledge, sharing knowledge through mobile network immediately and delivering knowledge to people in new contexts.

But how will people use the mobile group blog? Statistics from Technorati (Sifry, 2006) highlighted that more and more people had started to use a blog in everyday life for different purposes such as fun, work, study or as a diary of their experiences. Some people have developed a habit of very regular blogging. Blogging is a process of generating information,

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[4] m-Learning project website: http://www.m-learning.org/

rather than searching for information. A generation that grows up with new digital technology is confident in attempting blogging or mobile blogging. The appearance of group blogs gathers different personal blogs in terms of similar interests, topics or some specific purpose. The group blog thus also provides a platform of communication and forms an online community for a group of individuals who would like to generate, share and retrieve information.

This thesis proposes to investigate how successfully a mobile group blog can support a community of learners when they are out-of-school in everyday life. It is anticipated that the mobile group blog will not only provide a space for learners to share their 'mobile' information and experiences, saving all the content entries, but also constitute an online community in which people are linked real-time through individual mobile users on the go. This dynamic system, flexible in participation, time and place, fits into the uncertainty and randomness of informal learning in everyday life.

Furthermore, learning materials are not limited to the knowledge of 'expertise', which traditionally is owned and provided by other people such as teachers, trainers and authors; they can also be generated by learners themselves within this community. When people explore the real world, new knowledge is created. Learners therefore learn through reading blogs and negotiating with bloggers, as well as authoring new knowledge by themselves.

1.2.3 A potential community for application

To explore how a mobile group blog could assist in learning within a community, a group of people facing problems in transition in their everyday lives were selected to form a special community. These students were attempting to adapt themselves to the host culture by learning its knowledge and practices. There were few formal courses available for such transition and limited opportunities for these students to gather together each day to discuss their experiences face-to-face. They were physically isolated, nor did they know one another. For the purpose of this research, Chinese overseas university students were selected to form this blog community.

As reported in the media (BBC, 2004), the largest group of overseas students in the UK is Chinese. As well as adapting to their courses of study, these students face other challenges. It

has previously been reported that cultural issues for learners, including the potential for importing cultural imperialism from dominant western cultures, have serious implications for students in developing countries (McLoughlin and Oliver, 2000). Chinese students experience confusion and cultural shock in their everyday lives. At the same time, they are the new generation growing up in the digital world and enthusiastic about using new technology; most are already bloggers. Last but not the least, they are constantly and spontaneously learning about the host culture in their everyday lives, as a process of awareness and knowledge accumulation. The mobile group blog could be beneficial in supporting learning and knowledge sharing in this context.

1.3 RESEARCH PURPOSE AND QUESTIONS

The purpose of this research is to pilot a study to explore how the mobile group blog works and the benefits for cultural transition. The research raises the following questions:

1. Will the mobile group blog be suitable and acceptable for people to use for cultural transition and learning?

2. How easy might it be for learners to feel that they are part of the group or community making up the mobile group blog?

3. What particular benefits could the mobile group blog offer during students' experience of cultural transition?

4. How might they be guided in getting used to the new cultural environment through the mobile group blog?

5. What are people's expectations of this application, as they adopt the mobile group blog in cultural transition?

All these questions were distributed across four sub-studies according to the different stages of the research.

1.4 RESEARCH APPROACHES

As this research concerned the deployment of technology situated in the real world, studies were conducted to get data from experiences arising in a natural setting. The project relies on a step-by-step, programmatic approach, achieved through four different sub-studies. Three groups of Chinese overseas students attending the University of Nottingham for their undergraduate or postgraduate study participated in the research. Another group of Chinese students in China participated in the fourth study.

Chinese students are the largest group of international students in the University of Nottingham. Each year there are nearly 1000 new Chinese students coming to the University of Nottingham for a short exchange program for one month or for full-time undergraduate and postgraduate courses. The researcher designed and conducted two pilot studies for a needs assessment of their demands, in order to identify the gap between the current situation and what is necessary for the design; the priorities and their importance; and possible solutions and growth opportunities (Rouda and Kusy, 1995). The needs assessment concerned students' needs for cultural transition, their preferences for using blogs and their inclination to use the mobile blog. The results of these studies afforded guidance for the design and development of the mobile group blog.

The first study in 2006 involved a group of Chinese students from the University Ningbo campus in China to Nottingham's UK campus, staying for a short summer school. Shortly after their arrival, they were asked to record their thoughts and experiences using MP3 audio recorders. The purpose of this study was to discover how well the students adapted, and the main concerns and problems they encountered by giving them a technology to record experiences as they happened.

A second study was conducted with another group of newly-arrived Chinese students in 2006, who carried out group blogging about anything in their everyday life that they wished to record. This study was a fairly low- tech needs assessment for the general intended design of a mobile group blog system. The researcher also observed their personal blogs on MSN space and QQ space, which helped to distinguish the different utilities of the personal blog and the

group blog. Efforts were also made to direct these participants in starting to blog on the group blog site. Follow-up interviews and focus groups were conducted after participants had finished their three weeks' group blogging in order to collect feedback on their experiences of sharing information about cultural transition through the group blog.

Two further studies were conducted after the design and development of the mobile group blog. The first of these aimed at the practical deployment of a mobile group blog in the real world within a group of newly-arrived students in Nottingham in 2007. This study lasted for one month and each participant was loaned a mobile phone to record their experiences of enculturation through mobile group blogging. The main outcomes of their blogging activity were anticipated to highlight insights into cultural differences in everyday life and how the technology might help.

The final study evaluated the contents posted to the mobile group site by a group of Chinese students in the University of South West in China, who were prospective students going abroad for overseas studies. They were asked to read through the mobile group blog site produced by people in study 3 from Internet connected desktops/laptops. Observation, follow-up interviews and focus groups were conducted with them.

In the second and fourth studies, server log files were also collected and sent for analysis. These log files contained a vast amount of useful information ranging from who was visiting, where they came from, what time they posted an blog entry, the most-viewed pages, and what browser and IP address they used.

1.5 THESIS SUMMARY

This research is one of the first studies to apply a mobile group blog to learning. The framework of the mobile group blog as a learning community and the aspiration of assisting student sojourners learning a host culture may stimulate future design and development of new practices. Additionally, this thesis may also be a starting point for generalizing and potentially extending a valuable method for cultural adaptation with new mobile social software.

The thesis is structured into nine chapters. Chapter 2 considers relevant research literature about learning and learning with technology. Chapter 3 reviews the literature of cultural transition. Chapters 4 and 5 describe the pilot studies conducted for needs assessments before the design of the mobile group blog system. Chapters 7 and 8 illustrate the assessment of the system. More detail is given below:

Chapter2: a description of the literature review of learning and issues about mobile learning. It outlines themes of learning sciences, discusses learning within both formal and informal settings, and describes the literature of social constructivism theory of learning in everyday life. It then reviews technological applications in learning and considers mobile technology in learning. Three phases of mobile learning are discussed with examples. There follows a reflection on the benefits that mobile technology can bring. Some popular online reflective tools in learning are compared and the integration of mobile technology and social software is discussed. The mobile social software is then introduced to learning, in the form of mobile blogging. The possibilities of using the mobile group blog in learning are then stated.

Chapter 3: a review of the literature of cultural transition and the technology used. Cultural transition and culture shock is first explored, together with the problems encountered by Chinese overseas students. Then traditional supports and technology-mediated support for cultural transition are discussed. Five comparative features of cultural transition and mobile group blog are recognized.

Chapter 4: an audio diary study to explore the main concerns and observations of participants within the first month of their arrival. It also looks at the content structure for the mobile group blog design, aiming to derive more specific requirements for the structure and architecture of the mobile group blog design.

Chapter 5: a needs assessment study conducted through an established group blog. This investigates people's requests and requirements for the mobile group blog to assist cultural transition. Research questions are envisaged and discussed. There are two parts to this chapter: one describes a study of practical group blogging with digital cameras and the other reports on blog readers. The first study involves a pre-group blogging focus group, and blogging and

post-blogging interviews and focus groups. The other study reports on the reflections of post-blogging evaluators on the blog contents. The results of this chapter and of Chapter 4 are adopted as guidelines for the design of the system described in Chapter 6.

Chapter 6: a description of the design of the mobile group blog system. This chapter introduces and develops the framework of a mobile group blog for learning. The implementation of the framework starts with a comparison of different current blog solutions, followed by a proposal to select WordPress as the solution for this study. The chapter then illustrates the establishment of the group blog by describing the customization, sitemap and screenshots of the mobile group blog site. Finally, an example of how to do moblogging is demonstrated by using the Nokia N80 mobile phone.

Chapter 7: an assessment of the group blog system through an empirical study. The chapter discusses a practical field study of using the mobile group blog as designed and developed in Chapter 6. A group of newly-arrived Chinese overseas students was recruited to undertake practical mobile group blogging for four weeks. The chapter reports on an evaluation, findings, analyses and brief discussions arising from the implementation of the practical field study.

Chapter 8: an outline of a further study aiming to find out how the contents of blogs posted by the mobloggers in Chapter 7 could help students who were not living in the UK to understand the British culture and life. The methods used in this empirical study were face-to-face interviews and focus groups in China. Their feedback to the technology and contents is also described and discussed.

Chapter 9: a summary of all studies in this project and a description of the contribution made by these studies. Limitations and weaknesses of this research, together with the lessons learned, were discussed. The chapter also anticipates future work and the improvements that could be made to the design of the system.

Chapter 2- Learning and mobile learning

2.1 INTRODUCTION

This chapter presents an overview of current themes in learning science and the past and current practices of technologically-mediated learning, particularly the practices of mobile learning. According to the affordances of mobile technology, the continuity of learning from formal education to informal education, and the communication and social interaction in learning, is supported. Three historical phases of mobile learning are presented with relevant past and present projects. In this chapter, new opportunities for merging mobile technology and social software, e.g. the mobile group blog as a toolkit to assist learning, are discussed.

2.2 CURRENT THEMES IN LEARNING SCIENCE

When we talk about learning, perhaps we first think about learning in school, in the classroom. However, according to a much broader concept of learning, learning is defined as the general activity of obtaining knowledge. "Knowledge is a collection of facts about the world and procedures for how to solve problems"(Sawyer, 2002, p1). Knowledge covers symbols that represent objects, information that answers who, what, where, when and how, as well as many questions, understandings and wisdom. Learning could therefore occur at any time about anything.

Scientists define learning in more detail: "Learning is commonly divided into two broad categories: explicit learning and implicit learning. Explicit learning consists of what we normally read, write and talk about. It is conveyed via such means as textbooks, lectures, pictures, and videos. Implicit learning consists of things we learn through life experience, habits, games, experimental learning, and other 'hands-on' activities"(Jensen, 2005, p33-34). Successful efforts to acquire knowledge require a simultaneous emphasis on the practices and the environments of learning. From this description, we may understand generally that these two categories of learning are related to "formal" and "informal" learning settings.

2.2.1 Formal and informal learning

Schools, colleges and universities have not been the only methods of education and training in the experience of learning. Learning in the traditional classroom is complemented by studying at home, serving an apprenticeship, training, and informal learning outside of schools. Traditionally, what is termed "formal learning" often takes place in education and training institutions, leading to recognized diplomas and qualifications. Schools, institutes and universities are thereby the main formal settings of learning. However, professional training and learning of new knowledge also continues after school education. Put another way, learning opportunities occur at all ages and in numerous contexts: at work, at home and through leisure activities. What we term "informal learning" may take place in museums, zoos, aquariums, public environments, outdoors, homes, business and schools. Informal learning takes place outside a dedicated learning environment and arises from the activities and interests of individuals or groups, but which may not be recognized as 'learning' (McGivney, 1999). Unlike formal learning, informal learning is not necessarily intentional, and so may well not be recognized, even by individuals themselves, as contributing to their knowledge and skills. Therefore, this kind of learning always happens spontaneously but quite often, and it benefits individuals greatly in terms of their own needs.

Vavoula's study about everyday adult learning found that 51% of reported learning episodes took place at home or in the learner's own space at the workplace. The rest occurred in the workplace outside that space (21%), outdoors (5%), in a friend's house (2%), or at places of leisure (6%). Other locations were reported (14%) including places of worship, the doctor's surgery, cafes, hobby stores, and cars (Vavoula, 2005). So, for adults, learning seems to be occurring more often in informal settings. Another report from Conner also claimed that informal learning accounts for over 75% of the learning taking place in organizations today (Conner, 1997). It is further reported by Merriam that 90% of adults are engaged in hundreds of hours of informal learning (Merriam, Caffarella and Baumgartner, 2006).

From the figures above, we cannot deny that informal learning occupies a significant proportion of learning. Evidence from the study by Cook & Light indicated their adult

participants were not driven exclusively by vocational objectives, being motivated by a variety of personal goals for keeping up to date (Cook and Light, 2006). Adults' informal learning is not limited to learning a curriculum, but relies more on personal purpose. According to Moore, real learning is the state of being able to adopt and adapt knowledge through formal learning under ever-changing informal circumstances (Moore, 1998, cited by Grebow, 2002). The range of learning objectives is expanded to support every human in achieving her or his own learning goals, respecting individuals' learning preferences in everyday life. In contrast to formal learning, informal learning is a natural accompaniment to everyday life, which covers greater uncertainty, transformation and contingency. Therefore, we need more innovative designs for this informal learning.

Whatever the circumstances the learners are in, formal or informal, learning environments are grounded upon principles now emerging from the new learning sciences, such as authenticity, inquiry, collaboration and digital technology (Blumenfeld, Kempler and Krajcik, 2002). In social contexts, the learning environments are much more complex and mutable. Formal and informal learning is now a noticeable theme of learning sciences. In the next section we discuss another important theme - that is, learning in social contexts.

2.2.2 Learning in social contexts

As Rogoff discussed, learning occurs in the everyday contexts by interacting with other people and using socially-provided tools and schemas for solving problems (Rogoff and Lave, 1984, p4). Social contexts have an impact on learning, as the immediate social interactional context structures individual learning (Vygotsky, 1978). Vygotsky also pointed out the importance of transformation of an interpersonal process into an intrapersonal one by cooperative activity through a scaffolding process in the learning activities of everyday life (Rogoff & Lave, 1984; Vygotsky, 1978). There are possible roles that the 'social' factor can play in learning. First, learning is a scaffold for guided conversations out-of-class. Second, learning could be a process of interpersonal exchange within collaboration. Thirdly, learning could be social by being integrated into a community through communication with others. These senses of 'social' will be considered in the next section.

2.2.2.1 Learning as social: "scaffolded" learning

A concern for the "social context" stresses less the characteristics of the learner and more the interpersonal learning environment or learning community (Tu, 2004). Vygotsky presented a guide for curricular and lesson planning, emphasizing that school learning should occur in a meaningful context and not be separated from learning and knowledge in the "real world". Also, out-of-school experience should be related to the child's school experience (Ash and Gray, 1934). Traditional curricular domains are based on long-accepted knowledge which reflects the value and interest of verified "experts" (Banks, 1993). Knowledge was traditionally imparted through oral transmission, books and other media that stored that knowledge; both teachers and older or more experienced learners played the most vital roles in learning. Vygotsky stressed that learning is "potential development as determined through problem solving under adult guidance or in collaboration with more capable peers" (Vygotsky, 1978, p.86). Wood, Bruner and Ross described the metaphor of "scaffolding" as a model of the teacher in ideal practice. The teacher selects an intervention to provide a supportive tool for the learner, to extend their skills, thereby allowing them to move successfully towards individual accomplishment (Wood, Bruner, and Ross, 1976). However in the real world, scaffolding cannot be greatly relied on because people associated with the learners rarely actively try to be teachers, nor are they always practicing teachers in any case; they are often likely to be peers. Nevertheless, learners can also learn socially from collaboration with peers.

2.2.2.2 Learning as collaborative

Learning is a social, collaborative activity. "It can be conceived as an asymmetric type of cooperation where one person takes greater responsibility than the other for the successful accomplishment of a task by compensating for the other person's weaknesses "(Greenfield, 1999, p137). In informal learning, collaboration is even more essential.

Effective knowledge acquisition and understanding are developed under the guidance of, or in collaboration with, others. Pantiz asserted that the underlying premise of learning collaboratively is grounded on consensus building through cooperation by group members - sharing authority and acceptance of responsibility among group members for the group's actions (Panitz, 1996). In addition, the scope of 'learning' - traditionally on specific learning

objects - has been expanded to concern everything addressing knowledge in everyday life. Bauersfeld emphasized that learning is characterized by the subjective reconstruction of societal means and is a process of modeling through negotiation of meaning in social interaction (Bauersfeld, 1988). In an everyday learning environment, the need for knowledge acquisition and the interactivity of the learning process are the principal pedagogical considerations to be taken into account (Chen, Kao and Sheu, 2003). The interactions between learners indicate a transition from foundational (cognitive) understanding of knowledge, to a non-foundational ground where learners understand knowledge to be a social construct (Bruffee, 1993). Collaboration and communication among learners therefore are essential for learning.

Group work, or collaborative learning, is a practice growing at a remarkable rate, increasing students' achievement and creating positive relationships among students. Researchers report that students working in small groups tend to learn more of what is taught, learn better when they are actively involved in the process and retain the knowledge longer and achieve more satisfactorily (Beckman, 1990; Chickering and Gamson, 1991; Cooper & Associates, 1990; Johnson, Johnson and Smith, 1991; Slavin, 1980). The benefits can be seen from the following case. The Spring Project (Social Pedagogic Research into Group Work) by the Institute of Education at London University found group work led to improvements in mathematics, reading and science and higher level conceptual understanding (Galton, Hargreaves, Pell, Steward and Page, 2006). In a social context, by facilitating the rapid access to other users at any time and in any place, sharing content, knowledge, experience and gossip, collaboration and communication, all optimize the learners' learning processes (Taylor, 2004). In fact, all these could be conceived as occurring in a community, as described in the next section.

2.2.2.3 Learning as a community experience

As Sawyer said: "learning scientists have discovered that deep learning is more likely to occur in complex social and technological environments" (Sawyer, 2002, P.13). Learning is a cultural process shaped by community or social network around the learners (Nasir, Rosebery, Warren and Lee, 2006). When people come together regularly where certain conditions are created, an invisible community may be formed. In a certain sense, the community is a social organization

forming a kind of classroom without being in the real classroom. The community could be a friendly group with certain purposes where learners could learn by being a member of the community, communicating companionably with other community members. Furthermore, some practitioners of the notion of the learning community consider that one of the most important factors in learning progression within a learning community is that the group or community sustains people by providing bonding, mutual encouragement and support (McGivney, 1999). A 'learning community' therefore could advance learning continuity by such affective interactions among learners.

In the community, learners build up their knowledge by negotiating with others. This knowledge is to be contrasted with traditional models of knowledge acquisition provided by experts – often understood as "feeding in" methods. Social constructivists believe that the process of knowledge is a dynamically evolving, negotiated interaction of individual interpretations, transformations, and constructions (Fosnot, 2004). Multiple perspectives of knowledge as shared by different individuals enrich the individual's learning experiences (Honebein, 1996). Kieslinger suggested the trends of integrating new tools and resources to form a shared learning environment from Personal Learning Environments (PLE) to learning communities. All the tools can be used equally by the group members for collaborative tasks (Kieslinger and Pata, 2008). Cormier also attempted to explain learning as a social as well as a personal knowledge-creating process with step-by-step goals (Cormier, 2008). In other words, knowledge can be shared, exchanged and even created in a community.

Interactions and communications can require people to learn to engage in cooperative activity by reading, writing and electronic media connection with others who are distant in space and time (White and Siegel, 1999). Tools can be used to connect people who are separated remotely, a process which nowadays is greatly facilitated by digital technology. Vygotsky also suggested that when a person interacts with others using tools they collaborate and use the tools to achieve particular outcomes in the community (Russell, 2002). There are opportunities for digital technology to be used as a tool to support learning by mediating transactions and negotiations in order to develop a shared view of the real world among the learning community.

 In the next section, we will review facts about technologically assisted learning that contributes to share learning in the real world.

2.3 DIGITAL TECHNOLOGY IN EDUCATION

Digital technology encourages large data storage, simulations, construction and more importantly increases remote communication. In this information-based society, continuously updating knowledge requires new learning methods with more effective tools, and the very possibility of these tools relies on the advance of digital technology. As more frequent and high-quality communications are required, information and communication technology (ICT) continues to improve in the face of such constantly accelerating demands. These demands involve people's enthusiasm for new knowledge, their passions for seeking knowledge and their strong desire for mutual communication. The present generation was born in the new era of rapidly developing technology. The "digital natives" growing up with digital technology have spent their entire lives surrounded by and using computers, videogames, digital music players, video cams, cell phones, and other toys and tools of the digital age (Prensky, 2001). Dede (2005) argued that the utilities of advanced technology are encouraging the emergence of new learning styles adopted by students (Dede, 2005). The younger generation is often seen as more expert in a particular new technology and may even assist older generations in acquiring necessary knowledge and skills (Margaryan and Littlejohn, 2008). Prensky also claimed that all students were enthusiastically engaged in an out-of-class activity such as games, movies, music or Internet surfing. Learners today naturally engage with technology as a part of their everyday lives (Prensky, 2005). As young people are so familiar with the new digital technology, educators and researchers have been searching for effective methods to mediate learning with technology in order to enhance learning experiences and outcomes. As education in the 21st century becomes increasingly borderless and personalized, great challenges are presented to make use of advanced technology to compensate insufficiencies in traditional education and create chances for learning in more informal systems.

In technologically-mediated learning, a learning activity can be described in terms of the learning resources, medium, actions, context, roles and learning objective. The creation,

distribution, access, compilation, and consumption of digital content, together with communication, collaboration, and interaction with software tools, capture the significance of technology in the learning. With developing technologies such as computers and Internet, learning crosses borders and changes the roles of people in the process (e.g. the roles of student, teacher, facilitator, learning coach, human resource or education manager). Herrington declared that a great deal of research has indicated that learning contexts were moving from fixed formats in educational institutions to more distributed contexts (Herrington and Herrington, 2007). The emerging context for learning is informal community-based learning, as Cook argued in his study on the social contexts of UK online centers (Cook and Smith, 2004).

Technology now supports these learning situations: formal and informal, personal and social, individual or in a community. Learning also moves from expertly developed and sanctioned knowledge to more collaborative knowledge construction. Learners can be the co-generator of knowledge and are able to collect, display, share and analyze multiple perspectives on issues and problems. Learning resources shift from fixed resources chosen by a teacher to open, self-chosen or created resources with the community of learners. Learning shifts from exercises in the classroom to collecting and sharing authentic artifacts and digital products out of classroom (Herrington and Herrington, 2007). The community therefore not only offers knowledge exchange but also creates and maintains the resource of new knowledge coming from the real world. Downes described new opportunities for students to self-educate by producing their own learning content through social websites like MySpace, where vast numbers of users - often in their teens - blog, publish personal profiles and upload photographs (Downes, 2005).

Another significant trend in technology-assisted learning is the appearance of mobile computer-assisted learning. JISC pointed out that mobile technology is applicable to traditional learning in institutional learning spaces but also supports individual learning both inside and outside the classroom (JISC, 2008). The trend towards learner-centered and social learning is being enabled by mobile computing on and off campus, in formal and informal learning settings.

In the next section we will review the interest shown by designers and practitioners in applying

mobile technology in learning. Particular attention is drawn to the affordances of mobile technology and what practitioners have done and are doing.

2.4 MOBILE TECHNOLOGY IN EDUCATION

Shuler commented on the advantages of mobile technology for children if mobile technology becomes a force for learning and discovery in the next decade (Shuler, 2009).

Mobile computing is a portable, handheld or even wearable computation with rich interactivity, flexible connectivity and powerful processing. It is always a small networked device, allowing inputs through pens and/or speech or keyboard (Quinn, 2000). Mobile computing can make a contribution to learning in informal settings, breaking down barriers of time and place in learning. It creates flexible accessibility to unlimited time and place and therefore provides more opportunities for people to learn on the move. An overview follows of the advantages of this technology.

2.4.1 Affordances of mobile technology

The new mobile technology has started to replace technology with more informality and mobility. Mobile technology affords more accessibility to learning resources whenever and wherever learners are (Sharples, 2006). It has two significant advantages in assisting formal and informal learning: flexibility of time - learners can learn at any time - and flexibility of locations - learners can learn anywhere.

2.4.1.1 Flexible time

Okhwa Lee of South Korea's Chungbuk National University expressed the importance of just-in-time communication in children's learning: "When a child waits, they lose interest in learning or forget what they wanted to know, and learning does not happen. You have to get the secret right there, and with the help of the handheld device, you can have that power" (Shuler, 2009, P.17). The just-in-time demands, across the barriers of location and time, could now be well supported by mobile technology. For example, to bridge the technological learning gap between college and the workplace, the "Quick Response" project is a Just-in-Time computer

system that enables companies to produce and deliver finished goods in enough time to be sold in the marketplace (Schorr, 1995). The instant interactions shorten the time of transition from academic to real work practice and enable more efficient learning.

Furthermore, because of the real-time interaction that the mobile technology enables, learners gain greater freedom in their time arrangements. For instance, their time of learning is not limited to the school schedule; learners can have their own timetable. Mobile technology, due to its flexible accessibility, can therefore not only offer real-time learning in school but also offer learning out of school. That also indicates significant possibilities of informal learning in various locations. "Being mobile means that the context is around you, mobile learning is integrating with the informal learning space" (Good, 2007).

2.4.1.2 Flexible locations

With portable small devices, mobile technology offers learners greater opportunities to learn on the move, without the constraints of specific locations. Practitioners of mobile learning now have moved their focus from mobile devices to the mobility of people. In other words, it is not the fact that technology is mobile, but the fact learners are mobile that counts. Learners may transfer to different locations while at the same time they continue learning; the change of contexts cannot stop learning.

Context is "a situation defined through the relationships and interactions between the elements within that situation over time" and learning context "could be a situation defined through social interactions that are themselves historically situated and culturally idiosyncratic" (Luckin, Boulay, Smith, Underwood, Fitzpatrick, Holmberg, Kerawalla, Tunley, Brewster and Pearce, 2005, p4). Mobile computing puts a high premium on the phenomenon of interacting in context with artifacts and environments that are interwoven with processing and communication capabilities. Contextual information about users, documents, and systems are now taken into account to enhance mobile application services. Technology to capture and record the context has also been integrated into mobile devices. Personal and private information as well as timely settings such as who, what, where, when and why are contextual data to be captured and gathered.

Searching and collecting useful information in a context helps learners enquire and memorize phenomena coming into view while on the move. An example of mobile technology-assisted activities in context is the Smart Sight Tourist Assistant. It is a "wearable computer" developed in the Carnegie Mellon University, consisting of microphone, earphone, video camera and GPS to determine users' location and delivering navigational aid (Yang, Yang, Denecke and Waibel, 1999). If we regard tourists' inquiries as acquiring knowledge, this is learning with mobile technology.

Mobile technology can support the acquisition and sharing of evidence in multiple environments through communication and collaboration activities both synchronously and asynchronously (Evans, 2007). Information or knowledge generated by people in one context could be delivered and shared immediately with people in another context. Learning "occurring wherever people, individually or collectively, have problems to solve or knowledge to share, so mobile networked technology enables people to communicate regardless of their location" (Sharples, Taylor and Vavoula, 2005, p4). Collaborative learning can therefore occur in different locations synchronously or knowledge can be transferred to different contexts.

2.4.2 Mobile technology in education – 'mobile learning'

Learning with mobile technology, which is also called 'mobile learning', is the intersection of mobile computing and e-learning. As e-learning is a term for using digital technology in learning, mobile technologies empower learners to explore a whole range of environments, from the indoors to public spaces (Shuler, 2009) and enables learning across space and time, by acquiring knowledge from one location and deploying it in another, or by revisiting knowledge that was gained earlier in a different context or through ideas and strategies gained in early years (Sharples, Taylor and Vavoula, 2005). Mobile technology extends learning opportunities from traditional learning in the classroom to out of class in the real world. Mobile learning has also introduced practices from formal learning into informal learning.

2.4.2.1 Mobile technology in formal and informal learning

Mobile devices help young people make connections between different spheres of their everyday world (Shuler, 2009). Trials and studies on mobile devices applied in learning

gradually reveal that mobile technology has the special potential to bridge formal learning in schools and informal learning out of school. The mobility of mobile technology has enabled more widespread communication among learners in terms of time and space. Another successful trial is the Defense Activity for Non-Traditional Education Support (DANTES) in July 2007, which undertook a study of the effectiveness of handheld devices serving military students. In the context of course syllabi, learning materials were submitted to different handheld devices – the Dell Pharos GPSX and the Apple iTouch. They found the completion rates for courses delivered on handheld devices was close to the completion levels of online and classroom courses (Military.com 2007)

It is realistic to use mobile technology to deliver learning outside the classroom. A field trip study in a zoo, conducted by DeMarie among children of 3-12 years old, examined their new ways of viewing and understanding familiar sights. They were asked to take pictures during the field trip to show other children who were unable to go on the trip. The project concluded that more exposure of unfamiliar events and phenomena to pre-school children may encourage them to notice and to remember information about these events and phenomena (DeMarie, 2001).

Some researchers have declared that one of the greatest merits of mobile devices is the potential to use them both inside and outside the classroom (Breuer and Matsumoto, 2008). Mobile technology supports the learners in the classroom in continuing to observe measure and talk in other places out of school, thus closing the gap between formal and informal learning. Mobile learning is not just about learning using mobile devices, but learning across contexts. When context changes, learning changes. The flexibility of mobile devices fits such changeable contexts and they can thereby link different learning environments. This helps learners acquire knowledge from the real world and in return apply their knowledge to the real world. Learning is realized as a situational activity, relying very much on the context. It may also become a collaborative activity, a theme which is now considered.

2.4.2.2 Mobile learning for social interactions

In the everyday learning environment, the principal pedagogical considerations to be taken into account are: the need for knowledge acquisition; the urgency of the learning need; the mobility

of the learning setting; the interactivity of the learning process; the situation of the instructional activities; and the integration of instructional content (Chen, Kao, Sheu and Chiang, 2002). Guenther argued that there is no longer a fixed and well-defined space for learning, but multiple and intertwined learning scenarios (Guenther, Winkler, Ilgner, Dom and Herczeg, 2008). In Section 2.1, we mentioned collaborative learning. CSCL (computer support collaborative learning) is a method to support collaborative learning using computers and the Internet. It encourages groups to work together for a learning purpose with computing technology. Knowledge is a product of the collaborative process through the interaction of different perspectives, gradually refined through negotiation, codified and preserved in cultural or scientific artifacts (Stahl, 2002). Mobile computing extends the range of assisting learning in the form of groups with more freedom of time and location and greater flexibility than is offered by traditional computers and Internet.

Our society is becoming more organized around electronic communications, including increasingly multi-purpose hand-held devices. The vast majority of students own their own phones and often create their own media cultures outside formal education (Buckingham, 2003; Fortunati, 2001; Rich, 2000; Taylor & Harper, 2001). The concept of community today is largely breaking down geographic locations. Hartnell-Young described 'virtual community' as a group of people who may or may not meet one another face-to-face, and who exchange words and ideas through the mediation of computer bulletin boards and networks (Hartnell-Young, McGuinness and Cuttance, 2007). Mobile devices with mobile networks offer the potential of connecting people and things around us. We can see this from the fact that mobile communication naturally forms a social community of young people. In this community, people may not meet face-to-face everyday but they can keep in touch within the mobile network.

For young people, mobile technology is important in gaining a whole body of knowledge, skills and competencies. For many users of digital multimedia communication, the focus of mobile communication is the creation and maintenance of peer group relationships (Carroll, Howard, Peck and Murphy, 2003; Oksman, 2006; Palloff and Pratt, 2007). A learning community supported by mobile technology and networks provides more flexibility of place

for getting and sharing information and knowledge, while the distant just-in-time communication becomes available for commerce in the virtual community. The mobile network constitutes a mobile community for learning.

In this mobile community, technology may not only be used in formal institutes, or schools, but may also be used in social life for informal learning. With mobile devices and networks, learners can not only gain general knowledge from everyday life but also can transform it into disciplinary knowledge, with which learners can compile different ways of thinking and judgments to a new context. The next section gives an overview of contemporary studies of mobile learning to identify how mobile learning has been implemented.

2.5 PHASES IN THE HISTORY OF MOBILE LEARNING

Mobile learning has so far achieved positive results through many research projects and studies conducted in Europe, the US, Africa and Australia, in an attempt to find the best method of implementing the use of mobile devices in education. Since 1990 there have been three diachronic phrases in mobile learning (Cook, 2006): a focus on device and contents, a focus on location (learning outside classroom) and a focus on the mobility of learners.

2.5.1 Focus on device and contents

In the first phase, research emphasized devices such as e-books, classroom response systems, handheld computers, data logging devices and learning contents like reusable learning objects. Mobile learning in this phase was mainly implemented in formal classroom learning. For example, some of the applications were educational software packages embedded into mobile devices. The "MOBI "project [5] in South Africa is one such case. This project, conducted by the University of Pretoria, offers a number of options to access learning mathematical content of in the national curriculum in different secondary schools. Within the curriculum, pilot studies have also been conducted in various subjects in schools. Perry (Perry, 2003) described a UK project evaluating the use of PDAs in schools for managing workload and for supporting

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[5] http://www.mymobi.co.za/mobi_signin.php#

teaching and learning among 150 teachers in 30 schools. The exploration of using this mobile device for teaching and learning appeared to be at a basic level, including beaming and receiving information between teacher and pupil, among pupils, and storing data for teaching and learning. Later, mobile technology was applied in subjects that involved outdoor activities.

2.5.2 Focus on locations (outside classroom)

Learning with mobile technology outside the classroom includes field trips, museum visits, professional updating, bite-sized learning, and personal learning organizers. In this section, we will review practices of mobile learning outside the classroom, which is deemed to be the second phase of mobile learning. Children from schools ranging from primary to high school experienced mobile learning in zoos and museums in projects such as MyArtSpace and MOBIlearn. These projects illustrated the feasibility of applying mobile technology to learning outdoors, collaboratively and in different contexts.

2.5.2.1 Mobile technology in field study

Mobile technology in field study is one of the most popular practices. Field study was embedded into the curriculum to support experiential and active learning (Kolb, 1984). Organisers of field trips hope that technology might improve and enhance educational experience for a number of reasons, including economy, staffing levels, health and safety issues. Much research shows that one of the greatest strengths of mobile learning in field study is data gathering. MyArtSpace (CultureOnline[6]) also noted the strengths of collecting evidence through mobile devices used in UK museums and schools. A combined mobile phone and web-based service supporting multimedia representations of museum exhibits, allowed people to take photos, make voice recordings; take notes by mobile phones, then transmitted these collections to a website. The project had a positive impact and introduced technical and educational improvements to school museum visits.

The Augmented Reality Games (Klopfer, 2008) initiated by the MIT Teacher Education Program in the U.S engaged people in virtual games as well as in the real world by GPS-guided location-aware handheld computers, running at sites ranging from zoos and nature

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[6] http:www.ookl.org.uk/web/index.php

centers to schools and cities. Some projects started noticing the cooperative aspects of field studies like the RAFT (Remote Accessible Field Trips) project. RAFT was by initiated by the Fraunhofer FIT Institute and focused on data gathering and annotation in the field (Kravcik, Kaibel, Specht and Terrenghi, 2004). It supported students in active, cooperative and sustainable learning, combining classroom and on-site, enabling virtual field trips and real time collaboration. These studies revealed the opportunities that mobile technology afforded to field study; they also recognized that collaboration is a significant part of mobile learning.

2.5.2.2 Collaborative learning in context

Collaboration in field study can not only be encouraged in data collection using various types of mobile devices but also in communication on the move. By working with peers in the classroom and in the field as well as with students from other schools or countries through mobile technologies, greater participation in remote access and collaborative group work could be enhanced. In addition to accessing traditional resources through mobile devices, people in the field draw the appropriate strength from the environment by gathering and analyzing on-the-spot data (Rieger and Gay, 1997). The ERA (Enabling Remote Activity) project initiated by the Open University in the UK (Gaved, Collins, Barlett, Davies, Valentine, McCann and Wright 2008) found that mobile and communication technology enhanced field learning experiences for all students both indoors and outdoors.

Another mobile learning system – devised for scaffolding bird watching - also investigated the way scaffolding could encourage learning with PDA (Personal Digital Assistant) in a wireless mobile ad-hoc network (Chen, Kao and Sheu, 2003) It showed that mobile technology has great potential in scaffolding collaborative inquiry learning in nature context out of classroom.

Collaboration and interaction were also found in classroom studies mobile technology. The "Learning2Go" project (Whyley, Purcell and Bourne, 2007) in Wolverhampton and "Hand-e Learning" project (2008) in Bristol also enabled all pupils in a year group and their teachers to have mobile devices. Students were found to have a high level of enthusiasm and commitment to use mobile devices. They only used mobile devices in lessons and lectures but they would also interact informally with other children. The project demonstrated the possibilities of using mobile devices in the interpersonal interactions associated with learning. In the "Syllable-

MCSCL" project, children supported with handheld technology were found to have significantly higher word construction test score improvements than in subjects using paper-based materials. Mobile technology also increasingly supports social interaction in learning - for example, SMS or text, voice and media facilities for interpersonal communication. The technological network served as a scaffold for the social network, achieving collaborative learning activity supported by mobile technology in a face-to-face social context, achieving high levels of activity and avoiding passivity among the students (Zurita and Nussbaumw, 2004). It can therefore be concluded that interactions and collaboration can occur among different learners in a variety of different contexts, as a result of using mobile technology.

2.5.2.3 Collaboration and context

All of the above are examples of mobile learning following institutional or national curricula in formal learning environments. It has been applied in other out of class contexts and in more informal situations. "MOBILearn" is a European-led project to explore context-sensitive approaches to informal learning by using advances in mobile technology. One key achievement of the 'MOBIlearn' project was the shift in focus from learning with handheld devices towards support for the mobility of learning as it started to make use of context aware systems. The awareness of context in mobile learning was raised to meet the needs of learners, working individually or collaboratively. Thomas pointed out that mobile learning facilitated by mobile technologies offered great flexibility to learners, in terms of community, autonomy, location and relationship (Thomas, 2005, cited by Cobcroft, Towers, Smith and Bruns, 2006). Frohberg proposed four categories for learning in context with mobile technology: independent, formalized, physical and socializing context. Learning with mobile technology appears to be increasingly relevant to a learner's current contextual issues, relevant to the current environment. Frohberg labeled four categories for the relationship between the context of learning with the context of being, the environment of the learner. The relationship grows from no relationship to current issues in the 'independent context' to strong interpersonal relationships to current or past situations, emotions and learning history in a 'socializing context'. Frohberg also pointed out that most mobile learning projects were in physical, independent and formalized contexts but hardly any were in a socializing context (Frohberg, Goth and Schwabe, 2009). As learners are themselves mobile, mobile learning tends to be

applicable in multi-contexts or cross-contexts. Obviously, mobile learning should widen its focus beyond technology or location to the learners themselves. The new strand of mobile learning not only preserves the advantages of collaboration and context in learning with mobile technology, but also centers more on learners themselves and their mobility, within the current learning context and transition to different contexts.

2.5.3 Focus on mobility of learners

What learners see and hear, and where they are when they learn, are key factors in mobile learning, and therefore the most significant feature in mobile learning is the mobility of learners, the third phrase in the evolution of mobile learning. The design, development and deployment of mobile technology in learning should provide appropriate resources and the utmost freedom for learners on the move.

The 'CONTSENS' project (Ericssion, 2009) focuses on the development of appropriate training/learning materials for mobile learning among less qualified workers. These materials are enhanced by context-sensitive and location-based delivery within and outside formal education and training. Learners themselves are free to find the learning materials themselves within their context and location.

Another example is the GeoHistorian Project in U.S (Hooft and McNeal, 2009), which allows school students to create digital resources with mobile phones, reducing the barrier between schools and community. The Mobile Learning Institute in U.S also encourages learners to share mobile and digital technologies that they use everyday to develop 21st-century skills creating presentations, in classroom and community. A recently- started research project called 'Mobile Media: Ubiquitous Learning for Global Citizenship in U.S' (Shuler, 2009, p42) explores   learners' progress with mobile media within home, school and community settings. It would appear that practitioners and educators have initiated a new view on learning with mobile technology, changing the focus of mobile learning from devices and locations to the learners themselves, to their own context and community. This also illustrates the early efforts to socialize the context, which Frohberg suggested connects mobile learning to social network sites, opening up opportunities to distribute contextual information to different people in a

variety of contexts (Frohberg, Goth and Schwabe, 2009).

This is the aim of the present research is to explore how mobile technology can help people learn by inquiring, discovering and sharing experiences in everyday life, conveying contexts using a mobile group blog, which is a convergence of mobile technology and a social network site. The next section explores the importance of creating such conditions in terms of their potential for learner reflection.

2.6 LEARNING IS TO BE REAL-TIME AND TO BE REFLECTIVE

The mobile learning studies reviewed in section 2.5 outlined practices initiated by mobile technology supporting classroom-based learning. Mobile learning practices were then conducted in the field, in the museums and zoos. Learning time also changed from a fixed school timetable to any time out of school. Mobile technology enabled learners to access learning materials at any time. It supported informal interactions between learners not only in classroom learning, but was also widely applied to out of school learning in everyday life. Previously in section 2.4.2 we reviewed two ways in which mobile technology assisted learning: enabling continuity from formal learning to informal learning, and assisting social interactions among learners.

Additionally, from the above studies it is noted that mobile technology not only assists instant information delivery, collection and exchange, but also supports comparative and cross-context reflection. In the MyArtSpace project, learners could view multimedia presentations of museum exhibits, take photos, make voice recordings and write notes. All these contents were automatically transmitted over the phone connection to a website that stores a personal record of their visits. With these records, they could review their visits and the media they have collected, share material with other children, and create presentations. This is an example of successfully conveying experiences for reflection through mobile technology. In this project, mobile phones were used to collect artifacts and the website stored the records for later reflections when they were back in the classroom. Reflection was carried out by reviewing

existing learning materials and authentic information from the real world real-time through the mobile technology. The importance of creating such conditions for reflections investigated in the following section.

2.6.1 Reflection in learning

Bandura, in his Social Cognitive Theory (SCT), identified "self-reflection" as a uniquely human ability (Bandura, 1986). Both self-reflection and reflection by others play vital roles in learning, which can help students to identify and question their underlying values and beliefs, to understand their strengths and weaknesses, to acknowledge and challenge possible assumptions on the basis of ideas, feelings and actions. With reflection, learners have the opportunity to identify possible inadequacies or areas for improvement, which can lead to greater self-awareness. A deliberate and systematic approach to reflection is discussion (Dewey, 1997). Today in Higher Education (HE), we use reflection as an essential learning tool, encouraging students to review what they are taught, what they read and what they learn from experience, to develop their own constructions of this knowledge (Greener, Rospigliosi and Shurville, 2007). In Bloom's taxonomy, spontaneous learning in everyday life could be advanced to a higher order thinking level of analysis, evaluation and synthesis (Anderson, Krathwohl, Airasian, Cruikshank, Mayer, and Pintrich, 2001) by effective reflection.

Reflection in mobile learning could be carried out through mobile devices associated with online learning space. The mExplorer-designed tasks depended on a specific location in a specific environment - for example, finding information in the library (cell-telecom 2007). Another project by Vahey and Crawford employed PDA with several sensors for learners to collect temperature, magnetic fields, light intensity and amperage relating to the environment; later they could reflect on it (Vahey and Crawford, 2002). These two projects paid more attention to reflection on contextual data.

The demands of storing and sharing authentic materials collected by learners requires appropriate learning space to enable people to share ideas, thoughts and experiences and motivate them to participate and engage in learning. Ideally this learning space is a worldwide platform accessible online, such as a website. An online space is well suited to collaborative

learning and provides an environment that is rich in communication, collaboration and flexible access to information, both electronic and paper-based (Bridgland and Blanchard, 2005). A social network site is an example of this kind of website serving the social interaction and participation of learners. Recently social software has been a subject of renewed educational discussion, debated with great passion among some pioneers of educational technology. The most popular social software is termed 'Web2.0'.

2.6.2 Web 2.0 and Mobile 2.0

Web 2.0 offers a high level of user participation within a social online setting. It is regarded as the network as platform, providing a continually-updated service of consuming and remixing data from multiple sources, creating network effects through an architecture of participation to deliver rich user experiences (Oreilly, 2007). It facilitates the sharing, exchange and discovery of information, and the construction of networks of information. It allows users to do more than just retrieve information, and builds on interactive facilities to provide a network of computing and run software-applications entirely through a browser. Web 2.0 increases opportunities for high levels of interactivity among people, allowing them to contribute, create and modify content collaboratively, share results and discover new and related content through informal relationships with others (Low, 2006; Solomon and Schrum, 2007). The shift to Web2.0 tools may have a profound effect on schools and learning, causing a transformation in thinking (Evans, 2007). Particularly Web 2.0 and social media are bringing to schools new challenges in how to adapt and follow the collaborative activities that increasingly characterize technology in society (Sipilä, 2008). Therefore collaboration and social interactions with technology were brought to the forefront in learning.

It has been argued that the latest web-based tools converging with mobile technology have made the world smaller, especially for the users who access social software from their home or work place (Buriano, 2007). This convergence encourages the circulation of culture and social life by information and experience-sharing in an unrestricted network-based medium (Bleecker, 2006). This also suggests another term, 'Mobile 2.0'.

Mobile 2.0, as Ajit Jaokar and Tony Fish have described, brings Web 2.0 services to the mobile

Internet. Mobile 2.0 refers to services that integrate the social web with the core aspects of mobility – personal, localized, always-on and ever-present (Jaokar, 2006). Mobile devices are deployed in Mobile 2.0 such as Smartphones and multimedia feature phones that are capable of delivering rich, interactive services, as well as being able to provide access to the full range of mobile consumer touch points including talking, texting, capturing, sending, listening and viewing. The enablers of Mobile 2.0 are ubiquitous mobile broadband access, software platforms, tools and technologies of unrestricted access and frictionless distribution. With Mobile 2.0, the social web site becomes mobile, and the user-generated contents of the site could be updated anytime on the move.

Mobile broadband is expanding rapidly. A survey in Korea conducted in 2005 on users' attitude to mobile broadband internet showed 94.5% of mobile users have heard or were aware of the wireless Internet. The percentage of mobile phone users who have used wireless Internet at least once increased by 8.3% to 45.6% from 37.3% in June 2003. Teenagers from 12-19 years had the greatest experience with 90.8% (Cho, 2005). In China, the number of mobile internet users reached over 92,000,000 by the end of 2007. People aged from 18-24 are the major customers of mobile Internet, at 65.5% (iResearch, 2008). These figures indicate the great potential of mobile Internet usage including its use in mobile learning.

The social network sites such as the popular wiki and blog have offered many opportunities for reflection, as they keep track of users' activities. The combination of social network sites and mobile technology allows learners and colleagues not only to collaborate from anywhere they happen to be (Consortium and Initiative, 2008) but also to undertake self-reflections, peer reflections and group reflections. Learning therefore could be supported by mobile 2.0 with features of mobility, context-awareness, collaboration, community and reflection. The convergence of these two technologies has created a new toolkit for mobile learning - 'mobile social software'. In the next section I will discuss these new opportunities.

2.7 NEW TOOLKIT-"PACKAGE" OF OPPORTUNITIES

In previous sections, we have discussed several opportunities for mobile technology assisted

learning:

- Learners can be mobile, learn anytime anywhere

- Learning could be context-based

- Learners could learn by collaboration with others

- Learners could learn through a community

- Learning could be enhanced by reflection

Reflection could be facilitated by mobile technology with social software, "Mobile 2.0". Several recent types of online solutions that offer self and collaborative reflections are the blog, the e-portfolio and the wiki.

2.7.1 Comparison of three online tools for learning

The blog and e-portfolio have a common advantage in keeping track of learning. By tracking learning, learning outcomes must be stored and reported back. It is beneficial to know what next to provide for the learner, to be able to reward outcomes, and to manage corporate knowledge. E-portfolio and blogs can capture and store evidence for reflection, and give and receive feedback through assessment and evaluation reports. These collections of information represent accomplishments, goals, experiences and other personal records of the learner's activities. E-portfolio is a new tool for collecting evidence for assessment, and for demonstrating achievement, recording progress and setting targets and individual learning plans. The most significant advantage of e-portfolio is that it benefits learners in the form of repositories and planning because it allows the products of learner activity to be assembled and retrieved by the learner for later consideration and critiques. This offers an ultimate service specifically for personal learning reflections. As e-portfolios are designed for more personalized learning, the wiki and blog are participatory media that can allow communal negotiation of knowledge (Cormier, 2008).

Wiki is another technology for tracking records. A wiki is a type of collaborative authoring

website that allows users to " easily add, remove, or edit and change some available content, sometimes without the need for registration" (Leinonen, Sari, and Aucamp, 2006). Wiki provides a good collaborative environment for learners, offering great freedom and flexibility to permitted authors. However, too much freedom has the potential for disorder and chaos in this online community without in-group disciplines, so it is necessary to reduce threatening activities in learning, especially for young people who are less experienced in this medium.

The collaborative environment can also be supported by a blog. Blogs are easily found linked and cross-linked, referenced and debated, to create larger on-line communities (Godwin-Jones, 2003). People may argue that the blog is chronologically organized and not easy for conducting an information search, but a "structured blog", in which entries are well-organized, could be a mechanism for searching.

Below is a list of comparison of three reflective and community tools for learning.

Table 2.1: Comparison of three reflective online tools

Features of learning	e-portfolio	Wiki	Blog (Group blog)
Reflection	Yes	Yes	Yes
Collaboration	Support from tutor and peers	Yes	Yes, for group blog
Capture and store evidence immediately	Yes	No	Yes, if integrated with the mobile technology
Give and receive feedback	Yes, by assessments	Yes, and the reader can also change the author's content	Yes, by comments

Features of learning	e-portfolio	Wiki	Blog (Group blog)
Present to (an) audience(s)	Yes, for other students and tutors	Yes, anyone	Yes, could be anyone but depends on the authority the blog owner set
Store resources	Yes	Yes	Yes
Pre-plan	Individual plan fitting for the curriculum	No planning	No planning, could be semi-scaffolding
Multimedia	Texts and images, even audio and video	Texts and images	Texts and images, even audio and video
Regulate and control	Yes	Not easy to control	In the group blog, a regulation is set
Summative Assessment	Yes	Not easy to excute	Yes
Immediacy (Instant and timely)	No	No	Available in mobile blog
Curriculum focus	Could be several courses in terms of curriculum	Could be focused on one course	Could be in a completely informal setting out of curriculum

In Table 2.1, these three tools all support reflection, resource storing and discussion by giving and receiving feedback. All tools support user-generated multimedia artifacts, which can be presented to audiences through the Internet. E-portfolio is more individualized, usually having a pre-plan, regulations and assessment all within a curriculum context. Wiki focuses more on collaboration and discussion among learners themselves and often concentrates on one topic. Wiki is not expert at capturing and collecting authentic materials while e-portfolio and blog do

have this capability. Unlike the e-portfolio, wiki and blogs do not have specific plans according to the curriculum. They can often be used outside the curriculum, in other words, in informal learning as well as being used in formal learning. E-portfolio and wiki are not so far found to have mobile features, while mobile personal blogs have been in use for a few years. On the basis of this analysis, blogs seem to be the most compatible with mobile technology for learning.

In the present research, studies focus on the integration of mobile technology and social software, that is the mobile group blog in informal learning. In the next section, therefore, further details about the blog, mobile blog and mobile group blog will be described and discussed.

2.7.2 Blog as a learning tool

Blogs are easy to create and use from anywhere with an Internet connection for publishing to established communication (Betts and Glogoff, 2004). The blog gives voice to communities and encourages the sharing of ideas and events with others (Consortium and Initiative, 2007). Through writing personal philosophy, comments and view points, the bloggers refresh their thoughts constantly and construct a learning community, which facilitates and scaffolds reflective teaching/learning (Dempsey, Halton and Murphy, 2001).

Blogging is a simple technology that can be used to construct learning environments to fulfill three instructional techniques: information acquisition (receptive), response strengthening (directive) and knowledge construction (guided discovery).

David Huffaker explored the importance of literacy and storytelling in learning and links these concepts with the features of blogs (Huffaker, 2005). Lilley has argued that the blog is an ideal tool for students to capture examples of their learning and reflect upon what they have learned and so adjust their learning paths (Lilley, 2006). Kennedy argued that blogs allow students in a journalism class to be more aware of their writing and their audience by collecting news stories to report (Kennedy, 2003). The learner-generated blogs in a group therefore in a sense seem to enhance social interactions among bloggers and their audiences. Individual users and learners

now have vastly greater power to publish and access content. Blogs allow individuals or groups of users to co-author reflective websites (Flatley, 2005).

Bloggers are often well motivated and deeply engaged in their activities of blogging. In their study of the Nokia'lifeblog', Hartnell-Young claimed that in the 'lifeblog' we see the potential for learning and the ability to place artifacts in a rich context that also shows progress in knowledge and skills (Hartnell-Young and Vetere, 2005). Lankshear also pointed out participants can comment on the blogs in questioning actively at different levels without operating a blog on their own (Lankshear and Knobel, 2006). The active interaction between the blog authors and their readers contributes to collaborative learning. Glogoff believed blogging is well-suited as a tool that furthers learning because it can be constructed to emphasize declarative or procedural forms of knowledge, where learners either come to know the basic knowledge schemas or describe how to apply their knowledge (Betts and Glogoff, 2004). Blogging makes people more thoughtful and articulate observers of the world around them (Blood, 2002).

Of those social web tools, mobile blogging through the mobile Internet is a significant potential tool for learning in the Web 2.0 era.

2.7.3 Mobile blogs

Mobile blogging, or 'moblogging', is the activity whereby the user publishes blog entries directly to the web from a mobile phone or other mobile device. Moblogging is one subset of mobile 2.0 software. Nowadays, mobiles offer a multitude of ways to connect with peers and colleagues. Users now use their phones to post to their blogs, send updates to services like Twitter and Utterz, add appointments to online calendars, or find friends in their immediate area.

The mobile blog is one tool which makes use of mobile devices for both creating and 'consuming' online content (Pettit and Kukulska-Hulme, 2007). Mobile blogging enables people with camera-enabled cell phones that allow them to send e-mail/MMS or SMS photos and videos to a web site, or use mobile browsers to publish content directly to any of the

standard blogging platforms.

2.7.3.1 Why moblogging?

The ubiquity of mobile devices and the features of 'just-in-time' and 'on-the-spot' support are key advantages for mobile blogging. Space online is the content management and specific adaptations for presenting content to mobile devices (Trifonova and Ronchetti, 2003). The integration of mobile devices and website technology provides a platform for instant information collection as well as reflective resource maintenance. Mobile blog is one such tool with Web and the always-on connection. With mobile devices, the urge to share and play with texts, images and sound in real time across vast distances and within a social network of friends is overwhelmingly compelling. Mobile technology extends the blogging metaphor of social empowerment in everyday life (Paulos, Brown, Gaver, Smith and Wakeford, 2003). In summary, mobile blog can support instant interaction and reflection. As mobile devices are effective in collecting information in the context, we may now consider how mobile blogging can capture valuable information on the spot and at that moment.

2.7.3.2 Photo moblogs

Today many moblogs support text and image blogging. Images will typically consist of information that cannot be expressed in words. Russell suggested the 'meaning' of images was the simplest kind of meaning because images resembled what people mean, whereas words might not (Russell, 1919).

Stuart Woodward first posted from his cell phone to his website in January 2001 on LiveJournal (Fasbender, 2003). Moblogging first introduced blogging by texts and later by visuals. Nokia 'lifeblog' was developed for the potential of people creating digital items on the move, revisiting these artifacts, reflecting on them individually and holistically, and sharing the important items with others (Hartnell-Young and Vetere, 2005). 'Lifeblog' also supports both the desire to document everyday events and the need to feel socially connected through sharing or gifting personal details (Taylor and Harper, 2003).

Blogging by photos later became so popular that special photoblog applications and blogsites now attract more and more consumers. Most photobloggers say that 'real life' is the desired

content of their photographs. Okabe stated three camera phone usage patterns for photo taking: personal archiving (for personal collection and archiving function), intimate sharing (exchanging photos among friends and family), and peer-to-peer news and reporting. People taking photos work out the social protocols for appropriate visual sharing, but seem to take pleasure in adding visual information to the stream of friendly and intimate exchange of opinions and news (Okabe, 2004).With the convenience of digital cameras and the support of a mobile network, photobloggers are now able to take and share what they see of life as it happens in real-time, as they experience it. The 'real life' photographs differ from traditional photographs in that they record everything in life as it happens, including trivialness: an intriguing signpost, the stages of construction of a new building, amusing sleeping posture, a strange effect of lighting etc. Those 'moments' may not be valuable as news, but they could be significant to individuals. The importance to photoblogging is 'not thinking too much', as Cohen states, highlighting the role that instinct plays in the making of photographs (Cohen, 2005). These valuable moments captured by the blogger can be illustrated from the photos that contain on-the-spot inspirations that have been captured.

The strength of mobile blogging allows photographers to upload their photos in real time, conveying this instinct efficiently. At the same time, their friends, family, or other audiences can view them at a time that is convenient to them. The moblog could also be viewed from the mobile phone. Axup debated in his study of travel gossip that mobile blogs serve as a method to keep backpackers updated from one another on the road, refreshing social ties, reducing stress levels of family at home and maintaining group awareness (Axup and Viller 2005). Kato also argued in his community-moblog study that the moblog may expand our tempo-spatial images of a classroom by generating a sense of togetherness even when a member's presence is not available (Kato and Shimizu 2005). Both the portability and ease of access of a mobile blog and the integration of mobile computing into a wide variety of educational activities promote autonomous learning and student organization. They can also promote student motivation, collaboration and communication, and support inquiry-based instructional activities (Crawford and Vahey, 2002). Panday found that blogging can enhance people's skills such as sharing, analyzing, reflecting ,reading and writing (Panday 2007).

Some practitioners have started to carry out moblogging in education. The next section discusses this in more detail.

2.7.4 Moblog in Learning

The combination of immediacy, informality, access to emotional support, and the opportunity to develop ideas in association with others, makes blogs a powerful aid to learning. Initial moblog trials have been conducted in recent years. REXplorer is a rich interactive scavenger hunt designed to enhance the tourist experience for young adults through the fun and excitement of a public game using mobile technologies as a part of the Regensburg Experience (REX) Museum (Ballagas and Borchers). Mobile blogs were also involved in a research study to describe and analyze Japanese young people under the concept of "self-presentation" at Keio University. In the moblog "Ktaifoto", members shared photographs, interacted in diverse ways face-to-face with classrooms and in common laboratories. They shared formal ritual rules concerning posting manners and contents of photographs in the moblog site. The existence of self-presentation strongly represented relations inside community. Moreover each member accumulated his/her individual records by posting to "Ktaiforto" for introspection and self-satisfaction. The communication played an important role in community activities among Japanese young people (Shimizu, 2006).

The choice of whether to send posts now or share them later is affected by the timeliness requirements of individual communication. Reflective learning with mobile technology is also triggered in Japan for subsequent reflection in the campus-based lecture. Mobile phone-based learning activity prompts learners to remember the important or interesting points in the real-time lecture (Gotoda, Matsuura, Kanenishi, Niki and Yano, 2005). Another example comes from the George Square game system, which uses a small, portable tablet activity to connect via the Internet to other users running the same software on other tablets or desktop PCs. This supports collaboration with both the online and physical aspects of a tourist scenario such as visiting a city square, sharing that visit with a companion who is at home, or sharing of places at a distance (Brown, Chalmers, Bell, Hall, MacColl and Rudman, 2005). These authors claim that the mobile blog can be used to monitor the current gamers' status by getting an overview

of the team's progress and updated scores. Visitors will be encouraged to capture sights and sounds unrelated to the scavenger hunt to add a more personalized touch to their blogs.

Field studies - or studies carried out in the real world - are key aspects in learning with mobile blog. For example, a team from Umeå University in Sweden, moblogged Jokkmokk's 399th Annual Sámi Winter Market in 2004. Students applied their academic learning about the Sámi to the real world, interviewing participants, conducting follow-up digital research on the fly, and uploading and expanding on commentary online (http://blog.humlab.umu.se/jokkmokk2004/Alexander, 2004). These students made a final summary of their moblogging, presenting their great satisfaction with what they learnt about both the multi-culture and the advantages of technology. The success indicated the great potential of informal learning with mobile blogging.

Mobile blog then has more multimedia features beyond text and image. A Mobile Audio blog was built in MingChuan University in Taiwan. Audio contents were created by mobile terminals while they were walking or visiting in a physical space. These contents were recorded and posted to an audio-blog server in a WiFi environment. Anyone could post and respond to audio contents in the real space. Yeh said this work formed a location-specific soundscape which can be created and with which a passenger can interact in the physical space (Yeh, Liang, Chen and Peng, 2006). This implies a bright future for applications with multimedia in moblogs.

These moblog applications in learning now are mostly individual-based. As blog is social software and has potential networking features, individually-centered blogging activities can be expanded to a group of people. Learning collaboratively can bring many benefits to individual learners. Mobile blog can also support learning in a group, helping individuals to apply what they get from one another to different dimensions of lives. Forming a mobile group blog could therefore be one solution to improve learning.

2.7.5 Mobile group blog

As we discussed in the previous sections, learning could be enhanced through collaboration

and social interactions within a community. The blog is a tool that helps such a community.

Blogs have become a popular mediation for supporting communities, allowing people to post ideas and comments and offering two-way communication or interaction between writers and readers (Petersen, 2007). Blogs are currently the province of the young, with 92.4% of blogs created by people under the age of 30 (Henning, 2003). Herring found that in 85.8% of blogs for which blogger age was apparent, roughly 60% were adult and 40% teenagers, although many of the adults indicate that they are in their early 20's (Herring, Scheidt, Bonus and Wright, 2004). This suggests a potentially large population of mobile bloggers. With such a wide population, collection and sharing become the key theme of mobile blogging.

Blogging has made it possible to amass easily large collections of digital recordings of our daily lives, including texts, photographs, and videos to tell stories (Shen, Lesh, Vernier, Forlines and Frost, 2002). All these digital collections could be stored in the blogs and could be reviewed by individuals, as a reflective resource. Trafford stated that blogs could fit very comfortably in the PLE (Personal Learning Environment) context, providing a medium that facilitates reflection about life over an extended period as well as capturing something in an instant - an instantaneous note to capture a concept before it escapes (Trafford, 2005). Blogging supports self-direction and active inquiry. They can cultivate reflection, engender transformative teaching and build community (Glogoff, 2005).

Recording and reflection make blogs an accumulative learning resource. As Herring said: blogs and online communities would ultimately improve discoverability and reusability of resources (Herring, Scheidt, Wright and Bonus, 2005). Continuous contributions from bloggers represent the growth and expansion of knowledge and learning resource for individuals.

Some researchers argue that blogs are more like radio shows than diaries. Technologists are working on methods to attach 'friend of a friend' metadata to blogrolls; others have added 'blog chalk', a notation indicating their age, gender, and geographic location, to their sites (Blood, 2004). In particular, blogs allow authors to experience social interaction while giving them control over the communication space. Herring argued that blogs provided an unprecedented opportunity for ordinary people to express themselves publicly (Herring,

Scheidt, Bonus Wright, 2004). Bloggers were drawn closer to their audience by the fact that bloggers and readers discussed the blog content together (Nardi, Schiano and Gumbrecht, 2004).This new way of publishing widens the scope of participants and audience at all levels and also therefore increases the chance of learning in a informal way.

The social network that exists in the blog constitutes an online learning community. Kieslinger pointed out the benefits of learning community in three respects. Firstly, individual knowledge and competences of coping with challenging situations are increased by using socially shared knowledge and competences. Second, he claimed an increase of students' awareness of the nature and development of dynamic and situational knowledge (shared at group level) and competences of coping with specific problems. Lastly, there is an increase of knowledge at community level which is embedded and accessible for other users via the traces of activity patterns left within the systems, via the networks of artefacts shared and created as well as the information these artifacts contain (Kieslinger and Pata, 2008). In the long term, online communities can also become the basis for creating an information program that goes beyond being merely a search and discovery environment, developing into one that supports users, experts and others who participate in discussions in online consulting and reference services (Choi, 2007). In the present research, the establishment of a mobile group blog aims to meet these points.

Mobile blogging with text, images, streaming sound and video via wireless devices such as cell phones to the "team blogs", with important implications for "just in time and just in place" peer-to-peer help, is the added feature in a mobile group blog. Members in this group blog may be physically isolated but they can moblog any time and communicate through the mobile group blog site in real-time. In the group blog, people were grouped for an explicit purpose or topic, forming a specific community. As for learning in everyday life, the mobile group blogging could be a more natural as well as flexible way. This is what this research intends to explore.

2.8 CHAPTER SUMMARY

In this chapter I have presented a review of key issues current in the learning sciences and, then noted how these themes apply to technologically-enhanced learning, especially mobile technology in education. Mobile technology could also assist reflections in learning, associated with social software. All these features converge on the opportunity to use the technology of mobile group blog in learning, which has great potential to support learning both in formal and informal settings. It can provide connections to social interaction and form an online resource and community for reflection. The mobile group blog is learner-driven and learner-centered, as learners can contribute to as well as consume through synchronous and asynchronous interactions.

Unlike the personal blog, there always is a topic or project with which the mobile group blog is concerned. In this research, the theme is cultural transition for overseas students. A mobile group blog was set up and implemented for the purpose of helping overseas students understand the host culture - adapting to the host society and life environment as soon as possible. The target group comprised of newly arrived Chinese overseas students coming to Nottingham. This group formed a mobile virtual community seeking to understand and gain insights into British culture. Before implementation, it is necessary to recognize cultural transition, know why students have to adapt themselves to the new culture and identify problems that they may face. Before we go directly to the practice of the mobile group blog in cultural transition in the next chapter, we need to review cultural shock and cultural transition, as well as identifying the existing supports that have been devised for the sojourners.

Chapter 3 The experience of cultural transition

When people arrive in a new place, they may generate a wide variety of feelings about the new environment - excitement, helplessness and fear. These people are called sojourners, who need time to adapt to the new cultural environment. The overseas students are a large group of sojourners, In this chapter, we explore the cultural shock and cultural transition that the overseas student sojourners may encounter and investigate the specific problems met by a group of Chinese overseas students' during their experiences of transition.

3.1 NEW OVERSEAS STUDENTS ARE NEW CULTURE LEARNERS

Adjusting to a new cultural environment is a natural process and related to one's cognitive development. Cole regarded cognitive development as a process of acquiring culture and concluded that " the normal adult cognitive processes were treated as internalized transformations of socially prevalent patterns of interpersonal interaction"(Cole, 1985, p148). The term 'culture' may have a number of different meanings. A culture may, for instance, include human knowledge, belief, behavior, rituals, religion, economic systems, language, a style of dress, a way of cooking, and a political system. People who share a culture typically follow the same rules and thereby form a society. Culture is not inherited, but must be learned and shared. This research views culture as an integrated pattern of human knowledge, belief, and behavior in the society, rather than the shared attitudes, values, goals, and practices that characterizes an institution, organization or group. Each society has its culture in a certain environment. The cultural differences between two societies often hinder sojourners becoming integrated into society, so acquiring knowledge of the new culture helps people "enculture" to the new society. This research concentrated on the British culture that overseas university students might face in their everyday life and their need to adapt to the new environment where they gain knowledge of the host culture.

3.1.1 Transition to the new culture

Sojourners, who may be immigrants, travelers, and overseas students, have to deal with cultural transition and cultural adaptation when they arrive at a new place. Sojourners always face problems in enculturation. In the online dictionary (Dictionary.com), the term "enculturation" stands for the process whereby individuals learn their group's culture, through experience, observation, and instruction. Most of the time, people can learn from observations about their context (what happens around them, what is there, who is together with them) from thinking about the phenomena, why this happened, how interesting those things are, people's behaviour and so on. Enculturation always occurs when people move to a new culture and experience it informally. Especially when overseas students enter another culture, they encounter a number of challenges associated with acculturation, adjusting to a non-native culture (Ye, 2005). This occurs more often in their daily life than in the classroom, although they have to adjust to academic situations for study. In the next section, we look more closely at enculturation in students' everyday life.

3.1.2 Culture shock

Most overseas students have similar experiences of enculturation when they start a new life in a new environment. At the beginning, these international students look forward to the new culture with excitement and enthusiasm. However, after a while they experience stress because they feel dissatisfied, lonely, confused, and unsafe (Deutsch and Won, 1963; Oberg, 1960; Yan, 2008). This reaction is called "culture shock", a term which refers to a stress reaction where salient physiological and physical rewards are generally uncertain, difficult to control or predict in a cultural situation (Weissman and Furnham, 1987). When individuals enter a new strange culture, they often encounter unfamiliar behaviour and demands, and lose familiar signs and symbols of social intercourse. Different habits, different traditions, different manners (or cultural gaps) always are barriers for sojourners. These student sojourners "remain anxious, confused, and sometimes apathetic or angry until they have time to develop a new set of behavioral assumptions that help him or her to understand and predict the social behavior of the local natives" (Weissman and Furnham, 1987, p314).

Students' intentions could be defeated through lack of cultural understanding and culture shock (Zhou, Jindal-Snape, Topping and Todman, 2008). As the sojourner often encounters unfamiliar behaviors and demands in the new environment, they could be left without a cognitive schema for seeing a recognizable response pattern or keep themselves detached (Brislin, Landis and Brandt, 1983). This could also result in feelings of inadequacy or helplessness. Gullanhorn (Gullahorn and Gullahorn, 1963) conducted a study involving overseas exchange students and reported that younger sojourners who had never experienced a prior geographic relocation had more difficulty in adaptation. There is therefore a great desire for support to reduce the difficulty, the uncertainty and the culture shock. As Bochner regarded sojourning as a learning experience, appropriate positive action involves learning about the culture transition which includes preparation and orientation, and the acquisition of skills relevant to the new culture (Bochner, 1982; Klineberg, 1982). Their enculturation, therefore, includes learning about the host culture, the behaviour about the local people and the new regulations of the host society.

3.1.3 The main problems in transitions for Chinese overseas students

Each year China sends a large number of students abroad for study. They encounter a great many problems when they start adapting to the new environment. As well as the professional knowledge they would like to acquire in formal institutions, they also intend to develop other knowledge and skills. An investigation by China Study Abroad (CSA, 2004) indicated that as well as increasing language capacity (76.7%) and professional knowledge (74.1%), their greatest priority , local culture (52.6%)and networking skills (36.4%) are also regarded as key challenges.

As an overseas student myself, through informal observation to classmates and friends, I identified a few phenomena worth considering as issues of cultural transition. The following examples arose from informal conversations with these Chinese overseas students.

As one of my friends wrote in his blog:

"People may not understand what you said, what you did due to language or other cultural

reasons. And I can't understand their words and sometimes their behaviours, either" (Jenti, University of Nottingham).

Because of the wide gap between British and Chinese culture, and a lack of English proficiency, overseas students from China have more difficulty in speaking and understanding English than their European counterparts. In addition, these Chinese overseas students in the UK have claimed to have experienced culture shock in their everyday lives. Culture shock could be an important reason for interpersonal stress ,conflict and homesickness for this group of people (Winkelman, 1994). The following typical example indicates the stress that Chinese students experience.

"I have to live alone, to think alone, to walk alone, to live in a flat with strangers, all foreigners. I have to cook alone, and sit alone in front of the computer, being in a daze. Miss you all. Miss those days in China. I used to be like a princess there. Totally two different *worlds. Sometimes I couldn't understand what they are saying, sometimes I couldn't ex*press myself, sometimes had tongue-shy when speaking with red cheeks, sometimes panic when go pass people with dogs, sometimes got lost on the road, sometimes felt anxious dealing with difficulties, sometimes struggled for bargaining the expensive Chocolate cakes... Suddenly feel *a kind of loneness. But I am confident that I will be strong. Believe me!"* (Doris, student of Masters exchange program).

Unfamiliarity with the idioms and a fear of being misunderstood interfere with communication between these students and local people. The greater cultural distance and language barriers could be recognized in shopping, in cooking with strange ingredients, accommodation, transportation for getting to class, finding out when and how the rubbish is collected, walking through the city alone with unfamiliar signals and buildings, and so on:

"Especially in a different culture, life is not easy. However, we all make it! Everybody settled down, adapting themselves to life here, exploring their best way of study, looking for a balance between study and entertainment, traveling a bit, getting a cell phone contract and so on*"* (Yang, Master student).

Through informal conversations with some Chinese students in the UK, typical challenges and

problems were identified:

(1) Language challenge: a significant barrier to adaptation is that most students still found it difficult to understand local English because accents were different from the standard English they had learned.

(2) Group working skills: critical thinking skills and collaborative coursework could get in the way of students' study. In China, most students are used to studying and completing coursework on their own. This does not mean that Chinese students are not able to work collaboratively. However, they do express a great deal of confusion and complain about group working.

(3) Accommodation: in contrast to the multi-bed dormitories in Chinese universities, students who come to the UK and are given a private room are suddenly isolated. The detached private room deprives them of talking and discussing before going to bed; chances for communication are reduced which leads to some psychological problems.

(4) Food: students at first are happy to eat British food, but after several weeks they start to miss Chinese food, especially those who do not know how to cook.

(5) Psychological stress: in leaving their parents, friends and relatives at home, the Chinese student also suffers from homesickness. Staying in isolated accommodation, living with strangers in the same house, and difficulties with the English language, leave some students feeling isolated, inferior, insecure and lacking in confidence in communicating.

Of course, the difficulties these students reported are far more than those listed above. Individuals may have their own personal challenges of culture adaptation. As personal casual observations were not enough for a deep investigation, it was necessary to do empirical work to capture a more reliable and fuller account. In this research, I regarded these Chinese overseas students as learners who needed to become accustomed to the local environment, to get along well with local people, and at the same time, to become involved with the community and gain insights into local culture.

The next section reviews several ways to assist the cultural transition for these students.

3.2 SUPPORT TO REDUCE CULTURE SHOCK

Furnham argued that the factors provoking culture shock were their previous knowledge with other cultures and past experience of cross-culture adaptation and the degree of difference in one's own and the host culture. The wider the gap between the two cultures, the greater the culture shock. Further, the degree of preparation, social support networks, and individual psychological characteristics determined the degree of cultural shock they would experience (Furnham and Bochner, 1986). Winkelman also considered the process of culture transition as a matter of learning. He pointed out that awareness of the nature of cultural shock helps constructive intervention for recognizing the sojourner's ongoing cultural shock experiences, and reframes the situations with adaptive responses and problem-solving strategies (Winkelman, 2001). In the present studies, the overseas students were all adult learners who had their own knowledge and learning skills, self-motivated by living in the local environment everyday. Because of the mobility and variety of these overseas students, formal courses that assist cultural transition by exploring different living and learning environments are quite difficult to deliver. There are few courses or modules specifically for cultural transition aimed at helping overseas students in universities, even though this is an essential part of their life. Universities offering international education have some institutional introductions about the study and life to help the transition, but they are still far from adequate.

Most overseas students have acquired some knowledge of the host culture before they arrive at the university location. This pre-departure information that assists their awareness of life in the university might come from different sources such as agencies, newspapers, TV programmes, radio and websites. However, the cross-cultural adaptation places high demands on newcomers for seeking support to reduce culture shock. Their search for help is made more difficult because of the lack of available providers, their great uncertainty in identifying appropriate sources for help, or their inability to predict reactions of potential providers (Adelman, 1988). Efforts have been made to offer social support to these sojourners, discussed in the next section.

3.2.1 Traditional support to sojourners

Albrecht and Adelman identified several types of supportive message for the sojourner's cultural adaptation: pre-departure assistance with a source of social comparison, orientation instruction programs, direct assistance of personal resources, emotional support for personal relationships and venting impressions and emotions (Albrecht and Adelman, 1987). These supportive messages could be delivered by family and friends or by people outside the primary social circle in more impersonal connections.

Pre-departure assistance and orientation programs can help prospective sojourners in developing realistic expectations and confidence to mediate stress (Albert, 1986). Sources providing these supportive messages are numerous. This research notes that the University of Nottingham had appointed staff to give lectures in China about pre-departure information. The university also provided direct help to all students in their initial two weeks after arrival by running a program called the "welcome program". However, the support strategy of the university seemed to be inadequate in offering emotional support to individuals. Although all 'institutional aids' such as personnel officers, foreign student counselors, and social workers were utilized, they were unlikely to become part of an individual circle and be responsive to personal needs (Adelman, 1988). This type of formal, planned and organized support helped to reduce culture shock in certain ways, while Adelman also suggested other ways of supporting individuals: recording experiences of the transition from home to host country; the self-help group using interdependent strategies; and the less intimate group of strangers (Adelman, 1988). All of these forms of support could be unplanned or semi-planned and informal which would benefit the sojourners. My research will therefore focus on new efforts to derive support that could help the individual or groups of overseas students undergoing similar experiences.

According to Kim's review of immigrant adaptation studies, during the initial phase of cultural entry, reliance on ethnic ties were less stressful than interaction with natives (Kim, 1987). Previous cross-cultural experiences with expatriates and veterans could be invaluable by allowing them to share their reaction to the transition and their knowledge of the host country

(Adler, 1981,cited by Adelman, 1988). This is also applicable to overseas students. In this research, therefore, Chinese overseas students were selected as the example of a group experiencing cultural adaptation. The study aims to explore the opportunities of providing support and resources by tracking their experiences of transition, and carrying out 'self-help' within this group with those people from the same cultural backgrounds. "A self-help group is a supportive, educational, usually change-oriented mutual aided group. Participation and contribution are voluntary in the self-help group" (Kurtz, 1997, p4). One of the characteristics of a self-help group is that its members share their knowledge and expertise by pooling of information and problem solving with one another. The information could be drawn upon by individual members at times of need (Self-Help-Nottingham, 2005). This research investigates the opportunities for building support resources using new technology. In the next section, we will review current technological-assisted support for cultural transition.

3.2.2 Technology assisted cultural transition

Cultural transition could happen at any time in the sojourners' life, and could now be enhanced with the aid of new technology. Researchers have also started to explore the possibilities of using convenient ICT in everyday life for cultural transition. The cultural transition is itself a form of learning, which could parallel knowledge learning in formal education. ICT plays a new role as a medium.

Chapter 2 discussed some characteristics of overseas students and this section returns to this subject. Overseas students are mainly young people in their 20's or 30's. Reports on the learning and behavioural tendencies of the so-called 'network generation' (Tapscott, 1997) and most recently of the 'Millennials' (Oblinger, 2003) emphasize that these are students who have grown up in the information age with technology, and thereby developed digital skills. With ICT and Internet, they gain greater access to resources in order to build up knowledge. At the same time the technology provides more opportunities for recounting authentic experiences or stories.

3.2.2.1 Digital sources of experiences for cultural transition

Digital collections could be a medium for recording, storing and tracing shared sensations and experiences of cultural learning. A study in the USA stated that sharing the experience of culture shock through digital collections helped people reduce their culture shock. Informal interviews were collected in Greenstone digital libraries as a space of sharing in-depth stories about experiences. It was found that participants overcame their sense of isolation through this practice (Azeez, Sharmin, Kerne, Southern, Summerfield and Aholu, 2004). This is an example of successful deployment of digital technology in culture adaptation. The authors also suggested an online space for digital collections of experiences of culture shock and adaptation, allowing participants to update and add their experiences through the web.

Attempts have been made to create cross-cultural sites to lower cultural contextualization in online courses (McLoughlin & Oliver, 2000). Now freely available online is a PMI-funded project for UKCISA (UK council for International Student Affairs) that created a new interactive learning resource to help UK institutions prepare their international students for university study before they arrive. 'Prepare for Success' has also been developed by the R&D team within the Center for Language Study at the University of Southampton. These interactive multi-media learning resources help students discover features of British academic culture and the academic skills needed for effective study. As well as preparing international students for what to expect when they begin their studies, the resource also provides scope for language improvement.

Some current relevant resources for cultural transition were also found in university Bulletin Board Systems (BBS) and websites of local societies. Chinese students can have diverse access to information about cultural transition from s online BBS forums such as Wenxuecity[7] and Chinese society's websites, e.g., CSSA-Nottingham[8]. These resources cover a wide range of issues in life with the purpose of entertaining people as well as giving support. First-hand experiences of sojourners, including students and immigrants were shared as a part of these BBS forums. The support for cultural transition in these resources is always ambiguous, however, as it is mixed with a lot of other information on entertainments, business and news.

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[7] http://www.wenxuecity.com/
[8] http://www.cssa-nott.org.uk/

Direct help, especially targeted help is not easily obtained from these BBS resources promptly.

3.2.2.2 Mobile technology for cultural transition

With new mobile technological aids, student sojourners can seek help from both people they meet and people they cannot meet. The first-hand experiences of the local culture can be shared and distributed to people in other locations at the same time or asynchronously. One outstanding advantage of mobile technology is that it can be used to collect first-hand experiences promptly and convey or spread them across locations immediately.

People are connected by cable network and increasingly by wireless network, which overcomes the geographical barriers. In the worldwide-connected network, people from different countries with the ability to travel across diverse communities, commence transition by discerning and respecting multiple perspectives, and by grasping and following alternative norms in the new culture (Jenkins, 2006). Mobile technology provides these sojourners with the opportunity to collect and share information while on the move. The key challenge is how to make best use of the existing mobile and network technology to offer students hands-on learning for cultural transition and adaptation.

Mobile devices offer the chance for people to capture and record contextual 'moments' in their life, and wireless networking gives the opportunity for immediate sharing and communication. The expectation of the present research is that mutual communication among people would enhance motivation and engagement in learning. Cultural information in the context in daily life could be collated and captured through mobile devices when sojourners stay in the house, go out and even meet with people in new physical places at any time. Contextual information about physical locations, objects and available resources obtained from users' input represents their own understanding and awareness of culture adaptation.

In the University of Portsmouth, a mobile game-based application was developed for international students to deal with cultural issues. The mobile application was designed to teach the user about the specific culture in question on a pervasive display such as PDAs and mobile phones (Bennet and Maniar, 2007). The results found that the response from both staff and students to the overall concept was positive. In this way, students retrieved useful

information from the 'prepared' cultural knowledge. However, this well-planned information is still the very limited 'expert' knowledge generated by the designers or consultants. Alternatively, student sojourners can gain knowledge from their first-hand experiences, which could also be useful for others. The wealth of knowledge created by students themselves could be more realistic and effective.

3.2.3 Package of technology for cultural transition

In the University of California Dan Diego, a study found that an increasing number of students work and live off campus. This requires new ways for people to stay in touch with old colleagues, meet new ones and become aware of the exciting opportunities around them (Griswold, Boyer, Brown, Truong, Bhasker, Jay and Shapiroet, 2002). Students are more distributed. There is also a need to develop closer ties among all these student sojourners living off campus. O'Brien stated that with the aid of collaborative technology, cultural adaptation can start from an understanding of others in different global contexts, and situated knowledge perceived, analyzed, and produced (O'Brien, Alfano and Magnusson, 2007). Mobile technology can also enable efficient conversations between newcomers and veterans which enhance group dynamics within cultural adaptation.

Meanwhile, mobile technology also assists in tracing the experiences of cultural transition. The context-aware mobile technology and wireless network can also support acquisition of knowledge about another person's authentic experiences and about real first-hand materials. The multi-representations of cross-cultural information by mobile computer/communicators with integrated technologies such as video camera, voice recorder, phone, media player, and Internet access, also can present vivid and real pictures of cultural transitions.

Reflections also occur frequently during the process of cultural transition. When transition starts, people reflect on their personal visions; question their own assumptions; understand what dictates their actions and how they contribute to their problems; feel the necessity to change; and see their own part in the changing on-going process (Senge, 1991). New technology enables rich conversations among newcomers as well as their connections with expatriates and veterans with their own cross-cultural experiences. They can gain support from

those existing resources and, moreover, they can share self-generated knowledge and experiences as a source of informal and casual support.

The integrated technologies of mobile technology and a social network website can supply multimedia creation, delivery and sharing of cultural information in context. There is great potential for student sojourners to apply these convergent mobile technologies into everyday enculturation scenarios. As learners of the local culture as well as the prospective expatriates of cross-cultural experiences in the future, these overseas students could also be encouraged to capture their own experiences with the aids of new technology. In addition to the support supplied by the official institutions, they can keep more authentic information themselves - their study and their lives. Their contributions to learning resources of cultural transition could be collected and generated. Their viewpoints could also be kept as reflective learning resources both for themselves and for future students.

With regard to the advantages of integrated mobile technology and social software, the mobile group blog was selected as a tool for cultural transition, to assist learning the culture in a situated context. The next section takes a closer look at resonance between culture transition and learning with the mobile social software, the mobile group blog.

3.3 CULTURAL TRANSITIONS AND MOBILE LEARNING

Cultural transition could be defined in three ways as informal learning which differ from traditional learning in the classroom in the following ways:

Cultural transition could happen anytime anywhere in everyday life.

There is no curriculum for this cultural transition. It is not possible to predict exactly what could happen to a certain person in a certain scenario, and it is not easy to set a standard for the extent of enculturation. The result of enculturation often represents how well the student lives and studies in the foreign culture.

The process of cultural transition is also a process of socializing. People face the host culture in the real society as individuals, but can share their cognition of the culture through their own

community. In this sense, the group of Chinese students forms a community of enculturation.

Interestingly, by comparing features of mobile learning and cultural transition, they are found to be well matched. As described in Chapter 2, mobile devices enable learning across different locations, anytime anywhere. Sojourners can learn through a mobile device "just in time" to solve a problem or gain update information about cultural contexts.. The mobile group blog could therefore be a feasible tool for assisting people's transition to a new culture. The goal of this present mobile blog application in cultural transition is to help overseas students, in the process of cultural adaptation, to decrease their uncertainty and reduce culture shock.

There were five features in cultural transition and mobile group blogging, which could be matched, as indicated in the following table:

Table 3.1: Match points of cultural transition and mobile blogging

Cultural transition	Match points		Mobile group blogging
Social skills	Understand the behaviour of host people, their manners, their characteristics	Blog is a form of social communication in which blogger and audiences are intimately related (Nardi, Schiano and Gumbrecht, 2004)	Blogging as Social Activity
	In the online community of a group blog, a social network promotes interaction between people.		

Cultural transition	Match points		Mobile group blogging
Opportunistic information	Unexpected events happen occasionally which may involve new cultural information	Mobile device provides the opportunity to capture the 'moment' on the move	Anytime anywhere
	The 'mobile' feature of mobile blogging could help people to record their immediate feelings about unexpected events for discussion or reflection		
Learning Spontaneously	New attitudes and cognitive information are integrated into spontaneously behavioural transformation	Blogging is motivated by diverse objectives, which generally depend on bloggers' desire, their awareness and insights about the environment.	Self - motivated
	The self-motivated blogging activities can be considered as bloggers and their audiences initiating inquiries and informal learning themselves.		
No preset curriculum	Individuals from different cultural background have different learning content and rate of progress.	Blog entries stored in the site reflect the tracking of bloggers' progress.	Progress made by reflection and

Cultural transition	Match points		Mobile group blogging
	Collections of experiences in blogs are for reflection, assessments and needs analysis. Adaptive curriculum is developed as circular learning reflection and enhancing needs.		accumulation
Community-based	Sojourners regarded as a new cultural group, adapt themselves to the new cultural community and environment.	Group blog is an online community for a group of people to share their thoughts, experiences and insights.	Mobile group blog as an online community
	Group blog forms an online community for mobile end users to collect and share their everyday experiences and understandings.		

Social skills vs blogging as social activity: learning a culture is also a process to learn social behaviours or learn through social interactions. The blog is a social tool which may assist in enhancing and promoting social skills for communication for the student sojourners.

Opportunistic information vs mobile blogging anytime anywhere: in the everyday cultural context, some events may occur unexpectedly. Hence mobile blogging enables people to capture and keep opportunistic information immediately. Mobile devices greatly contribute to transition tracing by recording events. Learning about the culture can be conducted at any time in new cultural contexts. Provided portable computational technology is mediated into learning scenarios, it is more flexible for learners to learn anytime anywhere about the culture.

Learning spontaneously vs Self –motivation: all cultural transitions happen naturally. Another viewpoint on learning suggests that all communication in genuine social life is educative

(Dewey, 1916). People are always self motivated to carry out blogging intentionally; cross-cultural awareness may raise their interest.

No preset curriculum vs progress made by accumulation and reflection: cultural transition scenarios vary greatly among people, between cultures and from country to country. It is not easy to preset learning scenarios for these student sojourners so that they can adapt to the host culture. Blogging is a process of information accumulation, which could also be a process of gaining cultural experiences. By blogging and reading blogs, learners can advance their knowledge even though there is no curriculum preset.

Community-based vs mobile group blog as an online community: overseas students need more communication and interaction in the cultural transition, while the mobile group blog establishes an online community for cultural transition. The community set up in the mobile group blog in the long term could benefit people by helping them to make friends and to obtain reflection from others. It brings greater opportunity for individuals to share experiences and get support from people with the same ethnic background, or from veterans.

The convergence and diversity of mobile technology provides more flexibility for people to be mobile. These international students may face culture shock anytime anywhere. The contexts of culture transition always change on the move. With mobile devices these students can collate on-the-spot cultural information, share it or present their quick responses. The student sojourners are a group of people with language difficulties and financial problems, while also dealing with a new educational system and the pressure to succeed, changes in social status, homesickness, adjustment to social customs and norms, and difficulties in befriending host nationals (Verthelyi, 2000). The idea of mobile group blog aims to form an online community for this group of Chinese overseas students to free them from uncertainty and loneliness by getting to know more people from similar cultural background, sharing their stories and experiences of solving problems, making friends and learning about the local customs and norms.

This research, which compares features of cultural transition and mobile blogging, seeks to demonstrate that the mobile group blog is a feasible tool to assist people adapt to the new

culture.

3.4 CHAPTER SUMMARY

This chapter offered a brief review of cultural shock and cultural transition. We assumed the Chinese overseas students to be learners of British culture. We reviewed the traditional support systems and technologically-mediated support for cultural transition. Practices of mobile technology employed in cultural transition were also introduced. In section 3.3 we identified five ways in which cultural transition matched mobile group blog.

As there have been no practices of mobile group blog in cultural transition previously conducted, a pilot study is necessary discover the requests and needs for the specific design and development of the mobile group blog. Having recognized that cultural shock is a significant problem for these Chinese overseas students, there is an urgent need to find ways of supporting them. This research goes on to investigate the suitability for and receptivity of the mobile group blog by these Chinese overseas students and to explore how far the mobile group blog can support their cultural transitions. It is also intended to provide a way of supplying the online community and resources with mobile technology in order to assist overseas students in adapting to their new environment. These considerations will be illustrated in the following chapters.

Chapter 4 Comparative Audio Diary study

4.1 INTRODUCTION

Previously in Chapter 3 we have discussed the main problems of transition for Chinese overseas students. As part of this study, an investigation was conducted in order to gain further insight into the nature of the real life experiences of Chinese overseas students and empirically to justify the need for resources to support their cultural transition. In order to get close to their real live experiences of cultural shock and cultural transition and to obtain their real thoughts as they occurred, MP3 audio recorders were used as personal diaries.

The aim was to understand the contents of the students' experiences to prepare the design of the mobile group blog. With these MP3 audio recorders, the students' thoughts and their impressions were recorded by asking them to make audio entries at moments that struck them of cultural interest or surprise. The study was called 'Audio Diary', which allowed participants to 'write the diary' using their voice. As with written diaries, the audio diary preserved people's thoughts expressed aloud. This method was designed to allow people to record their everyday experiences as naturally as possible.

There were two primary purposes for this study. One was to investigate the nature of these particular Chinese overseas students' experiences of cultural transition. The other purpose was to summarize valuable guidelines according to the results of this study, leading to the design and structure of the mobile group blog system. The research themes therefore were:

- What is the nature of culture shock that these students encounter in their real experiences on arrival in a foreign country such as the UK?
- What kind of problems face them during this transition?
- What are the major concerns of this cultural transition for these Chinese students?

4.2 STUDY METHODOLOGY

Participants of this study came from Ningbo, China; they were studying in Nottingham

University's Ningbo campus, and came for about a month to Nottingham for a summer school program. The study started on the fifth day of their arrival and lasted for two weeks.

All participants were asked to record their experiences in the new environment, such as what they saw and heard, what they encountered, who they met and talked with and where they visited, in the form of a diary using MP3 recorders at anytime and anywhere (Ref. Appendix I). They were allowed to tell their stories either in English or in Chinese.

4.2.1 Participants

The group of the Chinese students stayed in a student hall. Advertising for recruitment to the study was done by posters in the student hall and an announcement after one class. Twenty students then volunteered to take part, all classmates from the Business School at the Ningbo Nottingham University. Fourteen of the participants were undergraduate students and six were postgraduates. Sixteen of them were females and four were males. Most of these students came from South China.

Table 4.1 Profile of participants

Participants	Gender	UG/PG	Age
P1	F	PG	23
P2	F	PG	22
P3	F	UG	21
P4	F	PG	23
P5	F	PG	23
P6	M	PG	23
P7	M	PG	23
P8	F	UG	19
P9	F	UG	20
P10	F	PG	22
P11	F	PG	23
P12	F	PG	22
P13	M	PG	23
P14	F	PG	24
P15	F	UG	19
P16	F	PG	23
P17	F	PG	23
P18	F	UG	21
P19	M	PG	22
P20	F	UG	20

4.2.2 Procedure

Before the audio recorders were lent to the students, each participant was given a demonstration and a set of written instructions, including the MP3 recorder user manual and the link for searching more detailed help. The researcher kept in touch with them by emails during the study in order to solve technical problems that arose.

All participants had previous experience of writing diaries but none had heard of an audio diary. They were requested to keep a log of their audio diary as they wished during the two weeks of the study. They were asked to notice the differences between their everyday lives in the UK and in China, covering any aspects of life, such as 'clothes', 'food', 'accommodation', and 'transportation' in Chinese cultural norms. Two hundred and twenty audio files were received in total, 195 audio files of these were diary files. The rest were audio recording tests files.

Three students attempted to record diaries in English, though these were very short. Few of them reported technical problems, apart from batteries running out. The MP3 recorder was light and portable. Although most of the participants recorded diaries in their dormitories, some recorded their experiences on the move - in one diary the girl's whoop and the sound of the wind were clear to hear. Generally, the participants recorded the diary alone, but there were a few cases where recordings were made of casual conversations about what had happened during the day. Unexpectedly, this was a natural and informal method of capturing their real experiences, and it also indicated their unintentional collaboration.

4.2.3 Analysis of diaries

Topics in these 195 diaries covered aspects of their lives such as studying, food, traveling and accommodation. On average, each participant recorded 8.95 diaries (audio files) during the 14 days of study period. Some diaries were as short as one minute while others lasted 25 minutes. The average duration of audio diaries was 5 minute 2 seconds.

All audio diaries were transcribed in Chinese. The "Grounded" method was used in the transcription analysis by reading those transcriptions, taking notes, reviewing those notes and

categorizing the data. Many aspects of their academic life at the university were mentioned in the diaries: food, weather, shopping, accommodation, transportation, travel, buildings, expenses, people, communication, nature, customs and behavior. These aspects were then classified into ten categories by the researcher, and the analysis of the contents of these audio diaries was subject to a reliability check with two other Chinese students in Nottingham. They were asked to read 10% of the diary transcriptions and place them into the pre-defined categories according to their own judgment.

4.3 FINDINGS

These participants recorded most of the audio diaries alone; four students recorded some of their diaries with others. Their experiences could be grouped into ten categories.

4.3.1 Categories

It is customary in China for people to be most concerned about food, clothes, accommodation and travel - the four main aspects of life. This research uses categories according to the Chinese custom, and also based on the cultural issues that concern these students. These were: 'Building', 'Custom', 'Communication', 'Food', 'Shopping', 'Study', 'Traveling', 'Weather', 'People', 'Life (others)'. The result of the reliability test of this classification is substantial agreement (Kappa=0.663).

- 'Building': any buildings they saw on the street or in the distance; their own accommodation; the facilities and services of a building; its history or art; the type of building and the way it was built; and the environment. For example, these participants talked about the appearance of the school building, the environment of the campus, their accommodation and its facilities.
- 'Communication': exchanging thoughts, feelings or ideas either with friends and parents in China remotely, or with local people, classmates and friends, or by taking part in activities. Sometimes, however, participants commented that they stayed on their own in their dormitory, feeling lonely, with no connection with others.

- 'Custom': convention, generally-accepted standards, social norms or criteria. This could be also related to the public regulations, procedures and mannerisms of British society. For example, participants observed recycling regulations and also habits such as people liking coffee, preferring gardening alone, having parties before marriage, having tattoos.

- 'Food': what they ate, local or oriental. This could involve buying, cooking and eating, or even discussions about gastronomy. For example, they talked about the food supplied in their student hall, about buying food and cooking it by themselves, about missing the Chinese food at home.

- 'Shopping': selection and/or purchase of what they needed at the grocery shop, supermarket or shopping malls. This could involve goods displayed in the shop, their related activities and expenditure. Some of these participants talked about shopping quite often, commenting on the type and location of the shops, the brand of the goods, the price and the quality of the goods and the customer service.

- 'Study': their course, classes, facilities and services in or out of the university. Here the 'study' refers only to activities relating to formal learning, learning resources, and facilities in formal settings - for example, listening to lectures, using the library and other university services for learning.

- 'Traveling': their experiences of trips and transport from one place to another place within and outside the UK. This could involve their plans for traveling, the transport they used, regulations and procedures for walking, cycling and driving, and their tours of landscapes or trips to tourist attractions. 'Weather': this was regarded as one of their main concerns - all participants talked about the weather and some made comments on a daily basis. Comparisons were made with the weather in China, and complaints voiced.

- 'People': comments made about people around them, involving their appearance, the way they dressed, their behavior and mannerisms.

- 'Life (others)': all other issues and events in their lives described by these participants, including sports, security and illness.

Cultural concerns raised in each of these categories in the audio diaries were noted down and calculated. The following figure (Figure4.1) illustrates the proportion of these concerns within each category:.
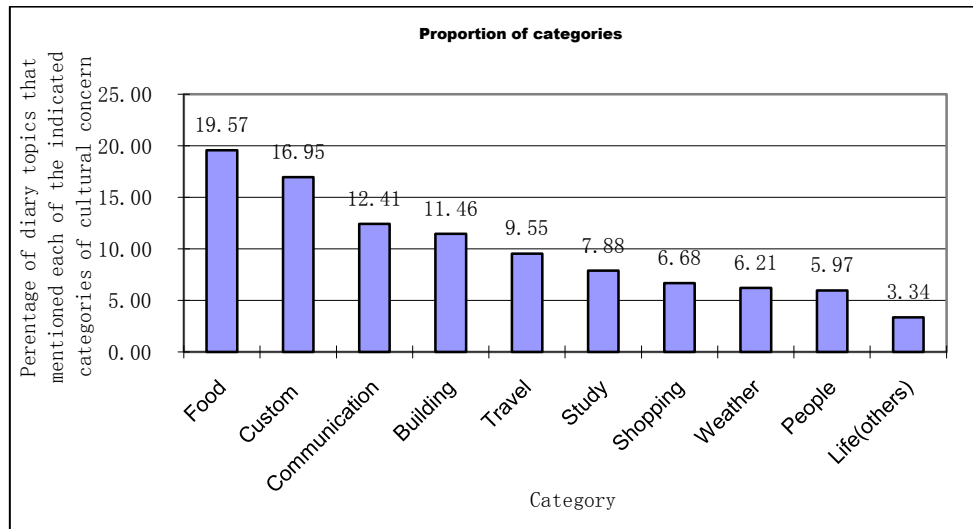
Figure 4.1 Proportion of diary topics that mentioned each of the indicated categories of cultural concern

From this figure we can conclude that 'Food' is the topic of greatest concern to these participants, while 'Weather', 'People' and 'Life (others)' are categories less talked about. In the next section, the contents of each category will be reviewed in detail, with examples.

4.3.2 Cultural shock and problems encountered

Of the ten categories for cultural shock mentioned in the audio diaries, 'food', 'custom', 'communication', 'building' were the four aspects that struck them most. Below are specific descriptions of each of these categories in the order of significance, according to Figure 4.1.

4.3.2.1 Food

There is a famous saying in Chinese that "Food is the first necessity of people", which represents how important food is in Chinese culture. From Figure 4.1 we also learn that food is the most significant topic these participants talked about. About 80% of participants complained about the food served in their student hall. They claimed that British food seemed to be acceptable in the first week, but after one week they found it hard to tolerate. There were various responses:

(1) Surprise and contrast

Chinese people prefered warm food and warm drinks and felt uncomfortable about digesting cold food. They were afraid to drink cold water because they considered unboiled water to be unclean. They showed great surprise that British people always had cold drinks, even with ice:

"I don't like the food in our student hall, repetitive and simple, awful. Cold drinks for meals even in the morning. " (p.16, ref. Table 5.1)

They compared this food with the food they had in China.

(2) Disappointment

These participants were disappointed that the British food was not as delicious as Chinese food or to their taste. The following example indicates their disappointment: *"I never ate instant noodles in China, but I found they are more delicious than other foods here."* (P 5)

(3) Attempts to adjust

They also explained how they try to adjust to British food even though they were dissatisfied with it. They started cooking Chinese food by themselves, a new skill for most of these students because in China their food was cooked by others.

"We tried to cook rice in the microwave this evening for ourselves, but it tasted strange." (P 2)

 (4) Discomfort and anxiety

They also appeared to have worries about health problems from British food, as this girl commented - she expressed her anxiety and fear about the food:

"I can't stand the food here and I miss Chinese food so much. Like many other classmates, I am wondering if it is the food that has given me a mouth ulcer and diarrhea" (P 20)

These students' complaints and anxieties about food are very clear. To adapt to the new environment, they had to endure the food and learn new cooking skills . 'Food' is therefore a real issue for these Chinese overseas students in their cultural transition.

4.3.2.2 Custom

'Custom' was the second category most mentioned by these students, scoring 17% of the total. They made careful observations about public manners and notions, respecting British traditions and styles. They believed themselves to be getting along well with local people by learning the local customs and were also eager to know the proper ways of behaving. They always compared their observations with Chinese culture. They expressed curiosity, doubts

and fear, especially if something occurred that was felt strangely different from their own beliefs:

(1) Surprise

The following example illustrates the participant's great surprise in comparing her observations of parents with their babies with her own understanding of Chinese traditions. She observed that while Chinese parents protected their babies by keeping them indoors until one month after their birth:

"We saw some people leisurely wheeling the pram along the street. Little babies were underdressed. From my view, they were too little to be taken outdoors." (P 17)

(2) Doubts and confusions

They also had doubts when things they were accustomed to in China were not available here. The participant in the following example had doubts about having her clothes dried, because in China it is customary to hang out clothes in the sun to dry, in the balcony or in the yard, but their accommodation had no such facilities:

"How can they have their clothes dried? Don't they put clothes in the sun?" (P 16)

They asked these questions but they could not get the answers.

(3) Lack of understanding

Because they lacked knowledge of British history and culture, participants found it sometimes quite difficult to understand British humor, expressed in everyday conversations or in entertainment.

The following example illustrates that the student could not understand the humor of a British comedy movie that she had watched:

"I don't think that is humor, or at the most it's 'black' humor or 'horrible' humor. I can't comprehend it."(P 18)

(4) Attempts to learn procedures

They also learnt about public procedures in everyday life:

"Today the cleaner came to us again, asking us to clean out the hair in the bathroom and separate the garbage." (P 9)

(5) Attempts to understand and adapt

They appreciated and accepted British cultural lifestyle, and even started to adopt similar habits as the local people:

"People seem to quite enjoy their life here, not really busy, not as busy as my parents."(P13)

"Now I have a new habit of taking my umbrella with me every day, as local people do."(P9)

(6) Verification of previous knowledge

They had their previous knowledge verified by their first-hand experiences. For example, they had previously been told about, and then observed, the democracy and freedom of speech in the UK:

"We witnessed the freedom of protesting today. There was a protest against animal testing on *the street where people preached to us about the privileges of animals. "* (P 14)

The above examples suggest that these Chinese overseas students encountered various forms of cultural shock. There was a great desire for resources which could answer their questions and reduce their cultural shock.

4.3.2.3 Communication

This study found that most communication between participants and local people occurred when they went out shopping, took part in events or asked for the way. Previously, this group of students had not had many opportunities to talk with local students because all their classmates were from China, and during their stay the local students were away from campus. They mentioned that they had made a few remote connections with their families and friends in China, and were homesick and lonely.

(1) Loneliness and homesickness

Although these students knew one other and lived close together in one student hall, some participants still commented on their loneliness and homesickness, calling their parents every day:

*"Now I am alone in my dorm. Just now I made a call back to China. This is the first time I

have called my parents in China. In the past they usually called me. We talked for more than one hour. *"* (P 9)

The feelings of isolation and homesickness in the new situation led to more communication with their families back home, a typical phenomenon of cultural shock among these overseas students.

(2) Language barrier

Although these students were given lectures in English in the Ningbo Campus of Nottingham University, they still had difficulties in communicating with local people:

"We talked freely with some local students although there was a language barrier. I think we *should have more detailed communication with British people, to find out more differences"* (P 5)

(3) Improve communication

These students were willing and happy to have further communication with local students. They were active in taking part in some organized events integrating with local people:

"We played games with girls at Nottingham High School, making pagodas with flour and spun sugar."(P10)

At the same time, they also reported on the negative aspects of their communication.

(4) Misunderstandings and distortions

There were cases of misunderstandings and distortions that resulted in unsuccessful communication. The following example is typical - these students had no previous experience of booking train tickets, and nobody explained to them how to do this:

"We were refused a refund for our train tickets. Why we can't get a refund? I can't accept it." (P8)

There were different choices for customers to buy the train tickets which they had not

understood, and their confusion frustrated them.

(5) Complaints

Unsuccessful communication and misunderstanding of different habits of living also led to complaints about staff in the student hall. This girl was not satisfied with her dormitory and asked for a room change:

"They said they could help me change to another room *but in fact they didn't. Are they a bit over-strict?* " (P5)

The above examples indicate the potential for conflict between these students and the local people, as a result of culture shock and difficulties in communication. This is an important and serious problem.

4.3.2.4 Building

'Building' is another focus of concern of these students. In their diaries, they commented a lot on their accommodation, the buildings and the campus environment, the houses of local residents, and buildings they saw during their trips. They also evaluated local architecture, infrastructure and the environment: They did evaluations and comparison.

They talked about the facilities and furniture in the buildings they visited or in their dormitories:

"London is an international city with buildings from Roman times and modern times." (P 6)

"The castle in Wollaton Park looks more like an animal museum and you can see a lot of animal specimens there." (P 14)

"Buildings in Birmingham look quite modern. But compared to Shanghai, there are no skyscrapers at all." (P 3)

This participant's diary shows her preference for modern cities and her disappointment with cities in the UK.

This category was always accompanied by the 'travel' category. For instance, when on a trip,

they would talk about the buildings they observed and made comparisons. These expressions also revealed the gap between fact and imagination in these participants' minds, another reflection of culture shock.

4.3.2.5 Travel

Participants planned and took many trips. They talked about their methods of transport, the landscapes they visited or would like to visit, their preparation for travel, such as booking flights and hotels. This indicates that these students are enthusiastic about exploring the UK as much as possible.

(1) Comparing and learning new regulations

Participants also compared transportation rules and tools in the UK with those in China. Below is an example of their experiences of taking a train:

"The first time I took a train in the UK, it was quite exciting. What makes us worry most is that we may board from the wrong platform. It is different from trains in China, not all seats are reserved. And there are not so many people on the train, so you can sit down whenever you find a vacant seat."(P 12)

In the above comment, the participant explained the uncertainty of taking the train and the ease of finding a seat by comparison with a train journey in China. This also shows how very simple things can be organized differently and perhaps become a source of stress or uncertainty.

They learnt traffic procedures; they compared the differences in motorways:

"We need to push the traffic light button at the side of the road when we are going across the road." (P 6)

(2) Evaluation

They commented on the infrastructure, roads and different transport systems, always making comparisons:

"The taxis here have a strange appearance; they are big and are old in style, with a big

compartment."(P 3)

"The motorway is not as straight as that in China. It has a lot of roundabouts." (P 19)

(3) Happiness and excitement

They traveled a lot, making plans and visiting some places of interest. They also learnt the history and culture of the place they visited. They were happy and excited to acquire new, first-hand knowledge and enjoyed their sight-seeing experiences and opportunities to learn.

On their travels they were also interested in issues like 'shopping', 'people', 'weather', 'building' and 'custom'.

4.3.2.6 Study

Not every participant mentioned 'study' in his or her audio diaries. Only a few talked a lot about what they had learnt from the lectures, seminars and workshops they had in the summer school. Most of them could follow what the lecturer was saying, and they liked the learning methods in the classroom: group work and games. They found no differences between the lectures here and those in Ningbo campus. Language was not a problem for their courses. They also observed the differences of their own behavior and that of British students in class. The following example describes their opinions of a visit to a local high school:

(1) Group work skills

 "Students here have more initiative and are more active than us. They have more collaborative skills from group work which they often do. " (P 4)

Because of the differences between traditional teaching methods and the emphasis in individual and independent learning, greater collaboration in British schools were observed.

(2) Freedom of choice

They also compared their methods of learning in China with those in the UK:

"In high school, students here are free to select courses. But in China, students have to take compulsory courses with no choice." (P 13)

(3) Discussion

As their classmates are all Chinese students in the summer school, this group of students might have less difficulty in having discussions with their classmates. However, in general, overseas students in the UK might encounter different situations in class, having lectures and discussions with local and other international students in their second language. This is more challengeable. .

4.3. 2.7 Shopping

This group of students were very interested in shopping as their study period coincided with the summer sale season. Unlike other overseas students who stay in the UK for longer periods, they felt as if they were tourists, possibly because they were young people in pursuit of world-branded products, and mainly female. Male students mentioned shopping less frequently. The group also found differences between nightlife in China and in Nottingham   most shops closed early in Nottingham, whereas in China, most shops stayed opened until midnight. Some Chinese students regarded shopping as relaxing.

(1) Contrast and surprise

"All shops close early each day, except some supermarkets. There are no shops to visit in the evening. This is opposite to China, fewer people walk on the street for shopping here." (P 15)

(2) New knowledge

They also encountered problems or had to adapt to new methods of purchasing when they were doing shopping:

"I still do not trust shopping online and still prefer doing shopping in real shops." (P 16)

In China, online shopping is a new phenomenon; most Chinese still prefer going to shops to make their purchases.

(4) Surprise and confusion

The students were surprised, even confused, when they could not find what they wanted in the shop. They were shocked that they could not buy clothes to fit them:

 "*It's difficult to buy proper trousers here because of the size. For us, we only can* get them

from the children's section. " (P 12)

We can see from the above comments that these Chinese students also had to adapt to making purchases. They had to change their shopping habits and rearrange how they spent their leisure time.

4.3.2.8 Weather

All participants commented on the weather in the UK, comparing it less favorably with the weather in their own city in China. That summer in Nottingham was abnormally cold and wet compared to Chinese summers, and the length of day and night also influenced their work and mood.

4.3.2.9 People

They met people who had different accents and came from different racial backgrounds. They commented on their appearance, behavior and manners:

(1) Happiness and praise

"Men are polite and women are also graceful. They always smile when they are talking with *you. You can always hear 'sorry' and 'thank you'.*" (P 2)

(2) Shock, suspicion and fear

They were also shocked by the appearance of some people:

"Some people appear strange. Men have long dyed hair and wear quite a few earrings, even rings on their nose. Strange. They don't look like good men." (P 16)

Such judgments indicate that participants were slightly suspicious and afraid of people with strange dress and appearance. Even their follow students can strike a very different impression and thereby be the focus of surprise and curiosity.

"You can see a lot of oddly dressed people and women in all black hijab except their eyes. Nobody here feel they are strange except us. Are they more easy-going?" (P 8)

These comments revealed that the students judged people according to Chinese values and outlook on life. Chinese culture had a deep impact on these overseas students and support was needed to explain misunderstanding and narrow the gap between British and Chinese culture.

4.3.1.10 Life (others)

Other issues in their life relating to cultural shock and transition and problems encountered were listed in this category. They included entertainment, sports, illness and security. Only a few individual participants made observations about these.

It can be concluded from the above comments that these overseas students did experience cultural shock and had to deal with many issues relating to transition from different aspects in their everyday life, even though at the same time they were excited about exploring their new world and learnt from their observations, conversations, travels and experiences in everyday life. It is therefore essential to build up a flexible and accessible learning resource as a method of support for their cultural transition.

4.3.3 Summary of main points about cultural transition

To summarize: these participants in this study did find there were plenty of stories about cultural shock in everyday life they could talk about. The main issues experienced by the students in this study, revealed in their individual diaries, were, in order of significance, food, custom, communication, building, travel, study and shopping. They enjoyed this audio diary study although they did not share these stories with others. They suggested that the benefit of this recording was that they would have a good individual review of these experiences in the future. Most of them were inclined to try recording the diary on the move with MP3 recorders.

Food is one of the essentials of living. Students had great problems in adapting themselves to the local food and felt there were demands on them to learn how to cook as the solution to this transition. This suggests that overseas students have to learn more skills as well as the professional/academic knowledge associated with their university studies.

They expressed considerable shock at local customs and their problems in communication. They explored the new environment and the different culture by traveling and visiting places. They appreciated the comparison they made between learning methods and skills in the high school class and their own experiences, which indicated to them the adjustments they would have to make in their university studies

They expressed their feelings of excitement, anxiety, uncertainty and loneliness in their diaries. This indicates they were affected by cultural shock. Even though they were given lectures in English in China, there were still barriers of language in their attempts to communicate with local people. It is possible to hypothesize that overseas students other than Chinese also experienced culture shock and difficulties in adaptation. International students should therefore be supported in becoming accustomed to the local environment.

4.4 DISCUSSIONS

The MP3 audio recorder was used to collect the students' experiences in this study. This technology offered real advantages in getting close to their everyday experiences.

4.4.1 Audio advantages

Audio MP3 recorders offered the participants the opportunity to record on the move. Although in the study most participants recorded their diaries in their dormitories and followed the habit of writing before sleep, two students tried recording their experiences when walking outdoors. The instant information obtained from the contexts was also recorded, giving authenticity. They recorded casual and natural conversations describing their experiences. Some students felt more relaxed if they left the MP3 recorder working while they were talking and doing another activity, such as cooking, so that the audio recorder captured contextual information in a natural way. Audio recording was regarded effective and efficient documenting.

4.4.2 Limitations and possibilities

However, there were some constraints for this study. One of these was the fact these participants lived together in the same student hall, thus giving them a lot of opportunity to discuss what they encountered face to face. This group differed from those students who would stay overseas for a longer period. The latter might have fewer chances to meet together to discuss their experiences, particularly those students who were not classmates. These participants also had an advantage in linguistic acculturation as they were given lectures in English in Ningbo before they came here. Despite this, they still experienced difficulties in

communicating with local people. However, all these individual experiences reflected only their own confusions and shock about cultural transition. The diaries also revealed that these students shared similar experiences and faced similar problems. Their observations of their experiences could be delivered and spread informally as knowledge to other overseas students who might encounter similar problems and cultural shock, and technology other than audio files could assist with this. Time is needed to listen to audio files, nor are these easy to use for information searches. Texts and images may therefore score highly because of their solid and iconic representations; the group blog with texts and images is a suitable technology to explore. The group blog could bring individual collections of their experiences together, providing a space for sharing and discussions as a learning resource.

4.5 CHAPTER SUMMARY

This chapter has described an audio study of students' greatest concerns and awareness about cultural transition. Participants recorded their thoughts and experiences by speaking to an MP3 recorder to create audio diaries based naturally and closely on their real life.

The study demonstrated the nature of people's experiences of cultural transition and their concerns. It also justified the need for specific support for Chinese overseas students in Nottingham in order to make this transition. We examined the comparison made by these students between their observations and their previous culture or knowledge, and identified problems associated with cultural shock, such as surprise, misunderstandings, distortion, anxieties, fear and suspicion, as well as excitement and happiness. All these negative feelings presented a risk of failing to adapt. Some participants solved their problems with the help of other people and tutors, but there were a number of questions and problems left unsolved that they could not solve by themselves. As these overseas students sought further communication with people and wanted to learn more about Britain, a flexible and widely accessible resource is essential in order to help them to deal with cultural shock.

Based on the results of this study, ten categories have been established to reflect the degree of concern expressed by participants. The contents of their diaries, based on this classification,

have recommended guidelines for the design of the mobile group blog, as illustrated in the

following chapters.

Chapter 5 Needs assessment study with a group blog

5.1 INTRODUCTION

In the previous chapter, personal experiences were collected individually using MP3 recorders in the form of audio diaries. The purpose of this research here is to show that people can use digital technology to create, communicate and share their experiences within a learning community. The study of audio diaries in previous chapter did gather rich and colourful expressions of peoples' real experiences and feelings, and demonstrated the need to support these people. However, their individual audio collections were less suitable for sharing because access to the use of audio files was more time-consuming (involving replay and review), and because scattered audio files were less easy to be shared directly.

A further study was therefore conducted to explore what might take place when people capture information in their environment by taking photos and using textual expression, since use of text and image seemed to offer a more direct and speedy presentation of people's views and a greater opportunity for sharing them. The purpose was to investigate how personal experiences could not only be captured, collated and coordinated, but also made visible to others.

From the researcher's personal observations of her friends in this group of Chinese overseas students, it was found that they tended to update their personal blogs frequently on starting their new life in Nottingham. Contents described their lives in transition. Because of the popularity of using personal blogs, answers were sought to the following questions for the purpose of this study:

- How do Chinese students collect and share their experiences of cultural issues with the aid of the group blog?

- What are their experiences of personal blogging and group blogging?

- Do those who take part in the group blog feel part of a community?

This study also intended to encourage them to go out, observing and communicating with more people, in order to gain more insights into local society. There were two groups of participants in this study: one group acted as the group bloggers, the other acted only as post-blogging evaluators by reading the contents of the group blog.

5.2 THE STUDY OF THE BLOGGERS

This group of participants took part in the empirical blogging activities. They were asked to describe their experiences and understanding of their cultural transition in their new environment, by submitting blog entries to a group blog site during the study period. Personal experiences, observations, awareness and thoughts were captured, recorded and shared by all these participants through the group blog. Short interviews were conducted with pre-blogging focus groups, followed by detailed post-blogging interviews and discussions with focus groups.

5.2.1 Participants

Sixteen newly arrived Chinese overseas students were recruited in Nottingham to collect their individual experiences through a group blog using texts and images. This group of volunteers (10 females, 6 males) ranging from 22 to 35 years old began either an undergraduate or a postgraduate program in September, 2006. All came from the Chinese Mainland and none had experienced overseas studybefore. Five of them were previously known to one another. They came to study in the various departments of Business, Mechanical, Chemistry, Computer Science, Human Resources, Education, Psychology and Economics. Each participant registered a nickname as the username for the group blog. The following table (Table 5.1) gives their details:

Table 5.1 Profiles of participants

Participants	Gender	UG/PG	Age	Faculty
littlegrass	F	P	23	Education
bluenner	F	P	22	Economy
Endimi	F	U	22	Business
Slvera	F	U	22	Business
zzzyyysu27	M	P	23	Psychology
elaine	F	P	22	Education
winter3m	F	P	22	Marketing
Vera	F	P	26	Education
chongzi	F	P	23	Education
Kelvinyang	M	P	22	Human resources management
Lyybella	F	P	22	Education
hxqswx	M	P	24	Computer science
Angvil	F	P	24	Economy
Tommy	M	P	35	Physics
wxl_david	M	P	22	Mechanical engineering
Ford	M	P	24	Built environment

All participants except 'Tommy' already had their own personal blogs and most of them were familiar with personal blogging, although only two knew the term 'group blog'. None of them had previously attempted group blogging

5.2. 2 Apparatus

A group blog was installed and configured on a free public web host to support the group blogging. Exblog was selected as the blog server software, developed by a Chinese company with open source. The researcher used the default structure and design of the Exblog for its 'group' feature. The Exblog can be run on web host with PhP and MySQL server. The host I found is 12700, and the web link was (http://www.127000.com/Jamine/lsri/), valid for one year.

This free publishing platform included several key features: Blog entries, Categories, Announcement board, and User's login and password. The group blog enabled multi-blogging, which provided each person with a user account. Each blog entry submitted by different bloggers would be displayed on the website in reverse-chronological order, and all entries mixed.

The following figure illustrates the first page of the group blog, divided into two columns:
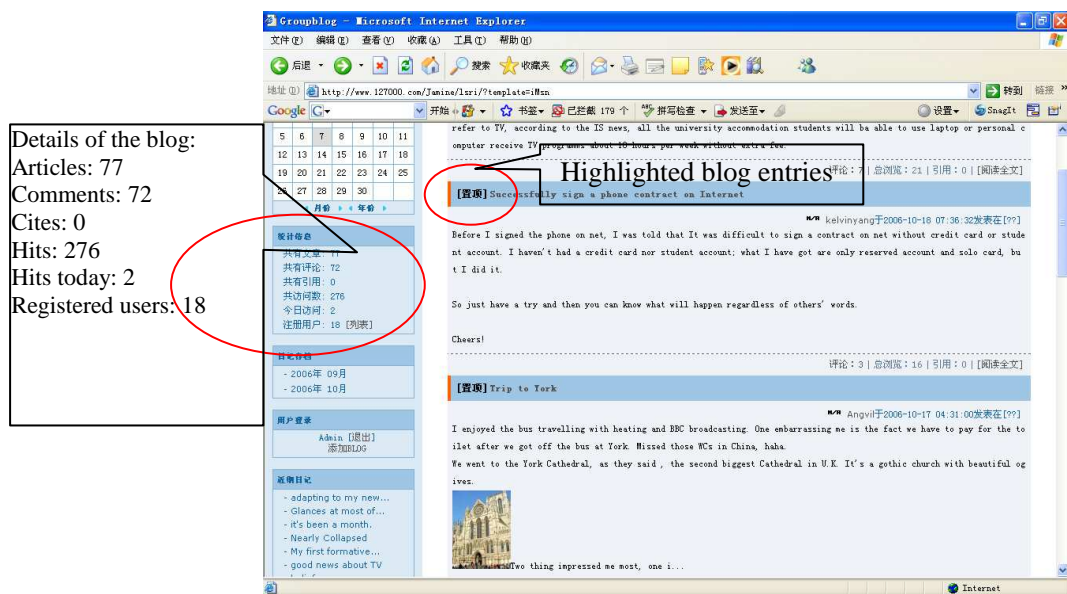
Figure 5.1 The website of the group blog

The left column shows calendar, latest entries, latest comments, latest trackback (the URL another personal referring to this article) and permanent-links. The list of updated information shows the current status of the blog site. The details are as follows:

- Articles: the number of blog entries. The figure shows there were 77 blog entries.

- Comments: the number of total comments to all blog entries in this group blog site. The number 72 is displayed.

- Cites: the number of trackback. The figure indicates that nobody used this.

- Hits: the number of blog site visits. A total of 276 visits is shows.

- Hits today: the number of visits to the blog site on that day

- Registered users: the number of users of this group blog, including the researcher and the participants. The researcher had two accounts - one was administration and the other was scaffolding. Only registered users had the authority to publish blog

entries and leave their comments on the group blog.

- Highlighted blog entries: interesting topics were highlighted by being placed at   the top the main page to attract attention.

In the right column is the main body of blogs, including an announcement board and blog entries. Highlighted blog entries were placed at the top and the remainders of entries were displayed in reverse-chronological order. One blog entry is shown, with title, body and the shortlist of numbers of comments, readers and trackbacks. The blog entry is shown partly with the name of the author, date of posting and a few lines of blog content. Readers had to click the title of the blog entry and go into the details by opening a new webpage to view the whole content. Below is an example of a blog entry with full details.
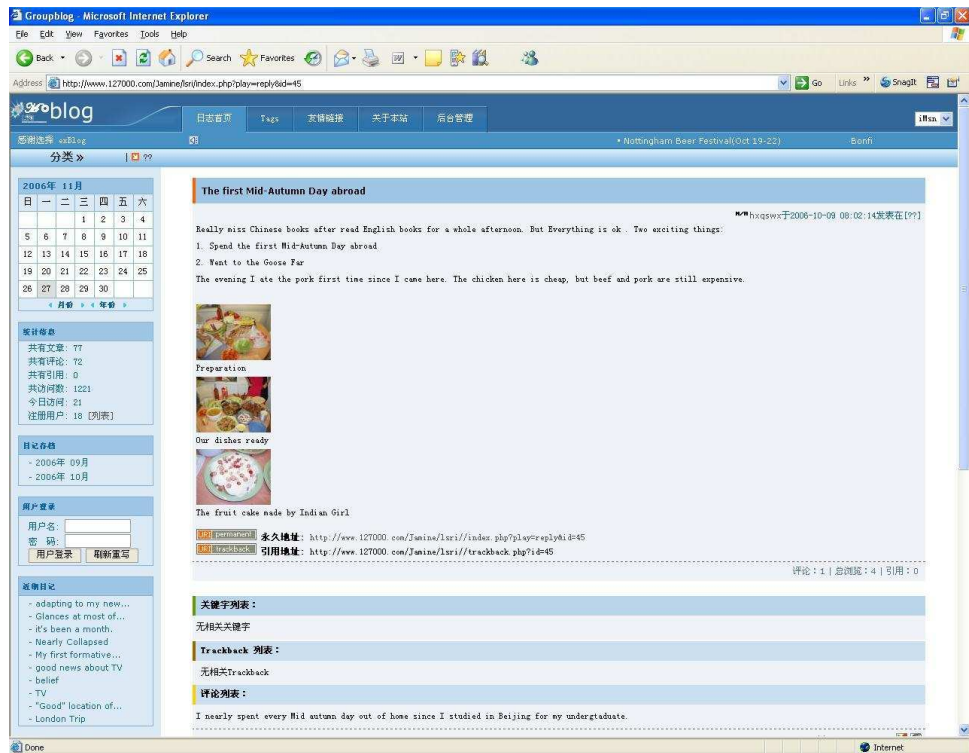
Figure 5.2 A blog entry example

5.2. 3 Procedure

There were three phases to this study: pre-blogging focus group, blogging and post-blogging interviews and focus groups. The profiles and previous experience of participants were

collected in the pre-focus group, and a demonstration was given to this group on how to carry out the group blogging. Each participant registered a username for the group blog site. They were asked to capture anything in their everyday life that they felt was interesting and useful for sharing, and to submit this information to the group blog site in the form of a blog entry at any time. All they needed were their own digital cameras and an Internet-connected computer.

Fourteen of these participants joined the post-blogging interviews and focus groups which followed the practical moblogging activities. They were divided into two focus groups, each lasting for 30 minutes. Interviews and focus group discussions were recorded by MP3 recorders. Pre-blogging focus groups were conducted on the day of study induction, blogging lasted for three weeks and post-blogging interviews and focus groups were conducted within one week after the blogging. Below are the details of each stage.

5.2.3.1 Pre-blogging focus group

Simple questions were asked in five focus groups on recruitment to the group blogging activity. In each group, three or four people introduced their background and experience of personal blogging. All members of the groups agreed to give permission for the researcher to view their personal blogs. The themes for each focus group included:

- Basic personal information about their age, gender and their study program

- Their experience of personal blogs

- Frequency of updating personal blogs

- Their experience of using mobile phone

- Their attitudes towards blogging in a group

5.2.3.2 Blogging

Exblog was installed on the website and on recruitment participants were asked to register for blogging. They started group blogging in the second week after they arrived.

The researcher acted as an administrator and observer of the group blog. The blog site was left blank at the beginning and the study began with semi-scaffolding by the researcher: in the first five days the researcher copied some blog entries on cultural transition from personal blog sites to the group blog, the aim being to initiate involvement as soon as possible.

All participants were asked to write their blogs in English and were allowed to transfer content

from their personal blogs in their MSN spaces to the group blog site.

5.2.3.3Post-blogging focus group and interviews

Two focus groups and one interview were conducted after the group blogging phase. Questions were asked about their personal and group blogging experiences, and their ideas on mobile blogging were also sought.

5.2.4 Analysis

The study had both qualitative and quantitative data, collected from the following sources:

- Log files of each learner's actions

- Qualitative data from the interviews and focus groups

5.2.4.1 Log files

From the log files, I distilled data about the online actions of each student. The following features were included:

- The number of logins, hits and visits each day

- The number of blogs in each day

- The total number of individual blogs, both direct to the group blog site and copied from their personal blogs

- The number of comments on each blog entry

5.2.4.2 Interviews and focus group analysis

Transcriptions were made from the recordings of interviews and focus group discussions. As these conversations were in Chinese, I listened to the recordings, transcribed them into Chinese texts, took notes from these, and then identified categories and concepts. By reading and re-reading the transcriptions, I was able to examine the inter-relationships of these categories and concepts. The interpretations were combined with the themes of the study. The contents of the group blog site were also analysed in terms of the most common concerns expressed by the participants.

5.2.5 Findings

The following table shows the number and type of blogging actions during the study period:

Table 5.2 Figures of actions

Action	Number
Total hits (visit the blog site, including logins) visits)	254
Users logins (Bloggers' visits by login in)	120
Blog entries	77 (including one from the researcher)
Comments	72

On average, each participant posted, made comments or logged to the group blog every three or four days, not every day. They shared good and bad news, their excitement on traveling, and their difficulties, their viewpoints about the new culture, their life style changes and so on.

5.2.5.1 Findings from the group blog site

The following figures illustrate the analysis of data from the log files and blog site contents:

 (1) Continuity

The 'visits' here means the number of hits to the blog site by the group members each day during the three week period from the end of September to the middle of October.
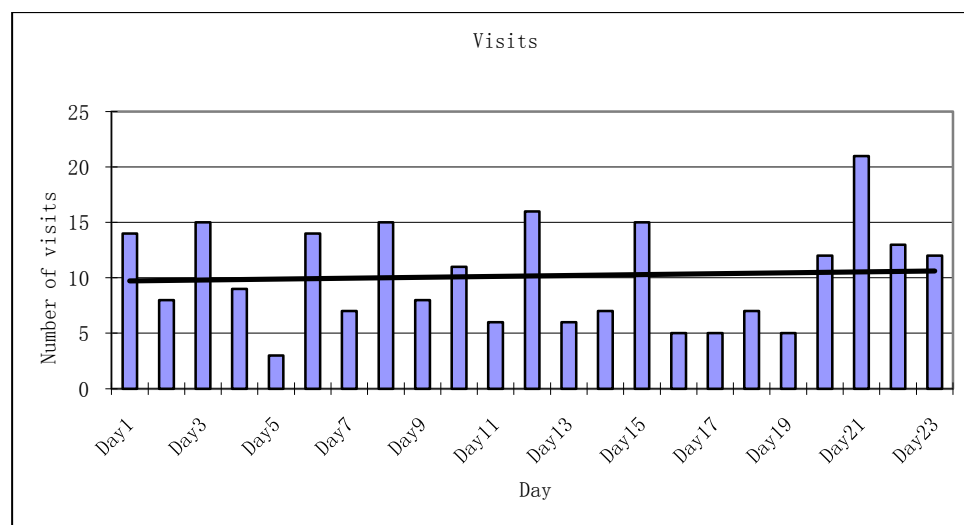
Figure 5.3 Number of user visits to the blog recorded on successive days of the

fieldwork period

There were only four days when the visits stayed at a relatively low level; on the days in between the visits rose sharply. The black trend line in the middle of the figure implies that the number of visits stabilized at around ten. The figure also indicates that the participants were active in visiting the site on a continuous basis, none of them dropping out during the study period. They kept maintaining the blogging every two or three days. This indicated a satisfactory level of engagement in the blogging activities.

(2) Participants' engagement

Figure 5.4 illustrates the individual activities of participants during the three weeks of group blogging, which is according to the number of blog entries from largest to smallest. It includes the number of individual logins, of blogs transferred from MSN space and of blogs they posted only for the group blog, as well as the comments they made on entries.
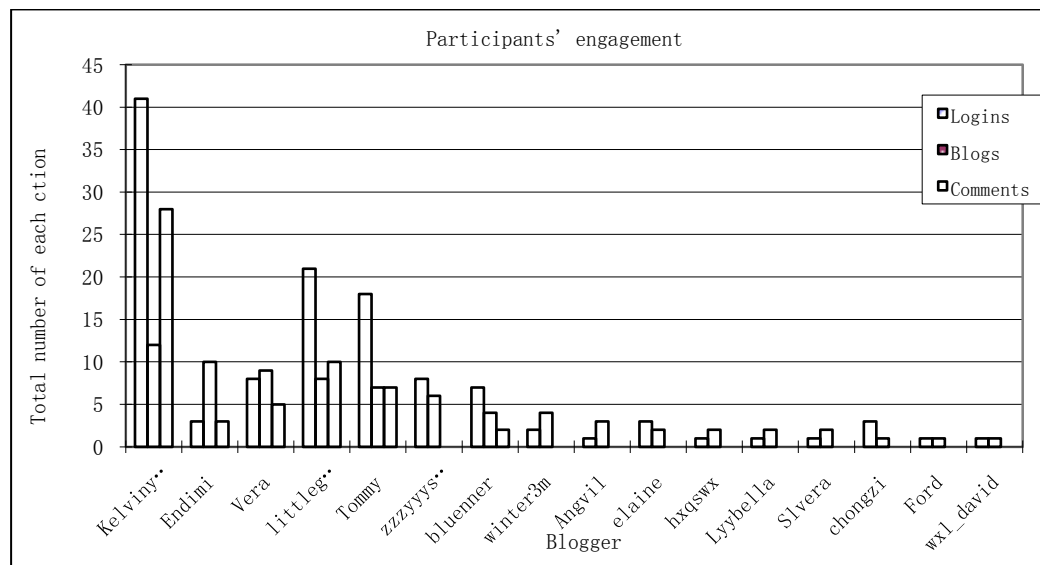
Figure 5.4 Participants' activities on the blog site

It is found from the figure that some participants are active users, some are modest users and some people are low users. Three out of sixteen members of this group - littlegrass, kelvinyang and Tommy - were significantly active in visiting the group blog during the period of this study. It was also found that the active bloggers were also active commentators. Only ten participants copied and translated blogs from personal MSN or QQ spaces to the group blog site. For four of these, 'Slvera', 'winter3m', 'hxqswx' and 'Angvil', this was the only blogging

they carried out, implying that one in four participants did not intend their blogs to go only to the group blog. Figure 5.4 below illustrates the proportion of blog entries transferred from personal blogs to this site compared with the proportion of blog entries created only for the group blog.

Engagement by blogging

Although there is no participants dropped out, participants showed different levels of activity and engagements. Figure 5.4 shows that 'Kevinyang', 'Endimi', 'Vera', 'littlegrass' and 'Tommy' were active in blogging, 'Kevinyang' being the most active of these. 'littlegrass' and 'Tommy' took part only in group blogging, never transferring blogs from their personal space. 'Tommy' is the only person who did not have his own blog. 'Kevinyang' and 'Endimi' created more blog posts for the group blog, while 'Vera' only participated by transferring contents from her personal blogs. A noticeable fact is that 'Kevinyang', 'Endimi', 'Vera', 'littlegrass' knew each other before they took part in the group blogging and they were found to give one another more comments. Participants in the right part of the figure such as 'angvil', 'elaine', 'hxqswx', 'slvera','chongzi', 'wxl_da' were strangers to each other. A possible explanation is that those four active participants, closer to each other, regarded the group blog as an online space for sharing discussions. Another possibility is that some people might log on less frequently and be more 'silent' but they could spend a long time on reading, which we could not get the figure unfortunately in this study.

Engagement by giving comments

It can be seen from Figure 5.4 that only six participants submitted comments on blog entries. 'Kevinyang' was again the most active commentator; 'littlegrass' and 'Tommy' were also active in making comments. The other ten participants remained 'silent' throughout the study. From this, combined with information from their profiles, we can note that participants tended to give comments only to people they knew, indicating that they preferred to connect with previous acquaintances.

Engagement by reading

As the majority of these participants did not submit comments, it is necessary to check the frequency of their log-ins (Figure 5.4).

'Kevinyang', 'littlegrass' and 'Tommy' again had the most logins, with more logins than blogs, illustrating that they logged in not only for posting blogs. People making fewer comments also logged in less often, although 'Endimi', who logged in less often, gave her comments on each occasion. 'Bluenner', 'zzzyyysu27' and 'vera' logged in several times, but 'zzzyyysu27' did not make comments. 'vera' and 'Bluenner' sometimes submitted comments. It is possible that those people who made more visits without comments are those who prefer reading than commenting in order to gain knowledge from the blog site.

The group blog site received a total of 254 hits, more than three times the number of comments, suggesting that there were large numbers of hits coming from 'silent readers' who visited without making responses.
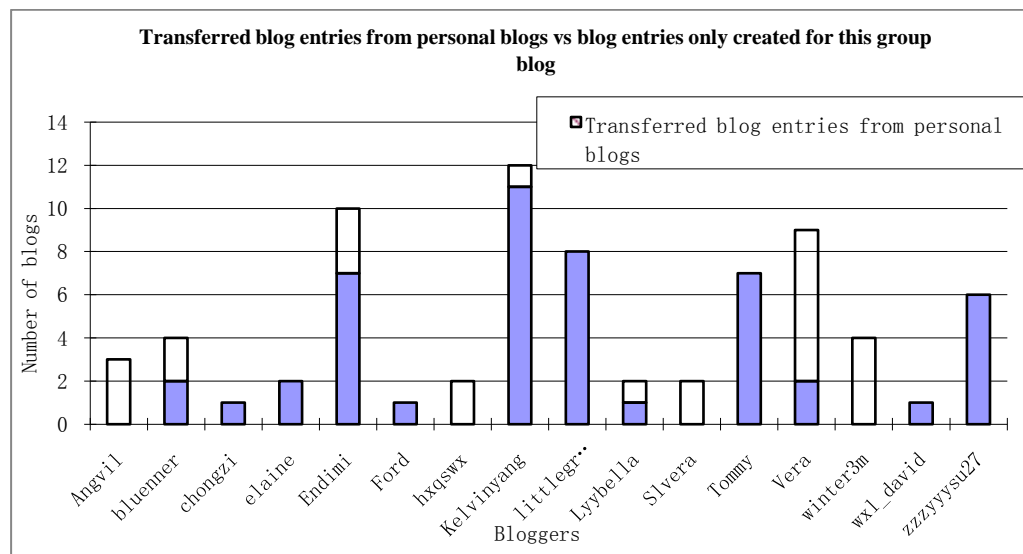
Figure 5.5 Blogs entries only for the group blog or transferred from personal blogs

From Figure 5.5 we can see only seven participants created blog posts specifically for the group blog site. 'Angvil', 'Hxqswx', 'Winter3m' and 'Slvera' only transferred or copied contents from their personal blogs to the group blog. The other six participants both transferred contents of personal blogs and created new entries for the group blog. On average, 61.49% of entries were created specifically for the group blog site; seven out of sixteen (44%) posted the

same contents to the group site as those in their personal blogs; 38.51% of entries were transferred or copied from personal blogs. This indicates that some participants considered that personal and group blogging were similar.

5.2.5.2 Contents of blog entries

The contents of the blog entries revealed the participants' main concerns about their everyday lives. They were free to post thoughts on any topic, so it was expected that analyses of blog content would highlight their concern about cultural transition.

 (1) Summary of categories from the contents

In order to make a summary of contributions to the group blog, nine broad categories were identified by the researcher. Classification followed that in Chapter 4 (Section 4.3.1) with some minor changes. First, in this study, 'conversation' replaced 'communication', to avoid ambiguity. Most Chinese-English dictionaries define 'communication' as 'transportation'. Because transportation was classified under 'travel' in this research, the researcher explained to bloggers that 'conversation' would be used to emphasize this category as interpersonal communication.

Because participants were significantly active in taking part in some events, the label 'event' was separated from the category of 'communication' to examine how active these students were engaged in local social activities.

The minor categories of 'people' and 'weather' in the previous study were deleted for the reason that there was much less direct comment on these topics in this blog site. There were no comments on people's appearance and weather, and photos, mainly depicting activities with others, related more to 'communication' and 'event'.

The reliability of this categorization was again tested with other Chinese people in Nottingham (Kappa=0.745). The proportion of blog topics about cultural issues in each category to those topics in overall categories is shown below:
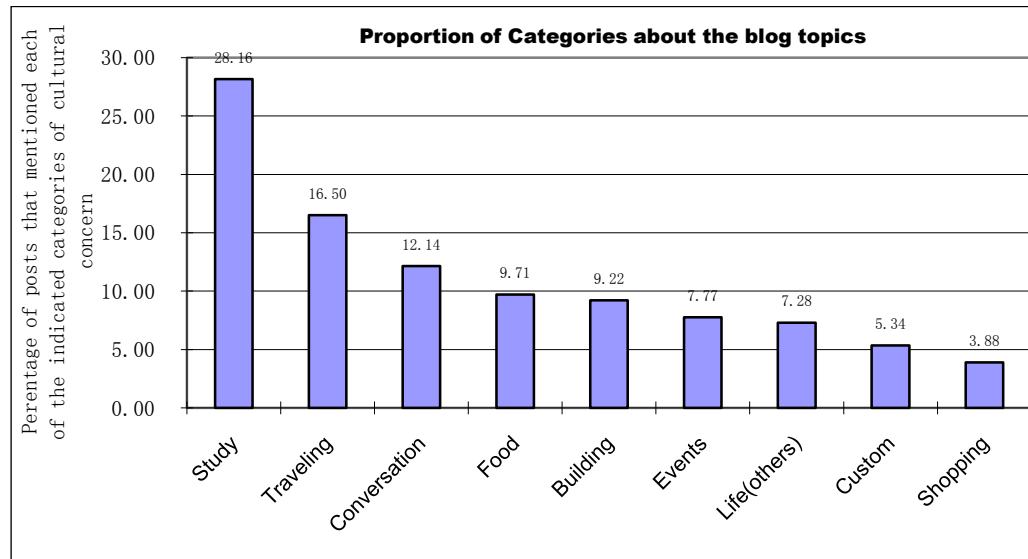
Figure 5.6: Proportion of posts that mentioned each of the indicated categories of cultural concern

In the above figure, 'study' was the greatest concern, followed by 'traveling', 'conversation' and 'food'. As reflected in the value of 'conversation' and 'events' shown in the figure, participants interacted quite fully with people both locally and remotely. Many photos were shared when they went on trips, making 'traveling' the second major category. 'Food' seemed also to be an important issue for these participants. However, they seemed to give less attention to 'custom', which differed from the result in the previous study. It is difficult to explain this result, but it might be because the participants used digital cameras instead of audio recorders. Custom is easily and directly described verbally, but is implicit in photos. Compared to the previous study, there were fewer expressions in words in the blogs.

(2) Similarities and differences between personal blogs and the group blog

Blog entries were presented in the form of texts and images; 37 out of 77 blog entries in the group blog involved pictures, and for some blog posts there were ten pictures in a single blog post. In their personal blogs, too, participants uploaded many pictures depicting their everyday lives. They used these pictures to express thoughts and views of their new environment and to describe their experiences.

However, there was a slight difference in using pictures in personal blogs and the group blog.

For the latter, most Chinese students appeared unwilling to upload pictures of their own faces or those of their friends, preferring to show these photos only to their intimate friends in their personal blogs.

Figure 5.5 illustrates that nearly one-third of blog entries were transferred from personal blogs. However, individual bloggers were selective in transferring content from their personal blogs to the group blog. Not only were there fewer photos with faces displayed, they also hid some of their views and true feelings when they posted to the group blog. They also commented on some issues less deeply than in their personal blogs.

The differences in personal and group blog activities can be summarized in terms of privacy:

- Participants were much more careful about sharing experience in a more public space.

- They expressed personal opinions in less depth in a more public space.

5.2.5.3 Findings from post-blogging interviews and focus groups

Some interesting themes were identified from the group blog contributions: descriptions of sharing experiences in both personal and group blogs; the special advantages of group blogging; and anticipation of features of the new mobile technology added to the group blog.

a) Experiences of sharing

There were three aspects to their descriptions of sharing experience: the motivation for sharing, who they would share with, and the consequences of sharing.

(1) Motivation for sharing

Participants claimed that their purpose for blogging was to express emotion, thoughts and moods.

"I blog at will, to express my emotion, release pressure or unsuppressed rage and annoyance" (Kevinyang)

Further, bloggers also sought to share their experiences with their friends in China which were

described in their personal blog. They wanted to tell them about what it was like to be abroad by themselves, and of their experiences in cultural transition. Also some bloggers wanted to share relevant transition experiences more generally on the group blog because they believed these were useful.

Participants sought to share "interesting and useful" information in considering the needs of the group blog audience.

(2) Who share with and what to share

Further differences between personal blogs and the group blog were noted. In their personal blogs, written in Chinese, most participants wanted to share personal experiences with their friends and classmates in China.

"I shared some good photos I took here with my friends and relatives. These photos are of great comfort to my family members as they can see evidence of my life here. " (zzzyyysu27)

"I blog to let my friends know what I am doing now, especially those who have no chance to *come to the UK to study. I am their 'eyes' posed to this island."* (littlegrass)

Most of them did not share their personal blogs with their parents - they had permission settings in their personal blogs.

"If too many people know too much about your personal life, it brings trouble. The purpose of keeping the audience to a small range of friends is *just to avoid trouble."*(Ford)

This shows their concern with privacy.

As the explicit purpose of the group blog was to share experiences of cultural transition, participants knew that the most beneficial audience would be the overseas students in the UK. They therefore removed some words and pictures when they transferred the same content from a personal blog to the group blog, giving serious consideration to their own privacy.

(3) Consequences of sharing

Some participants believed that group blogs gave them guidance about what they should pay

attention to and how to deal with problems.

The group blog encouraged enthusiasm and engagement of members of this small blogging community. They not only shared experiences but also affected one another emotionally by releasing feelings of loneliness and by developing a sense of belonging.

*"And you will find many similar views towar*ds something, something in common there. I like *that kind of feeling. You don't feel lonely anymore." (*littlegrass)

b) Special issues arising from the use of the group blog

(1)Transition from personal blogging to group blogging

None of them had difficulties in group blogging. Contents on the group blog site were selected and systematized to compare with those on personal blogs. Specific themes, audience consideration and less casual behavior in the group blog reflected that they had clear awareness of being part of a community.

 "Group blog will enhance the personal initiation and motivation if he does really get involved in this blog. He will feel his significance in this group because people in this group appears to be around y*ou and watching you. " (Vera)*

(2)Blogging continuity

No participants dropped out of the group blog during the study. They posted personal blogs because of their self-consciousness. It has been noted previously (Figure 5.3) that bloggers did not post to the group blog every day. They only posted entries when they felt something interesting or important enough to be recorded.

"I usually write blogs right after some events, not every day."(Endimi)
"People may have interest in writing blogs but it's not easy to keep writing."(Vera)

Posting was often found to be irregular, emotion often affecting their motivation to blog. By giving and receiving feedback, participants encouraged the blogger to post more information.

 *"Since I arrived here, the h*its on my blog have jumped from 3000 to more than 5000 in *two weeks. Amazing !" (Lyybella)*

"My friends urge me to write more blogs, especially after I arrive here; friends in China push me to blogging." *(Bluenner)*

Communication between authors and readers sustained blogging. Participants felt that there was better communication because the audience could give feedback to the blog authors directly and quickly. Furthermore, bloggers could anticipate comments from their readers.

"I regarded the blog as a 'front-end*' tool which no other media could compare because* blog establishes straightforward communication between the author and the reader, the best *communication platform." (Vera)*

Therefore the mutual communication between bloggers and readers was of assistance to people keeping up group blogging.

c) Anticipation of new technology Participants reported their experiences in using mobile devices. They all possessed mobile phones and most had used them for the past six or seven years. SMS was the most popular and most frequently used method. They liked taking photos and playing music with multimedia embedded mobile phones.

"In my opinion, mobile phones with cameras/video cameras are very good at capturing the unexpected moments." (Ford)

These bloggers said they intended to take digital cameras with them on their travels and visits, and regretted some missed 'moments' for taking photos in their everyday life when they did not have their camera with them. Their motivation for more flexible and mobile technology was:

- Capturing a sudden occurrence

- Enthusiasm for immediate sharing of experience

- Supplementing current technology to capture contextual information

- Immediate communication on the move and with remote use

They imagined how ideal it would be to use mobile technology for blogging.

"Provided with good technology, my close friends and parents could 'travel' with me on the Internet. That would be amazing if they sit in front of their computer and I 'wear' a mobile camera to catch and broadcast the real things in my real life here." (littlegrass)

Although these people had not yet experienced mobile blogging, they could also envisage what a mobile blog might involve it, as we can see from this quote above.

To summarize, these bloggers were positive about using group blog and enthusiastic about blogging on the move. They regarded their blog entries as useful to other Chinese overseas students. Another group of five newly-arrived Chinese overseas students in Nottingham were then recruited to assess the contents of these blogs and to verify their usefulness.

5.3 THE STUDY WITH THE BLOG EVALUATORS

The purpose of this study was to find out how useful the contents of the group blog were for people who were not bloggers but readers, who also could envisage the mobile blog

5.3.1 Method

The blog readers were suggested by a friend of the researcher and asked to review the contents of the group blog by themselves and then attended a focus group.

5.3.1.1 Participants

The five blog readers arrived at the university at the same time as the bloggers, and their reviews took place as soon as blogging activities had been completed.   Four of them had personal blogs.

Table 5.3 Profiles of blog readers

Participant	Gender	Postgraduate/ Undergraduate	Age	School
R1	Female	PG	22	Economy
R2	Female	PG	23	Business
R3	Female	PG	26	Mathematics
R4	Male	PG	22	Biology

R5	Male	PG	22	Electronic Engineer

5.3.1.2 Apparatus

The researcher recorded the display changes on the screen using "Snagit" while the two out of five readers viewed the blog entries. The conversation of the focus group was recorded by MP3 recorders.

5.3.1.3 Procedure

Three blog readers were asked to read through the group blog site on their own computers. The other two readers' reading activities were screen captured with the 'snagit' software on one computer. They were emailed the link to the site, and they were allowed to review the group blog at any time. A focus group discussion of all five participants was scheduled, lasting about one hour.

5.3.2 Study analysis

There were two sets of qualitative data in this study. One set was drawn from the observation of video screenshots captured by the tool "Snagit"; the other arose from the focus group conversations.

Screen activities were captured to verify the following research theme:

- Which part of the webpage did they stay on for a longer period?
- How often did they stay at one blog entry? Which category did this blog entry belong to?
- Were they interested in the same blog entries?

Focus group themes included:

- Basic personal information about their age and gender
- Previous blogging experience
- Opinions about the functionalities of blogs and the group blog
- Assessments of contents and contributions to the group blog
- Their opinions about mobile blogging

5.3.3 Findings from video observations

It was observed that readers used scanning skills when reviewing, the mouse cursor staying on the scroll bar most of time. Readers needed to click the title of a blog entry that interested them to view the details, indicating that blog readers reviewed selectively and intentionally. They did not review all blogs.

Two readers stayed longer at the first page on the 'topped', or highlighted, blogs, indicating that these blog entries attracted more attention. When they later opened a new main page, they scrolled and skipped the highlighted blog entries as they were always at the top of each main page. They both spent time reading the 'topped' blogs, including the blog named "Do you have memory machine?" which was intended to be a unusual topic. They seemed to be attracted by the title.

Both blog readers were interested in entries relating to the 'travel' and 'study' categories, consistent with the percentages illustrated in Figure 5.6. One reader stopped at a blog entry when she noticed familiar faces depicted, indicating a particular interest in familiarizing themselves with an acquaintance's experiences.

Once the readers had opened a blog entry to read through the details, they always scrolled to the bottom to read the comments, implying that they were not only concerned about blog content but also about any comments made. There was a sense that they could join the discussion.

5.3.4 Findings from the focus groups

As all these readers also had personal blogs, they compared their experiences as a blogger as well as a reader.

5.3.4.1 The importance of communication in blogs

The readers also introduced their experiences of their personal blogs and emphasized the importance of contributing comments on the blogs:

> *"Each time when I revisit my blog, I do want to check if there's somebody who has left*

some words there. There seems to be a kind of potential pressure and someone is anticipating *you!"* (R1)

This quote reveals that the blogger had potential desires to know other people's opinions about what they posted. It also indicated the necessity of communication between the bloggers and readers.

5.3.4.2 Views about the group blogging

Like the bloggers, the blog readers also held positive views about the group blog. After reviewing the contents of the site, they recognized information that was useful to them and also felt a sense of familiarity and belonging.

*"You will find many simila*r opinions about one thing. We found something in common here with the blogger and the commentator. I like the feeling because it seems these people are *around you and you won't feel lonely anymore. "* (R4)

*"We can have a lot of people blogging together the*n you no longer feel lonely, better than *singing solo in the space."* (R3)

It is obvious that group members, both blogger and readers, had the feeling of being closer to their home country.

5.3.4.3 Authentic and fun

The readers agreed that blog contents were authentic, especially when, to their excitement, they found familiar faces on the blog. They also had a lot of fun and obtained useful information from the blogs – learning about TV licenses, for instance. They reported that reading had given them new knowledge which would benefit their own lives.

5.3.4.4 Expectations about the mobile blog

Three blog readers looked forward with excitement to mobile blogging themselves. One of them described her experiences of instant picture sharing by mobile phone via MMS in China, an experienced which she enjoyed. She anticipated that mobile blogging could be much better than photo-sharing through MMS. However, when the readers seriously considered the bandwidth and cost of mobile Internet, they preferred still photos and text rather than other multimedia features such as video.

"I think I am too lazy. For me, I would prefer writing some simple sentences besides photos. We can tell the story with lovely and lively photos in a fe*w sentences. That's enough. "* (R4)

The immediate sharing of information by simple texts and images is therefore feasible and acceptable to these participants, as some people are less patient.

It was promising that these evaluators shared the same positive opinions as the bloggers and that they looked forward to the mobile group blog which would be built for the purposes of this research. it is necessary to assess the essential needs of the features and elements of the group blog. Taken together, results from the bloggers and the evaluators suggest that an online community should be formed through the group blog. The next section will reflect on the roles in the group blog system.

5.4 REFLECTION AND ROLES IN THE GROUP BLOG COMMUNITY

This study found that both personal and group blogs had great potential for reflection through the pooling of information. The group blog was also more sustainable, not only because of the blogging activities but also because of their practical value.

5.4.1 Blogs reflection

Some participants mentioned that they would review their personal blogs from time to time. In the group blog, therefore, self-reflection or group reflection existed for bloggers as well as readers. As a pool of authentic information, the group blog could be regarded as a learning resource that could be reusable and reflective. The different types of reflections found in the group blog are described as follows:

5.4.1.1 Revisit personal experiences

In this study two participants commented that they revisited their own blogs either in personal space or in this group blog space immediately after postings. All bloggers tended to go back to their blog to review them. More importantly they read comments from their readers. As a result, they sometimes also commented on their own blogs, emphasizing points they had made or answering a commentator's questions. This can be regarded as self-reflection.

5.4.1.2 Engaging within the current community

As well as self-reflection, group reflection also exists in the group blog. Group reflection could involve synchronous and asynchronous reflection. Real-time peer reflections could happen at the same time as blogs are posted. The RSS (Really Simple Syndication) is a real-time reminder that could assist in keeping group members informed and updated. Readers can visit the blogs at the same time as blog posting, or later. The most common group reflections, however, are the asynchronous ones since most readers always visit or re-visit the blog site later, as members of the current community, gaining benefit from reading blogs from other people.

5.4.1.3 Remote group reflection

All bloggers and readers both inside and outside the group blog could benefit from the pool of authentic information as a resource. Thus the asynchronous group reflection was accessible to people who were geographically distant or who would not use it for a long time. For example, as in this study, this suited people who were not currently in the UK who might review these blog entries a few months, a year or many years later.

Current participants of the group blog community also played different roles, as illustrated below.

5.4.2 Roles in the group blog learning community

The group blog formed an online community in which the learner could be silent reader/observer, commentator and blogger.

5.4.2.1 Silent reader/observer

As previously discussed in section 5.2.5.1, there were a number of 'silent' readers who only observed the group blog site. Participants of interviews and focus groups also reported their willingness to read the blogs and to give comments. They learn from observations. As described in Vicarious learning: people learn and profit from observing the actions of others as well as from their own experiences (Bandura 1971). Learners benefitted from gaining insights into the bloggers' thoughts and feelings; from a sense of belonging to the blog community; and from an increased understanding of British culture through the online discussions.

5.4.2.2 Commentator

The number of comments to articles was slightly less than the number of blog articles. Interactions between bloggers and readers encouraged further blogging. Learners who therefore not only acted as bloggers but also as readers could be engaged in both contributing to and acquiring knowledge from the group blog resources, by learning through short-term study and long-term reflection.

5.4.2.3 Blogger

The blog authors captured authentic information from their everyday lives to submit as artifacts to the group blog. Bloggers are contributors or information/knowledge creators. This knowledge, self-generated by well-motivated and engaged bloggers, represented their personal opinions.

Use of mobile devices would give the opportunity for instant blogs, enabling readers, commentators and bloggers to share information and exchange ideas immediately. Bloggers would have the freedom to create stories and show evidence of real-life events as they occurred, benefitting and encouraging all members of the group blog locally and remotely. .

5.5 DISCUSSION AND SUGGESTIONS OF THIS STUDY

For the purpose of this study, sixteen newly-arrived students recorded and collated information from their daily lives and posted this information to the group blog site, which was regarded as a learning resource for reflection. Five of the newly-arrived students later evaluated the bloggers' contributions. The group blog formed an online community with three key roles. By returning to the themes envisaged at the start of this chapter, this study had realised the following achievements. Participants captured information about cultural issues individually with their own digital cameras and blogged through individual computers for sharing. Most people had an awareness of the differences between personal blogs and the group blog, considering seriously their different audience. They found a sense of belongings in the group blog with a number of people of the same ethnic group. The main results of this study can be summarized as follows:

- Sections 5.2.5.1 (2) and 5.2.5.3 (a) observed that these overseas students were enthusiastic about recording and sharing their experiences with other people locally or globally, either from their personal blogs or this group blog. The application of the mobile group blog is therefore feasible.

- From sections 5.2.5.1, 5.2.5.3, 5.3.4.1, 5.3.4.2 and 5.4.1 we learnt how participants anticipated communications through blog and developed a sense of being the member of a community.

- Photos were significant presentations of people's experiences, illustrated in section 5.2.5.2 (2).

- Section 5.3.4.3 described how these bloggers contributed authentic and useful information for readers.

- The greatest difference between personal and group blogging was in the filtering of information and selection of photos, as indicated in sections 5.2.5.2 (2) and 5.2.5.3 (a) (2), revealing participants' concern with privacy.

- Sections 5.2.5.3(c) and 5.3.4.4 described the participants' positive expectations of the mobile group blog.

However, a technological limitation of this study was that the free web-host did not support the input of Chinese characters and participants therefore had to write blogs in English from the beginning. Because of this, they claimed that they could not write articles in the same depth as they would in Chinese, which could frustrate some writers who wished to express deeper insights about their experiences. This language issue should therefore be taken into consideration in designing the mobile group blog to enable bloggers to write in either English or Chinese, and to enable readers to understand English more easily.

5.6 SUMMARY OF THE TWO NEEDS ASSESSMENT STUDIES

These two studies reported in Chapter 4 and 5 investigated the possibilities and requirements

for the mobile group blog application in assisting culture transition for the overseas students. The audio diary study set out to give a spontaneous and informative account of real experience as verbalized by participants, and to determine the problems they encountered in such reflection. The design of the mobile group blog will take account of the categories of experiences that were identified and will expect a similar capacity to reflect. Due to the lower bandwidth it is not easy to share audio files directly through mobile Internet. It was generally considered to be more practical to use images and texts as the medium for sharing contextual cultural information in the mobile group. The aim of the group blog study was also to assess the real experiences of the overseas students by collecting and sharing cultural information in the form of texts and pictures through the group blog, resulting in the sketches of the mobile group blog, and a number of themes were identified. This analysis has led to the conclusion that there is a great need for a resource such as a mobile group blog to support overseas students. The evidence for this comes from the following aspects:

5.6.1 Rationale

The audio diary offered private records of personal experiences of cultural transition. It provided justification of problems faced and culture shock experienced. It also reinforced the value of sharing experiences so that people can reflect on them and gain a fuller understanding of what they encounter themselves. Shared experience could help people to increase their knowledge.

5.6.2 Sustainability

Participants showed perseverance in recording their personal experiences as audio diaries. The same commitment was shown by the participants in the group blogging study in providing details of their experiences as images and texts. They gathered information which captured valuable moments in their everyday life. Audio recorders captured rich verbal information while digital cameras captured iconic information about individual experiences. In the group blogging study, the information captured was not only for self-reflection but also for all group members to reflect on at any time.

5.6.3 Usability

Participants in the group blogging study had previous experience of using mobile phones and of blogging and there were few problems reported during the period of study. They had positive views on using new technology in everyday life and were strongly motivated to learn about the new culture. All these factors supported the possibility of using the mobile group blog in assisting their cultural transition, supplying a resource to support this group of overseas students. The mobile group blog is accessible from high-end mobile device in any location.

5.6.4 Themes of contents

From the results of these two studies, we may conclude that the significant aspects of cultural transition for these overseas students are food, travel, custom, communication, building, shopping and study. These aspects informed the design and structure of the mobile group blog. Although results of the two studies showed some different proportions on topics for each category, the main categories remained the same. Categories were transferable in the mobile group blog design.

5.6.5 Community factors

It was recognized that participants developed a sense of being part of a community. They took care to select information for the more general audience of the group blog site. Bloggers, readers and commentators felt that communication was necessary and important. The group of participants formed an online community to influence one another in adapting to the new culture. They not only shared information collected from the real world but also discussed the contents through comments on the group blog site. The mobile group blog therefore could be an interactive dynamic resource to support cultural transition.

However it was also found these participants tended to give more comments to previous acquaintances rather than to strangers. Participants tended to be closer to people they knew. A further empirical study should consider the consequences of commenting on blogs from strangers. This could be a way to explore the potential generalization of the mobile group blog

among those people who are totally new to a place and have stepped into a new community.

5.7 CHAPTER SUMMARY

This chapter reported on a second needs assessment study of the real experiences of cultural transition for Chinese overseas students, this time using the group blog technology. Two groups of Chinese overseas students newly-arrived in Nottingham took part in the study by taking pictures with digital cameras. One group was asked to carry out group blogging for three weeks; the other group reviewed and assessed the contents of the blogs posted.

Returning to the questions posed at the beginning of this study, it is now possible to state that it is practical and desirable to set up a network to support cultural transition. The mobile group blog is a realistic tool to build up an informal self-help community among Chinese overseas students. This group blog resource would integrate resources of personal experiences, and offer a space for all overseas students facing cultural issues in their everyday lives. Discussion of the results of the two needs assessment studies revealed the necessity for designing a mobile group blog system to supply an informal environment to support ubiquitous cultural transition. It was also recognized that participants expected a technology that captured unexpected moments and that enabled them to share these immediately with others.

Ensuing chapters will illustrate and discuss the design and implementation of the proposed mobile group blog system. First, Chapter 6 will report on the design.

Chapter 6- Design of the mobile group blog system

The two previous studies on needs assessments recommended motives and guidelines for the design of the mobile group blog system. Chapter 4 and Chapter 5 suggested several features that should be considered in designing the mobile group blog:

- blog entries for bloggers to submit information, either from mobile phone or from desktop/laptop

- guides or scaffolding for navigation

- exchange of information on the blog site

- help for blogging from the blog site

- access the database for researchers to maintain and observe the activities of participants

Chapter 6 marks the beginning of the design, and presents the implementation of a framework for applying the mobile group blog in learning. First there is a comparison of different current blog solutions such as Exblog, used in the group blog study in Chapter 5, WordPress and Movable Type. Then WordPress was selected as the solution for this study. Next, by customizing the features of WordPress, the mobile group blog was established for the empirical study in Chapter 7. Finally, the Nokia N80 mobile phone is used to demonstrate an example of how to do moblogging. .

6.1 FRAMEWORK OF MOBILE GROUP BLOG IN LEARNING

In the study of the group blog (Chapter 5), all participants had experience of using mobile phones and all except one had their own personal blogs. The study of group blogging (the group blog study), indicates that participants would like to capture information by taking pictures on the move and by sharing their information with others, for people not only in the same city but also in other places. Participants also regarded their contribution to the mobile group blog as a learning resource for future students.

The digital cameras used by participants in the group blog study (Chapter 5) enabled records to be kept on the go by taking pictures. Those participants assumed that if they could use mobile

phones to take and blog pictures, they could capture the sudden occurrence and share a story immediately. This could be achieved more easily with mobile phones that could be carried at all times. Therefore the mobile group blog should have two main features: collecting instant information from mobile devices and sharing the information immediately. The mobile group blog should also have a client in mobile device to collect and store information as well as a space to share the instant information with others. Users can access the mobile group blog either from mobile devices through mobile Internet or from desktops/laptops through the Internet.
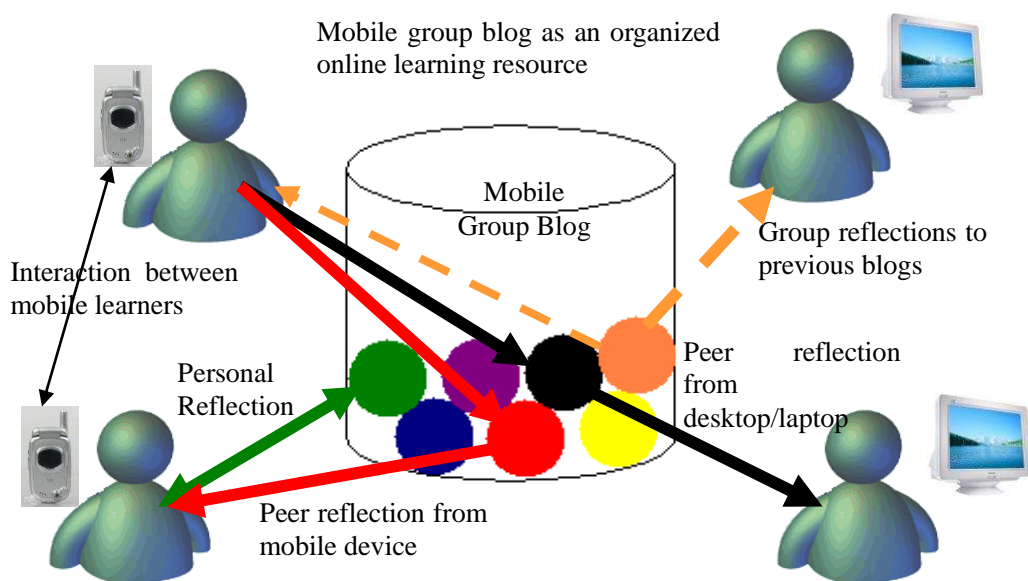
Figure 6.1: The framework of a mobile group blog in learning

In this framework, the cylinder in the middle represents the mobile group blog as the container of learning resource. Human icons with mobile image (on the left) represent the mobile users, and the icons on the right represent the desktop/laptop users. Differently-coloured balls in the container represent different types of information. Arrows represent the flow of information. The arrow between two mobile phone icons on the left represents the connection and interactions between mobile learners.

The framework describes the learning activities mediated with the mobile group blog. Learning is a process for people to generate, deliver and negotiate information. Learning activities may therefore be concealed in the information flows. Below are some examples of

information flows in the blog that may be related to learning activities.

6.1.1 Possibilities for information flow in the blog

The learning process in this framework consists of the generation of information and knowledge, with delivery, exchange and acceptance (the contents). Generation of information and knowledge occurs anytime and anywhere in the real world. This information and knowledge can be outsourced to mobile devices and be delivered through mobile Internet to the online space-blog. The information stored in the blog can be shared and exchanged in the blog. Also the information can be selected and accepted by digestion and negotiation.

There are six possibilities for information flow in this process of learning with the mobile group blog:

Flow 1

Information is collected by mobile devices and uploaded through mobile Internet to the blog server. Then the data is sent to desktop or laptop at the request of learners. For example, the black arrows (from the upper left user to the lower right user) in Figure 6.1 represent data flow from mobile users to computer users. The mobile learner generates the information and submits it to the mobile group blog site. The information is requested and accepted by another learner who uses desktop/laptop.

Flow 2

Information collected by mobile devices is uploaded through mobile Internet to the blog server and then is requested by other mobile users. For example, the red arrows (from upper left user to lower left user) in Figure 6.1 indicate data flow from one mobile device to another through the mobile group blog site.

Flow 3

Information is collected by mobile devices, and uploaded to desktops or laptops. From there it is uploaded through the Internet to the mobile group blog site. This flow supposes that people make traditional use of mobile devices, regarding mobile phones as digital cameras, for

instance. This is also how traditional blogging is done.

Flow 4

Data is collected by mobile devices and uploaded to the group blog site. The blogger later reviews his/her own information and carries out self-reflection through mobile Internet with mobile devices (as indicated by the green double arrow in Figure 6.1 above).

Flow5

Information stored previously in desktops or laptops is downloaded to mobile devices. The user then uploads this data from mobile devices to the blog server through mobile Internet. For example, people download and store images from their laptops/desktops to their mobile devices, and in certain contexts they upload images to the mobile group blog site

Flow 6

Information stored earlier in the group blog site could be sent to readers either through computers or mobiles. The orange arrow in Figure 6.1 indicates information previously stored in the group blog which could be reviewed by both mobile users and laptop/desktop users. Whenever the information is stored in the group blog site, learners at any time and anywhere can withdraw information from this resource.

These six possibilities for information flow cannot cover all information processes that could support in learning with the mobile group blog. For instance, all learners who use this mobile group blog could also carry out reflections through peer or group reviews. They can feed back or discuss within the group on the group blog site and then these reflections and discussions can be executed through mobile devices or through laptops/desktops. The time taken to carry out reflection varies in different learning contexts.

Instant self-reflection as shown by the green arrow and the green ball in Figure 6.1could be nearly synchronous, occurring immediately after the moblogger submits the blog entry. Instant peer-reflection can also occur straight after the moblogger submits the blog entry as shown by

the red arrows in Figure 6.1; reflection between mobile devices and laptops/desktops is shown by black arrows. These instant reflections can be called synchronous reflection. Long-term reflection could be also executed both from mobile devices and from desktop/laptops, as the information uploaded from them is stored in the group blog site. This can be called asynchronous reflection.

As the information flows go through, people play different roles in the learning process. They can participate in a variety of learning activities by generating and delivering information, selecting information and reflecting on it. In the following section, we will have a close look at different roles, which are played to complete learning with the mobile group blog.

6.1.2 Roles in the framework

In learning with mobile group blog, three main roles are played: learners, moderator/instructor and technologist.

Learners are essential elements of this mobile group blog system. By using the mobile devices, learners adopt new characteristics: they become mobile and flexible. With personal mobile devices in hand, they can not only retrieve knowledge delivered through mobile devices but also generate new information and create their own knowledge by collecting this information.

According to Betty Collis, the student may contribute learning materials to others in a WWW-based system (Collis and Moonen 2001). The website is largely empty at the start of the learning. Blogs provide a space for bloggers to fill in their information easily, thus avoiding the need to manage the technology of building up a website. Learners play the role of readers as well as authors, by reading through blog contents and generating information through their blogs. Mobile blogging learners have the advantage of accessing instant and realistic materials in different contexts or of capturing authentic materials and peer-creating new knowledge. This information and knowledge is represented as learning material on the blog site, and also as a reflective resource, which could be reused in other learning settings. In a word, learners who blog are authors as well as readers, contributors as well as consumers.

During the process of learning in this mobile group blog environment, the participant becomes a member of a community. Engagement is essential for successful learning. Learners should be meaningfully engaged in learning activities through the interaction with others (Kearsley and Shneiderman 1998). As suggested in Chapter 2, people learn through negotiated interaction and communication. Learners should communicate with others, stimulate peer-reflection and learn from others. In the mobile group blog, the content of information and knowledge uploaded to the blog site is mostly generated by learners themselves. Negotiating the contents and artifacts in the group blog is also a process of learning. The instructor or moderators in the mobile group blog can adjust guides or even curricula according to the content of blogs and negotiate the next stage of learning.

There are new implications for the roles of **instructors or moderators** in this mobile group blog, compared with traditional instructors or moderators. The instructors now have less and less need to create knowledge or structure activities; instead they need work more on providing criteria and evaluating new guidance. There is a strong likelihood that some learners will easily get lost as they start to use this mobile group blog as a learning environment, so guidance from instructors is essential. The role of instructor tends to merge with that of the moderator as they adopt strategies of monitoring, information filtering and guiding. If the moderator cannot accompany learners in real time, he/she needs to monitor their progress closely and give appropriate guidance. They can synchronously monitor the learner's work by observing content sent to the group blog via the mobile device. In addition, the , instructor can be an 'expert participant' (Collis and Moonen 2001, P.106) and co-learner responsible for any acquisitions. Likewise, learners who have more knowledge could act as 'expert' to help other learners in the same group.

By monitoring activities in the group blog, instant evaluation could be made of learners' contributions to their blogs. Alternatively their records could be kept in their blog for later evaluation. In other words, the formative assessments can be carried out during the learning process either by immediate feedback or by summative assessments after learning completed. This can be achieved even though learners are geographically scattered in the real world, synchronously or asynchronously.

6.2 IMPLEMENTATION OF THE FRAMEWORK

The proposed framework illustrates the features and components of applying the mobile group blog in learning. To implement the framework this study requires the selection of features of several current blog solutions.

6.2.1 Currently available blog solutions

Due to the limitation of time and funding of this project, it is impossible to program such a mobile group blog. By comparing current blog solutions, two alternative methods to set up a blog were identified: using an existing blog site service provided by blog specialists, or setting up and configuring a blog system myself.

Using an existing blog site service entails creating a group blog on the blog provider's website. Most currently available blog services - such as Google Mobile, Technorati Mobile, Yahoo Mobile, and MSN Spaces Mobile - provide new components for mobile blogging. Some special mobile blog services are also available like Six Apart's LiveJournal, TextAmerica, Buzznet, Moblogcn, MoblogUk, Buzznet, Simsi Moblog and EasyMoblog. Flickr also has added mobile features of photo uploading from mobiles. They provide only personal mobile blog services. Nor is it easy to monitor and observe the blog system using this service-oriented blog software. From the research perspective, more control of online activities and websites is needed.

The option I chose was to set up a mobile group blog by customizing the current blog server publishing software. At that time of this study there was no professional server/client publishing platform software for mobile blogging available. The only choice was to build up a normal blog server and add mobile features to it.

6.2.2 Mobile blog gateway

As with a normal blog, the mobile blog has a blog entries receiver connected to the database, although entry delivery is different. The mobile blog needs a gateway functionality to receive

incoming mobile blog entries and direct them to the blogging engine while delivering them to the blog website as ordinary entries. There are three ways of implementing the gateway functionally: post by e-mail, post by SMS/MMS and post by web or custom application.

Mobile email is the most popular basic application to enable blogging from a mobile device to a blog site. Almost every mobile device supports e-mail functionality. At the present time, this is the main method applied by most major mobile blog services such as Google Mobile, Technorati Mobile, Yahoo mobile, MSN Spaces Mobile, TextAmerica, MoblogUk, Buzznet and EasyMoblog etc. SMS message is available for most digital mobile phones or pocket PCs. Bloggers of Phlog.net, Phlogger and Simsi Moblog now have the choice to send blog entries by SMS/MMS.

Blogging via direct Web posting through an embedded web browser is another method suitable for various mobile devices. No additional components are required other than a web browser. Users simply need to navigate to a URL and log on to the blog system. The advantage of this method is that it is compatible with a wide range of mobile phones, smart phones, PDAs and even laptops in any network, nor is it limited to any brand products. WINKsite is one of the few websites which offers this service. In addition, some companies have developed specific applications for their clients for moblogging. The custom independent application often suits only one special blog system for a blog site.

Given the rapid advancements in technology which enable higher speed networks to spread the mobile blog ever more widely to a large variety of mobile users, direct client post by web seems to be the most convenient method and has great potential for generalization. The web-post method is suitable for most mobile devices with a web browser.

6.2.3 Choosing the blog server solution

There were a few blog server solutions to be considered. This study proposes that freedom of control and observation, low costs and suitable functionalities are necessary. Ideally for control and observation, the solution should be open source and compatible to plugins. At the same time, it is preferable that the system itself is free. Further, the software should be installed and

deployed at an established server.

Three blog solutions were compared in order to make the final decision. Table 6.1 below lists features of three different kinds of blog server software: Exblog (used in the group blog study in Chapter 5), Movable Type (free services of personal blogs) and WordPress.

Table 6.1 Comparison of features in three blog solutions

	Exblog	WordPress	Movable Type
Price	Free	Free	Not free (need license fee)
Open source	Yes	Yes	No
Server requirement	Web server with PhP and MySQL	Web server with PhP and MySQL	Web server, Perl and one of the following databases: MySQL, Berkeley DB, PostgreSQL, SQLite
Plugin API	No	Yes	Yes
Multiple users	Yes	Yes	Yes
Moblogs	No	Available in plugins	Available in plugins
Language	Chinese/English	English, multi-language plugins	English

- Price

Taking into account the limits on funding for this PhD project, it is preferable to choose a low-cost publishing platform for mobile blogging. Nevertheless, the best solution should fulfill the demands of the research.

- Open source

As there are likely to be necessary changes to the coding and re-programming according to the requirements is also possible, an open source solution gives the developer more freedom and flexibility. At this point, Movable Type didn't score highly.

- Requirements for server

 The free public online server does not seem to be efficient or secure enough to maintain the blog system. Exblog (used in the group blog study) and Wordpress need the PhP server and My SQL needs a database server. Movable Type needs Perl. Although Perl is also popular, I chose PhP as it is provided by our faculty.

- Plugin API

Both Wordpress and Movable Type provides friendly Plugin API for Plug-in objects, so these two platforms could be more compatible with other plug-ins.

- Multiple users

All these solutions enable group blogging.

- Language

This feature is desired by this research for multi-cultural purposes. As overseas student speaking different mother tongues are the target group of this research, it could be useful to have different language versions. Exblog (the group blog study) was developed by Chinese practitioners, so features both the Chinese and English languages. However, if the blog system is to be expanded in the future, any culture transition should take into account a wide range of international students using different languages. The strength of WordPress is that it has a plug-in for multi-language.

As WordPress met all the criteria for this system, it was chosen as the best solution for this study.

6.3 ESTABLISHING THE GROUP BLOG

WordPress 2.2.2 was downloaded and installed in the web host provided by MRL. The configuration process (Ref. Appendix VI) of WordPress made some changes of settings in the original package of WordPress 2.2.2.

6.3.1 Customization

By customizing those features in terms of the sitemap, several extra plug-ins were installed for better maintenance and management of this group blog; extended aids to bloggers or readers with language difficulties were also installed: 'Coolplayer', 'Language translator', 'Database Management', 'Postrating', 'WAP' and 'Firestats'.

1. For more features to support multimedia -'Coolplayer'. This enables the uploading and playing of sound files. It aims to add more multimedia applications to the blog, which would give bloggers more methods to represent their knowledge. This feature is only available and applicable from desktop or laptop.

2. For language extension for international students other than Chinese - 'Language

translator'. This feature is aimed at non-English or -Chinese speakers. It can support ten other languages including French, German and Japanese. A language bar (Figure 6.3) is displayed at the foot of each webpage.

Figure 6.2 Language bar for web translation

3. For better management and reminder of updates- 'Database Management' and 'Recent comments'. It aims for easy moderation and maintenance of the system.

4. 'WAP' plug-in is installed specifically for mobile blogging purposes.

5. To enhance participants' engagement- 'Postrating'. This feature asks participants give their comments by simply clicking the 'star' icon and rating the blog entry. This gives feedback to the blogger, by displaying their views about blog content.

In order to monitor the activities with the data changes in the database and for easier analysis of the activities anytime, the plug-in 'Firestats' was also installed. It aims at easy log file data collection and monitoring. To give a overview of the group blog system that has been established, the sitemap (Figure 6.2) drawn below displays features of the group blog site.

6.3.2 Sitemap of the mobile group blog

In this mobile group blog, there are three main components: blog contents, navigation &signpost and administration & help.
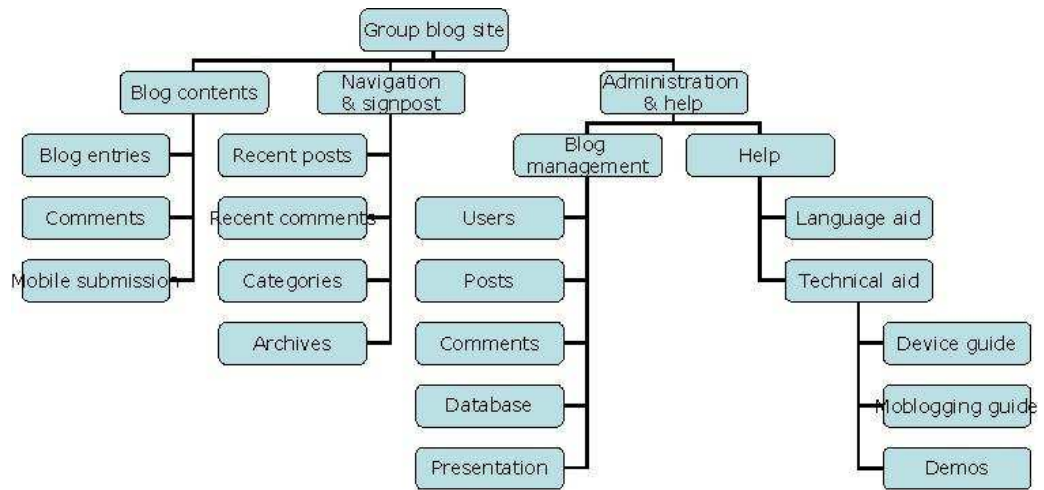
Figure 6.3 Sitemap of the group blog site

Blog contents

This section contains what to publish and display on the blog website. It includes articles of

blogs, people's comments and their assessments of a blog entry. Blog Inputs from mobile

devices in the form of texts and images are also involved.

Navigation & signpost

The navigation section intends to give the users quicker and easier ways of finding what has

been posted on the website. This engine also assists all readers of the blog site to access they

want quickly. 'Recent posts' and 'Recent comments' list the titles of the latest ten posts and

five comments. Readers can also search information by pre-defined 'Categories' which were

selected by bloggers when they input blogs. 'Archives' pack up blog entries in reverse month

order.

Administration & Help

This section involves the administration and management of the mobile group blog. It includes

setting users, managing post entries, comments, interface of blog site and database. These

features also record people's blogging activities.

The 'Help' section includes technology and language aids. The first study of the group blog

indicates that language is still one of the main difficulties facing Chinese overseas students. I

added a language plugin to readers of the blog with prospective overseas students in mind.

6.3.3 Layout of the mobile group blog

The Interface redesign of this mobile group blog site is displayed in Figure 6.4 below. There are four sections in the first web page: head bar, blog entry section, navigation and administration section, and blog description and help section.
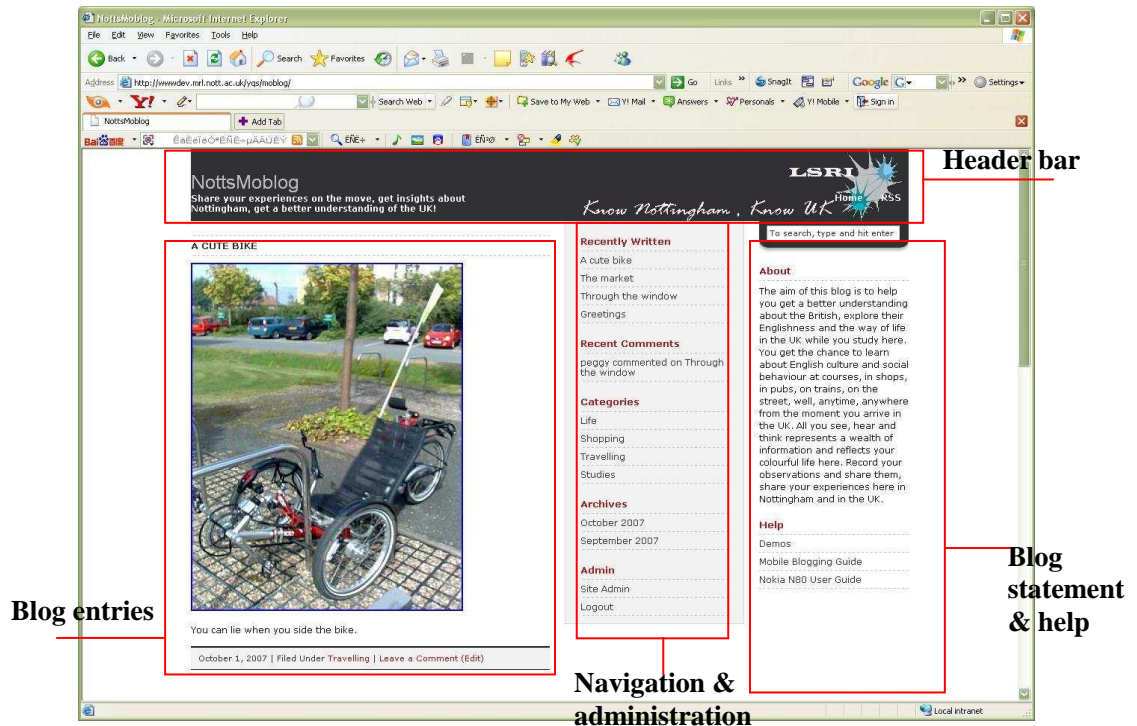
Figure 6.4: A webpage layout of the group blog site

On the top is the **header bar**. In this bar, the title and the topic with a LSRI logo of this mobile blog is displayed. The main content of the page is divided into three columns.

The left column is the largest section, including all **blog entries** from all participants, displayed in reverse-chronological order. A blog entry contains the title; the content in the form of text and image, ending with the date of blogging; the category to which this blog entry belongs; and the number of comments (if no comments, displayed "leave a comment"). To avoid scrolling too much in one webpage, there can be up to ten blog entries.

The middle column is the section for **navigation and administration** links. It contains five key features in the blog

- 'recent post', 'recent comments', 'categories', 'archives' and 'administration': 'recent post' refers to the ten latest blog entries posted to the group blog. It lists the titles of these blog entries in reverse-chronological order.

- 'recent comments' refers to the five latest comments made by participants in reverse-chronological order, although it lists only the name of the person making the comment and the title of the blog entries.

- 'categories' lists the names of nine preset categories in alphabetical order: custom, conversation, events, life, buildings, food, shopping, traveling, and studies. Conversation and events are sub-categories of custom and buildings; food, shopping and traveling are sub-categories of life. These categories are synchronized to those categories displayed on the mobile interface.

- 'archives' gives archived blog entries by month to facilitate search.

- 'administration' provides the links to the registration and login webpage.

The last section on the right of Figure 6.4 contains purpose and **statement** of the blog as well as links for **help**. It displays a brief description of the group blog, an explanation about what it is for and what could be posted. The 'help' file is also in this section.

At the bottom of the webpage the tool for language translation is displayed. Each national flag icon represents a link to the translation page of that language.

6.4 BLOGGING FROM DESKTOP/LAPTOP OR MOBILE DEVICES

There are two ways in which users of this mobile group blog can author the blog. They can do traditional blogging from desktops or laptops; alternatively they can submit the blog from a mobile device by visiting the URL of the mobile webpage.

6.4.1 Blogging from the desktop/laptop

The following image shows the blogging interface for desktop/laptop users.
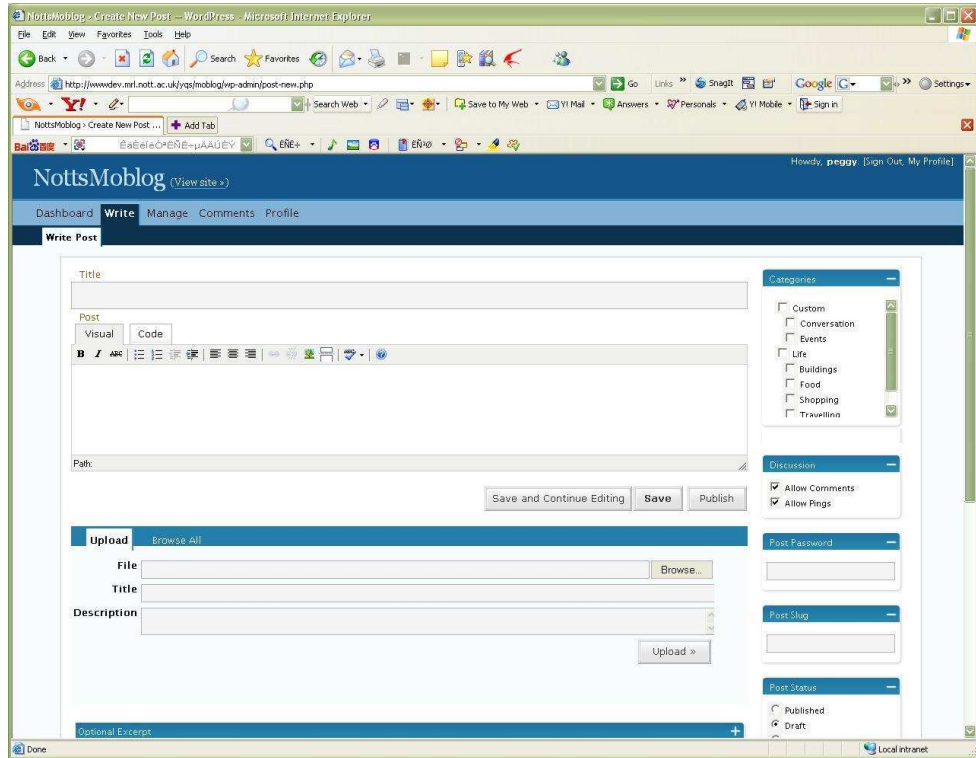
Figure 6.5 Blogging from computer

Please refer to Appendix VII '**Blogging from desktop/laptop'** for deails about how to blog from desktop or laptop.

6.4.2 Blogging from mobile devices

For users' blogging from mobile devices such as mobile phones, the layout of the mobile web page is shown as below

Figure 6.6 Mobile images and the interface of moblogging

Figure 6.7 The interface of mobile blogging

Figure 6.7 shows how users first login with their username and password. They then input the title and texts of their post in the textboxes. Nextthey can choose the name of a picture that had previously beentaken and stored in the mobile device. The size of the picture should be no bigger than 1Mbyte. They should also choose the category from the menu list by clicking the category item in the list box before they submit the post. All submitted texts and images are posted straight to the mobile group blog site.

6.4.3 An example of mobile blogging

To conduct a mobile blogging, the users can follow these steps as an example.

A Nokia N80 phone was used and the link to the mobile blogging page was pre-set as a

bookmark in the web browser. Below is a demonstration of a mobile blogging with the Nokia

N80 phone.

First, prepare for
taking a
picture.Take the
picture with the
phone. Ensure the
photo size is no
bigger than 1Mbyte

Figure 6.8: Taking a picture with the mobile phone

.
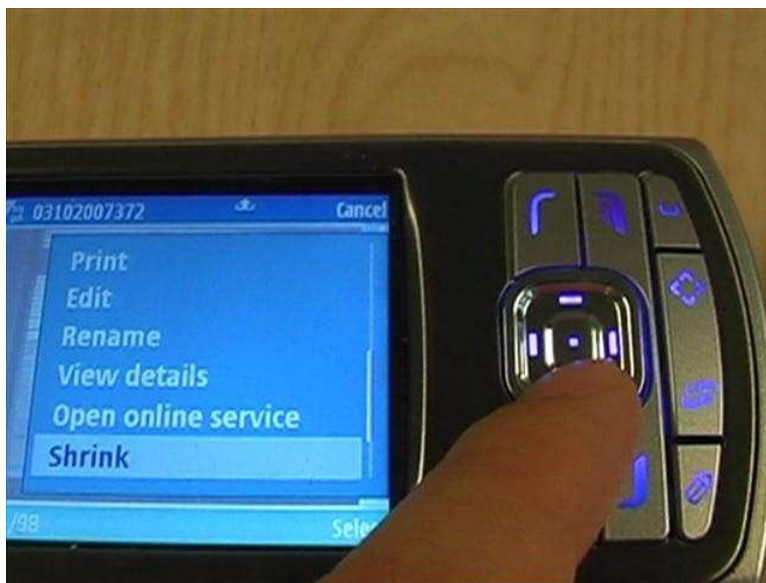
If the photo is too
large , reduce the
size   using   the
feature 'shrink'.

Figure 6.9: Compress the photo
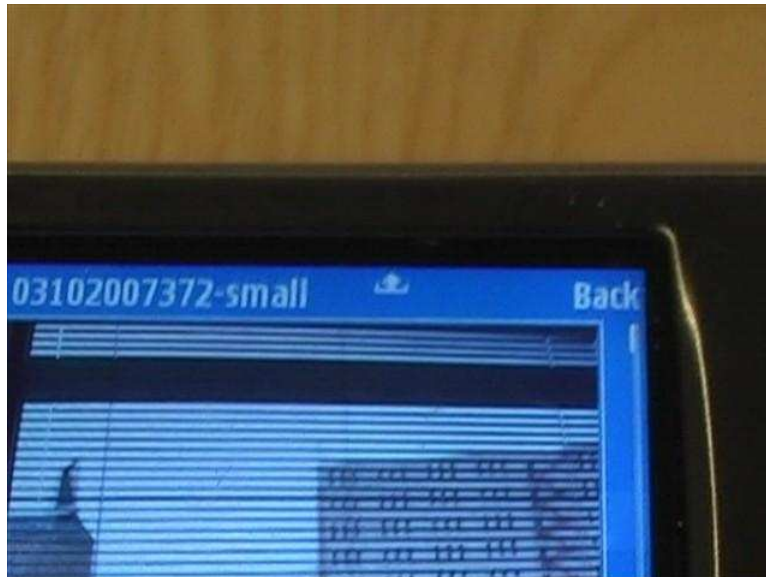
If the picture is shrunk, the word"-small" will be added to the end of the original filename of the picture.

Figure 6.10: The filename of the picture changed

Then the picture is ready to be submitted to the mobile group blog site. Note down the name and path of the file.

Open the web browser in the mobile phone and open the link of the webpage formobile blogging.

Figure 6.11: Open the web browser of the mobile phone

In this example, the user could choose the "NottsMoblog" bookmark or alternatively input the link of the webpage to the address box: "wwwdev.mrl.nott.ac.uk/ moblog/wp-wap.php"and confirm the selection.

Figure 6.12: Input the web link for mobile blogging

The mobile then starts to build its connection to the mobile Internet, after which. the page for moblogging is shown.
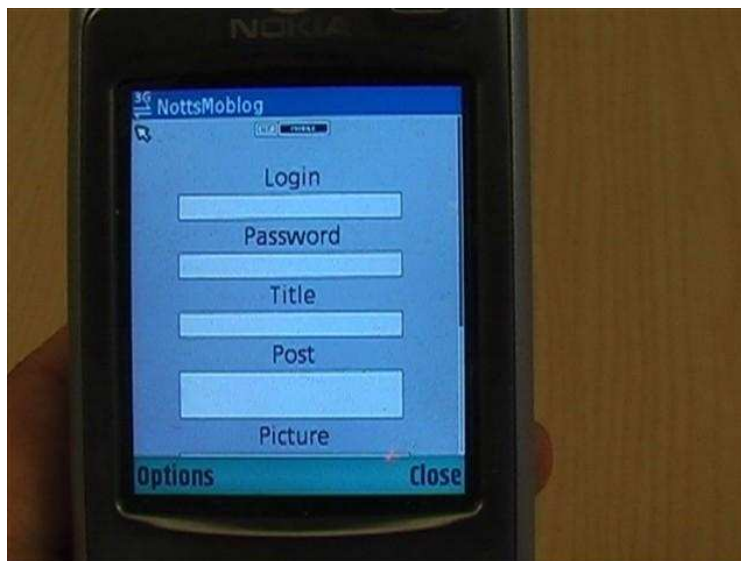
Fill in the login name and password in the 'login' and 'password' text box, and type in the title of the blog. Input texts to the text box under "title" to give the blog a title and input texts to the textbox under "post" to author the contents of the blog.

Figure 6.13: The interface of moblogging webpage

Move the cursor to the file-selection box under the "Picture" and click . A directory list will pop up.

Figure 6.14: Search the directory for the picture file
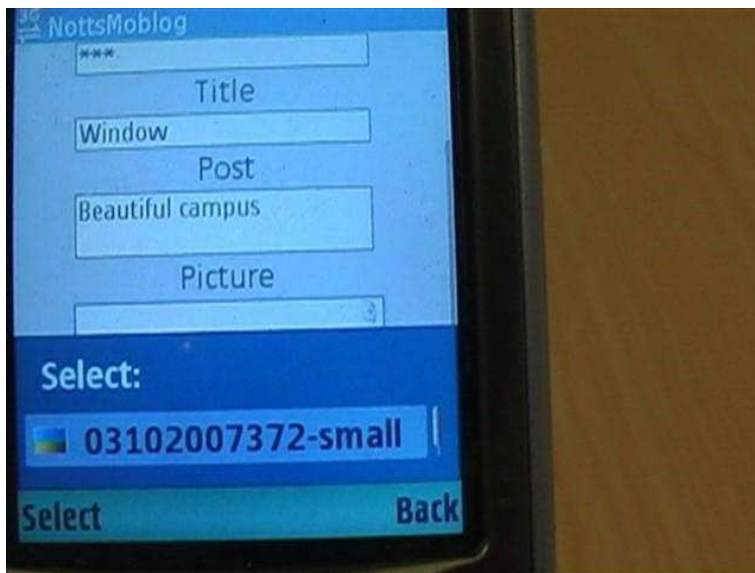
Select the file; then the name of the picture will be shown automatically in the dialogue box under "picture". The picture will then be attached to the blog entry for submission.

Figure 6.15: Choose the picture for Moblogging

The next step for the user is to decide to which category this blog entry belongs:
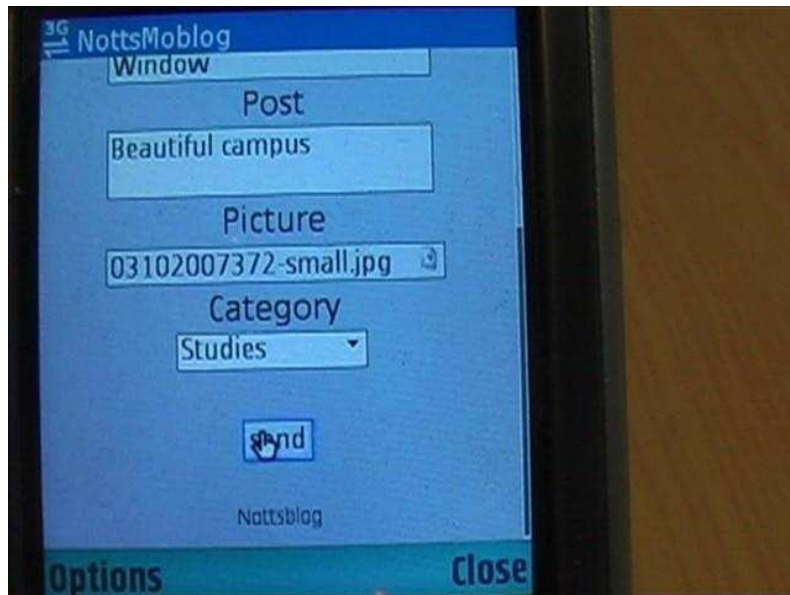
Select one item from the drop-down box under "Category". Then move the cursor to the button named "send", click and submitt the blog entry.

Figure 6.16: Finish inputs of a blog entry

You will see a status bar showing the submission (Figure 6.17). The total size and submitted size will be displayed.
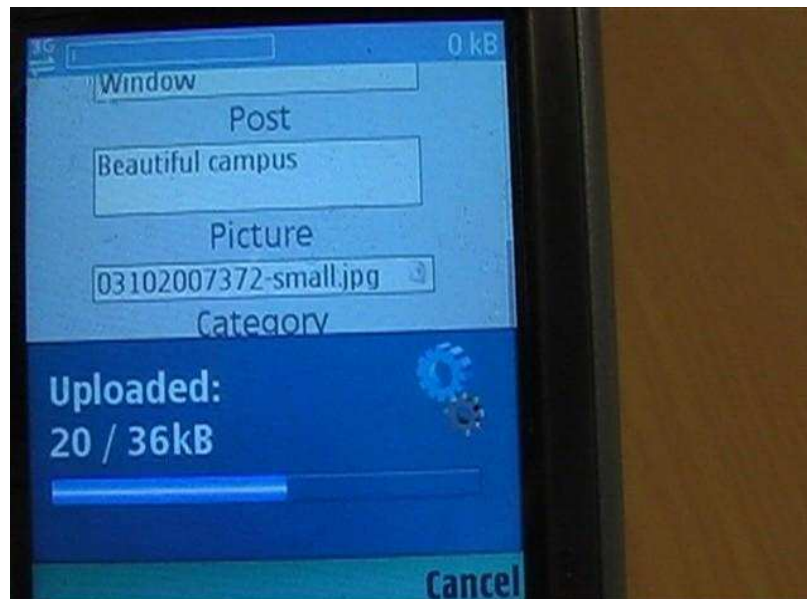
Figure 6.17: Submitting the mobile blog entry

If the blog is submitted successfully,the following message will appear: "Successful entered ID **"
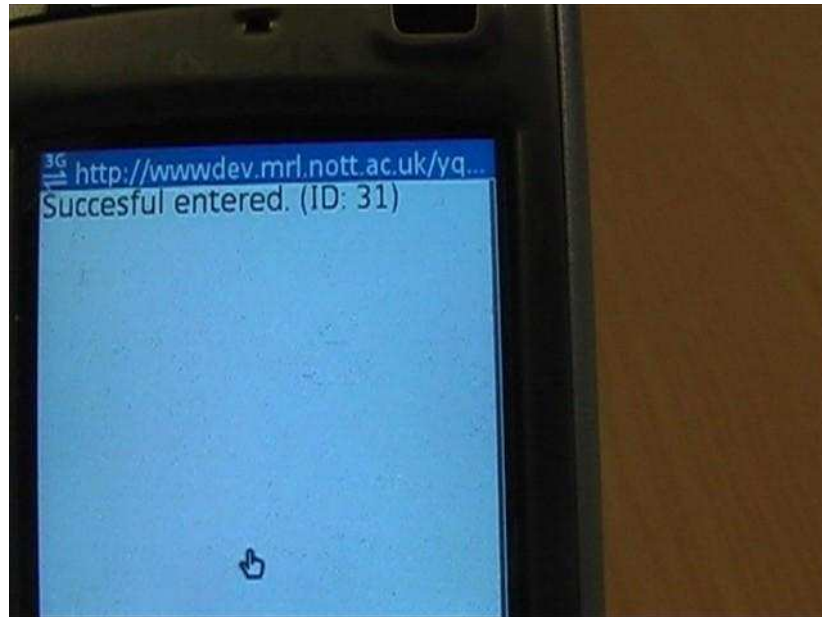
Figure 6.18: Successful submission of moblogging

The blog entry can now be viewed with the web browser accessing the Internet from the desktop/laptop or from the mobile phone. Below is the submitted blog entry view from a desktop.
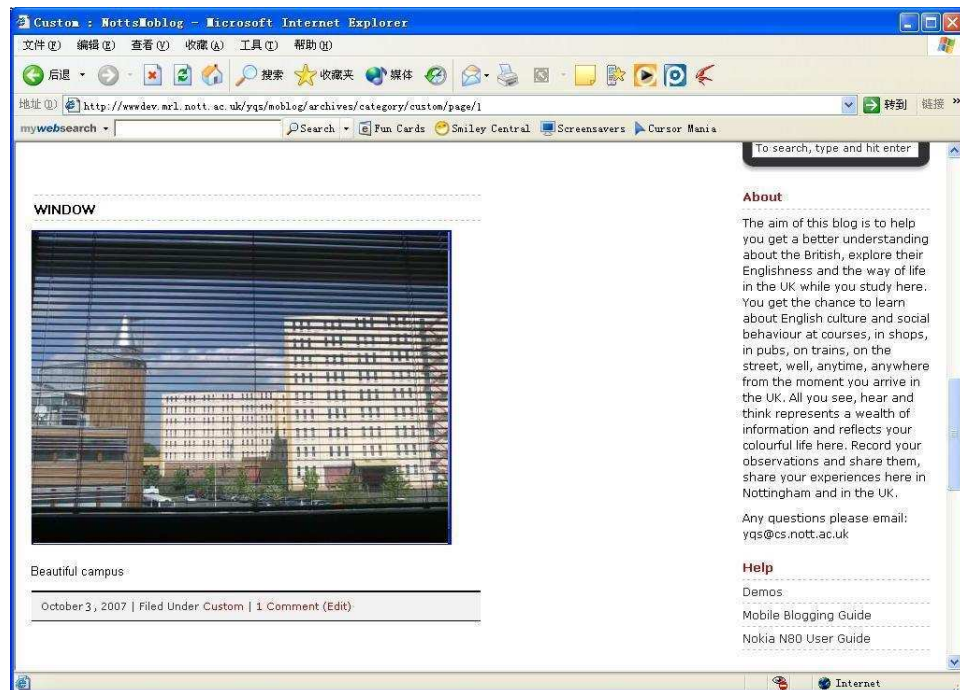
Figure 6.19: The submitted moblog entry on the website (laptop/desktop)

The following is the submitted blog entry viewed from a mobile phone browser.

Figure 6.20: The submitted moblog on the website (from mobile device)

The design process may need several rounds of testing and re-design. Although this PhD project has limits in time and funding (and so repeat testing and re-design is also necessarily limited), a small-scale empirical study to assess the blog system was conducted, using the mobile group blog in learning the host culture. The next chapter of this study will report on testings on bothtechnology and on the learning of real-world cultural transition.

6.5 SUMMARY OF THE CHAPTER

In this chapter, a framework for the mobile group blog was generated for learning purposes. Based on this framework, as a result of an analysis of currently available blog server solutions, the free blog-software 'WordPress' was selected as the platform for this study. Features of 'WordPress' were analyzed and customized according to requirements from the results of Studies 1 and 2 in Chapter 3 and Chapter 4. The mobile group blog was established. Users can blog from their desktop/laptop or from mobile devices. An example of mobile blogging was illustrated and the system was tested to prepare it for the practical study in the next chapter.

Chapter 7- Empirical study of mobile group blogging

7.1 INTRODUCTION

This chapter reports on the assessment of the mobile group blog system. The purpose of the study was to determine how the mobile group blog could support those Chinese overseas students in real cultural learning in everyday life. The study also intended to explore how the mobile group blog was accepted within this group of overseas students, as well as the strengths and constraints of this technology.

With the mobile group blog system initialized, Chinese overseas students were recruited to capture their understanding of the cultural differences between China and UK, the difficulties they encountered and their experiences of adapting to the mobile phones. Recruitment took place two weeks after their arrival. Research questions were as follows:

- Do students find the mobile group blog accessible, engaging and useful in their cultural transition? Why or why not? To what extent?

- How do students adapt to the new technology?

- In reality, do students feel themselves part of the community?

- In reality, what are the changes from group blogging to mobile group blogging?

- How could scaffold and guide learning in the mobile group blog in the everyday context?

- What are the strengths and limitations of this technology?

Results in section 7.3.1 are relevant to research questions 1-4; section 7.3.2 relates to questions 1 and 3; in section 7.4 results from empirical data collected face-to-face, in the interviews and focus groups, are relevant to questions 1, section 2,3,5,6.

7.2 STUDY METHODOLOGY

Both qualitative and quantitative methods were used in this study. Observations, interviews and focus groups were conducted and action research was also used, when the researcher was engaged in the group blog in the role of moderator: the researcher conducted field studies, observations and monitoring of everyday activities through the mobile group blog site.

7.2.1 Study design

The study was conducted over four weeks. Participants were instructed to start blogging on the day they received the equipment, and were asked to recount their experience, thoughts and feelings in everyday life; their insights into local society and the way of life in the UK, and their exploration of Englishness. They were encouraged to identify the differences between their native and host cultures, and to experience English culture and social behaviour on courses, in shops and pubs, on trains, on the street at any time, and anywhere in the UK. What they saw, heard and thought was posted to the group blog site via mobile phones or desktops/ laptops.

7.2.2 Participants

Twelve newly arrived Chinese overseas students were recruited - eight females and four males, aged from 19 to 25, who joined undergraduate or postgraduate programs at the University of Nottingham. All participants were from the Chinese Mainland and none had prior overseas experience of study. Most were previously unknown to one another. No participants had any experience of mobile blogging before but all had their own personal blogs. All but one of those taking part in this study had their own mobile phones. The following table (Table 7.1) is the profile of these participants:

Table 7.1 Profiles of the participants

Username	Gender	Age	Under/Post graduate	School
Angie	F	19	U	Business
Cs	M	22	P	Biosciences
Elsa	F	28	P	Law
Eva	F	24	P	Business
Kin	F	23	P	Business
Owen	M	23	P	Computer science
Phillip	M	23	P	Mechanical engineering
Piscescancer	F	24	P	Law
Solbyb	F	23	P	Law
Wanzi	F	20	U	Business
Wy	F	23	P	Biosciences
Zack	M	25	P	Human Development

7.2.3 Apparatus

Each participant was loaned a Nokia N80 mobile phone for this study. Although they were allowed to use their own mobile phones only two participants tried moblogging from these. They kept the Nokia phones for one month and were asked to do moblogging as freely as they could, at anytime and anywhere.

7.2.4 Preparation

The group blog had already been established before the practical field study. Settings in mobile phones were made and inductions were also delivered to these participants:

Mobile phone setting up
The Internet settings on the twelve Nokia N80 mobile phones were configured. A bookmark was set for mobile blogging in the phone web browser.

Categories of contents pre-set
Nine broad categories of contents were set up in the blog site and synchronized to the mobile application. Categories settings in this mobile group blog derived from the results of the two previous studies (the first two studies of group blog and audio diary in this research); categories also took account of Chinese traditions. This research identifies 'shopping', 'travel', 'food', 'buildings', 'study', 'conversation', 'events', and 'customs' as the main categories in addition to the category of 'life (other)'.

Users' authority

All twelve participants were asked to register their usernames and passwords. All of them chose their English name or nickname as usernames, rather than their real name. They could choose to blog either from mobile phone or desktop/laptop. With their username and password, they could log on to the group blog, post their own blogs, and read/edit other blogs.

Inductions to participants

Each participant was given a brief introduction to the related functions of the Nokia N80 phone. They were given a sheet of instructions on how to use the mobile blog and a demonstration of an example which used the whole process was conducted by the researcher. Participants were then given a 15 minute induction by the researcher, either individually or in groups, whenthey were encouraged to try sending their own blogs.

7.2.5 Procedure

Once they had been given the mobile phones, participants were asked to start blogging. They were also asked to read through other people's blog entries and to give their comments. The researcher acted as the administrator and moderator of the mobile group system, as well as the observer of the online activities with up to ten comments. At the start, the researcher entered a few examples of blog entries as semi-scaffoldings to the bloggers. Regular monitoring of the blog site revealed that some bloggers deviated from the original blog topic so messages were sent to pull them back.

Support from the researcher was provided through emails, personal contacts and blog comments. Participants could also get help from the website at anytime.

7.2.6 Analysis

This study utilized established theory for qualitative data from interviews and focus groups in Chinese. These conversations were transcribed afterwards.

7.2.6.1 Qualitative data

Before blogging activities started, pre-moblogging interviews were conducted to identify the background of participants. Basic profiles were obtained by asking them about their age, their experiences of using mobile phones, their experiences of blogging, and their first impressions

about their new life during the past two weeks. These interviews were conducted informally after the demonstration on the same day the mobile phones were given out.

At the end of the study, post-moblogging interviews and focus groups were conducted with all participants. They were asked about their experiences of blogging and their comments and suggestions for improving this mobile group blog system. Seven people were interviewed and five people took part in two separate focus groups. Each interview took about 20 minutes, while each focus group lasted for about 40 minutes.

7.2.6.2 Quantitative data

The log files offered quantitative data, which could provide some evidence for these participants's engagement and their changes from normal blogging to mobile blogging. The number of blogs posted by participants; the number of visits they made to the website; their responses to the blog entries; and the frequency of bloggings all reflected how active and engaged they were within this group as a community. At the same time, their preferences for blogging either from desktops/laptops or from mobile phones were also recorded. Through the original distillation, the hits, visits and page views from the researcher were filtered and eliminated. In the log files, the following features were included:

- The number of logins and hits
- The number of blogs in each day
- The number of individual blogs in total
- The number of blogs from mobile devices and the number of blogs from desktop or laptop.
- The number of individual comments on entries from other bloggers
- The number of responses to each blog entry
- The time when the blog was posted

All this data was stored in a database running on the server of the blog site. The database was later interpreted for analysis.

7.3 FINDINGS FROM THE BLOG SITE

During the four weeks, 216 posts and 109 comments were submitted by the participants. The blog site received 1126 hits. Log files illustrated how active those participants were while the contents in the blog entries revealed their understandings and insights into the impact of culture on their own lives. In the following section, the findings from quantitative and

qualitative data are presented.

7.3.1 Findings from log files

There are five areas of results from the log file data: blogging from desktop/laptop; from mobile phone; the first time moblogging was started; the time of day moblogging was done; and the number of blogs and comments from participants.

7.3.1.1 Comparison of blogging from desktop/laptop and from mobile phones

In this group blog, participants were allowed to blog in the traditional way i.e. post a blog through desktop computers with their unique username and password on the group blog. However, statistics show that 86% of blog entries came from mobile phones. Half of the bloggers had previously blogged in the traditional way (from desktop/laptop) but mainly in the first two weeks. Only three blog entries were submitted from computers in the last two weeks. Figure 7.1 below illustrates the number of blog entries (from mobile phones and from computers) posted by individuals and the proportion of blogs. In the figure, blog entries from mobile devices are called 'moblog' and those from desktops/laptops are called 'normalblog'.
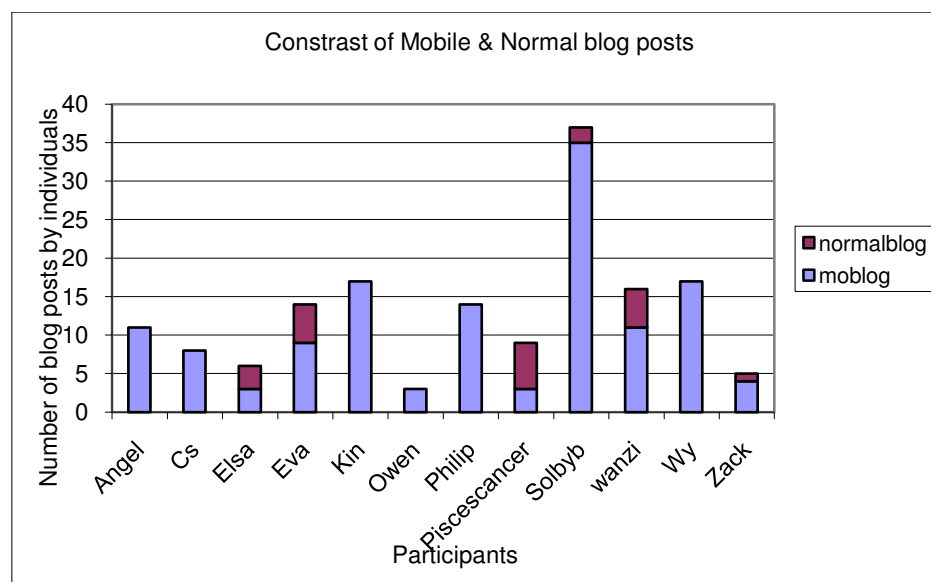
Figure 7.1 Proportion of mobile and normal blog

In Figure 7.1, the names on x-axis are the nicknames of the twelve participants. The y-axis represents the number of blogs submitted by each individual.

Four bloggers posted normal blog entries only as pure texts. Five of these traditional bloggers

blogged in Chinese at the start. Then the situation changed gradually. From the second week, more photos appeared on the group blog site, when more people started moblogging.

7.3.1.2 Start time of moblogging

Most bloggers began mobile blogging in the first week while. 'Elsa' started mobile blogging very late, in the third week of this study. After they started moblogging, fewer normal blogs appeared from the second week. Table 7.2 shows the day and time that each blogger started mobile blogging:

Table 7.2 Time of first moblog

Username	Time of the first moblog
Angel	Day 6 18:40
Cs	Day 5 19:09
Elsa	Day 19 17:32
Eva	Day 2 11:41
Kin	Day 6 14:36
Owen	Day 11 22:38
Philip	Day 7 20:56
Piscescancer	Day 8 19:02
Solbyb	Day 3 22:35
Wanzi	Day 5 18:59
Wy	Day 7 18:21
Zack	Day 14 19:49

'Eva' is the first person to start mobile blogging. 'Solbyb'and 'Wanzi' were also those people who started early moblogging. Follow-up data (Figure 7.2 and Figure 7.3), shows 'Solbyb'and 'Wanzi' continued to take initiative and were the most active members of this mobile group blog.

By comparing Figure 7.1 and Table 7.2, transitions from normal blog (from desktop/laptop) to moblog took several days. In the first few days, some people submitted photos through mobile phones but wrote blogs in Chinese through the computer. One issue that has to be accounted for is that the mobile phones used had no Chinese language support. This could have been a potential barrier for participants to express their thoughts in Chinese as textual moblogs. 'Piscescancer' sent more normal blogs than moblogs, and started moblogging only at the beginning of the second week.

7.3.1.3 Time spent moblogging

The study investigated how much time within a 24-hour day was spent in submitting blog entries through mobile phones. It was identified that 47% of bloggers posted blogs in the evening and during the night (after 7pm and before 2am); 39% blogged in the afternoon (after 12pm and before 7pm);and 14% in the morning (between 6am and 12pm). There were no mobile blog entries in early morning between 2am to 6 am. Most moblog entries sent in bulk were submitted during the evening or night, except two sets which were sent in the late afternoon (Ref. Figure 7.4 for more detail).

7.3.1.4 Participants' contribution to the blog

The following figure (Figure 7.2) shows the contributions of participants as a community in this mobile group blog study.
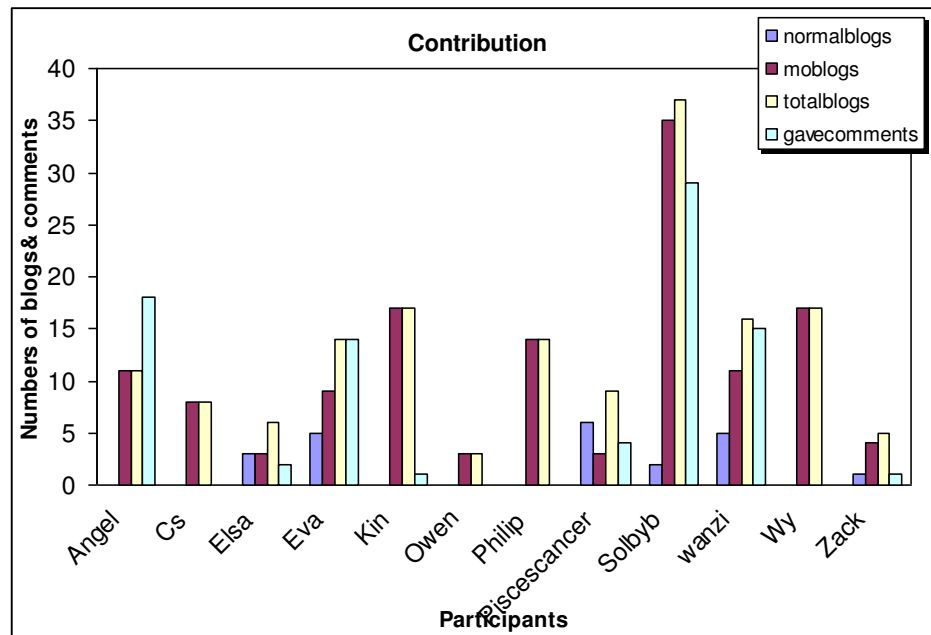
Figure 7.2 Contributions from participants

In this figure, the x-axis still represents individual participants. Dark blue columns represent the number of normal blogs, which are blogs submitted from computers in the traditional way. Purple columns represent the number of moblogs. The yellow columns represent the number of blogs in total, while the light blue columns represent how many comments were made by each participant on individual blog entries only.

Four participants, 'Cs', 'Owen', 'Phillip' and 'Wy', did mobile blogging, but kept 'silent'

throughout the study, making no comments. 'Solbyb' posted the largest number of blogs and comments in this group of students. 'Owen' made the least contribution to the group blog. 'Angel' and 'Eva' submitted more comments than posted blog entries. 'Wanzi' and 'Eva' had a similar number of blog entries and comments. We can conclude that 'Solbyb' was the most significant contributor in this group blog while 'Owen' was to be the least active. 'Angel' appeared to prefer reading and commenting on blog entries from others to creating her own blogs. The figure also indicated that there could be three types of participants in this study: active blogger as well as commenter (like 'Solbyb'), active blogger only (like 'Wy' and 'Philip'), active commenter (like 'Angel') and passive blogger as well as commenter (like 'Owen').

As comments could not be given through mobile devices in this study, all participants were instructed to submit their comments through computers. It was not necessary for them to login each time for commentary, but they were asked to leave their email address if they did not login. Therefore people outside this group could also submit comments on these blogs. Similarly they could view the blog sites without logins, so they might have read through the blog entries without making any response. There were 1126 hits to the website in this study during the study period, implying that there were four times the number of readers than login visits from bloggers. Those 'silent' readers might not have contributed much to the group blog site but they benefited from reading blog contents.

7.3.1.5 Interactions on the blog site

Online interactions between participants in this mobile group blog, mainly existed in the form of comments. Generally, the number of comments on a blog entry revealed how much concern people felt about its content.

The purple columns in the following figure (Figure 7.3) shows the number of comments and responses that individual readers gave to other bloggers and accordingly the number of comments individual bloggers received.
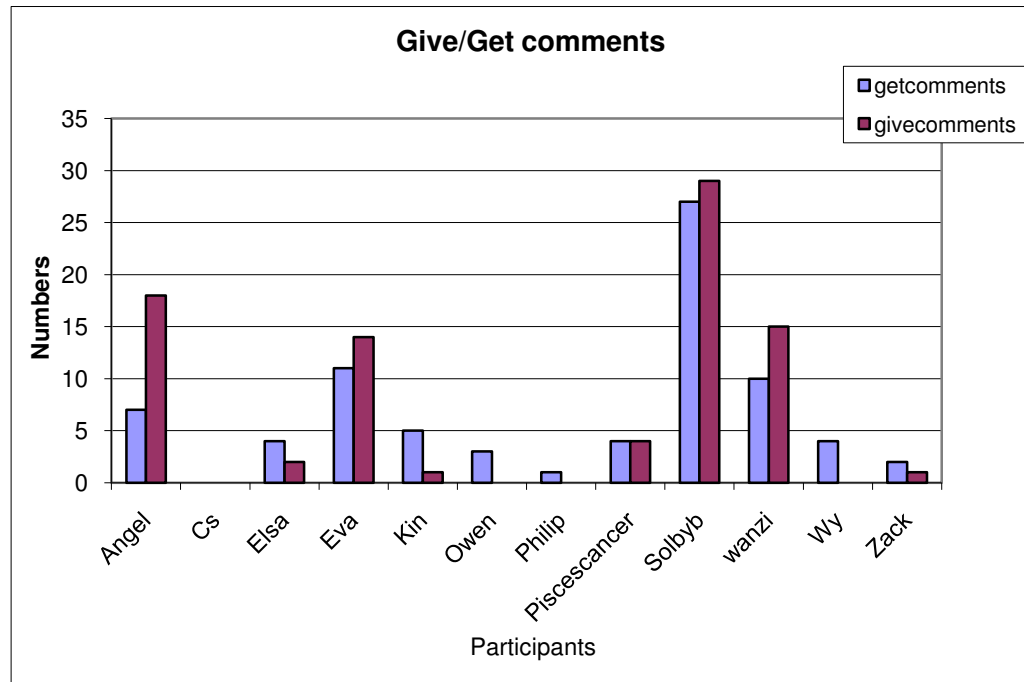
Figure 7.3 Comments given and received by participants

In Figure 7.3, 'Cs' neither gave her own comments nor received comments from others. All other participants received responses to their blog entries. Again, 'Solbyb' was the most active in responding, and at the same time she received the largest number of responses from other participants. We can therefore assume that she took the most initiative and was the most engaged and popular participant in this small community. There were three participants, 'Owen', 'Phillip' and 'Wy', who kept 'silent' in responding to any blog entries; even though they received responses from other participants on their own blog entries. The figure also illustrated that generally positive comment givers also got an amount of feedbacks , which indicated more communication with other people through the mobile group blog.

'Angel', 'Eva', 'Solbyb' and 'Wanzi' had good records for making and receiving comments i.e. they were active in communication through the group blog, exchanging their opinions by sending comments to one another. Figure 7.2 indicated that these four participants were relatively active bloggers as well as commenter.

Figure 7.4 below reveals the dates and times when each moblogger submitted entries from their mobile phones during the study period of four weeks.
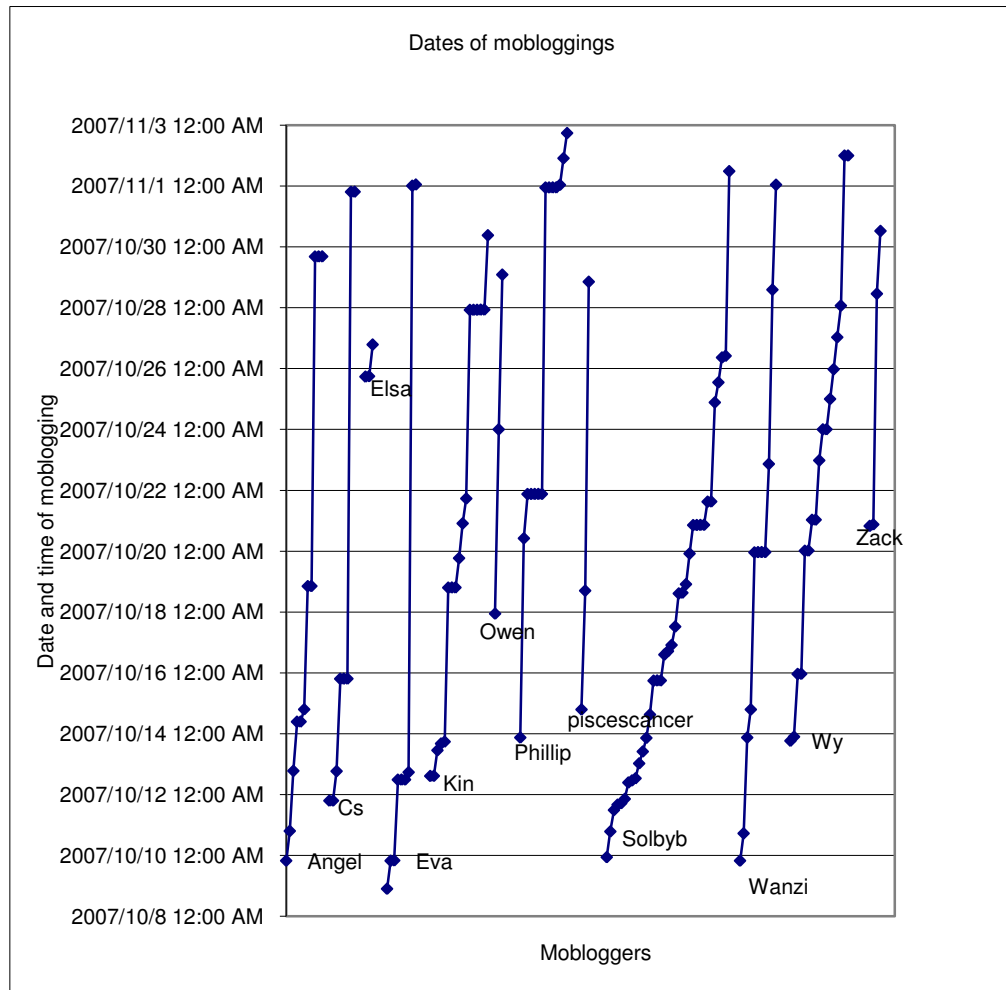
Figure 7.4 Frequency of mobile blogging

In this figure, the dots represent the time when blog entries were submitted and the lines between dots represent the duration when there was no moblogging activity. Those superimposed dots indicate bloggers posted several blog entries in bunches at one time.

'Solbyb' seems to be the most frequent moblogger among all these participants. 'Elsa' had a very short duration of moblogging which lasted only for two days. 'Owen' and 'Zack' had ten days of moblogging with a few blog entries, indicating that they were less enthusiastic. If we also look at previous data, as shown in Figures 7.2 and 7.3, 'Owen' appears to have had the least enthusiasm either for both moblogging or traditional blogging, as well as for responding to blogs from others. 'Zack' and 'Piscescancer' also posted only a few moblog entries but sent more traditional blogs, indicating that she preferred the traditional blogging method.

The data implies that the majority of these participants did mobile blogging continuously

though not regularly. Moblogging activity became intense in the second and third weeks. There is an interesting phenomenon that 'in bulk' moblogging often occurred in the evening, echoing, the results outlined in section7.3.1.3.

7.3.2 Findings and discussion from blog contents

Using the preset categories in the blog system, participants chose a category before they posted to the blog site. Figure 7.5 shows the percentage of blog posts mentioned each of the indicated categories of cultural concern.
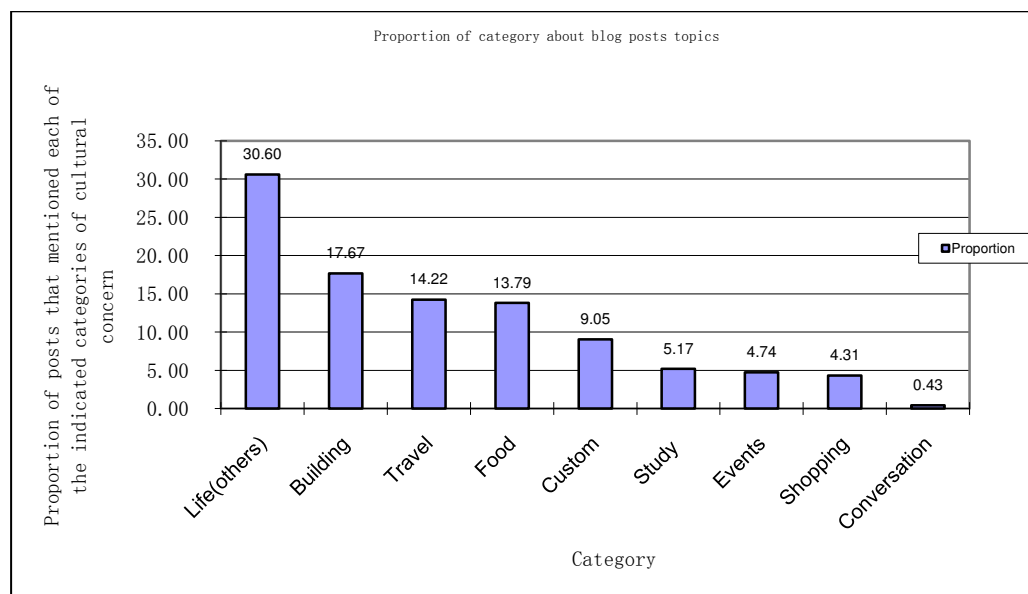
Figure 7.5 Proportion of the categories selected in the blog

In this mobile group blog, I preset 'shopping', 'travel', 'food' and 'building' as four subcategories within the category 'life'. Topics not included in these subcategories but which still belonged to 'life' would be classified as 'life (others)'automatically - 30.6% blog entries came into this category, indicating that bloggers considered most of their entries were relevant to 'life (others)' They also viewed 'shopping', 'travel', 'food' and 'building' as important to their own everyday life. That is, 80.6% of the contents cohere closely with everyday life. The following sections look in more detail at these four categories.

7.3.2.1 The category of 'life (others)'

The percentage of the category 'life (other)' seems to imply that people might not have a good understanding about the categories. However, a detailed analysis revealed that there could be

four possibilities why the blog author chose the 'life (others)' category rather than use the subcategories:

(1) They recognised that their blog contents were not related to any of the four subcategories. Sometimes the content was about things of interest that they captured incidentally. These blog entries were mostly sent via mobile phones. For example, the following image suggests to some readers the geographical location that Nottingham locates.

Figure 7.6 A moblog example in 'life' category

This topic could not belong to any of the four 'life' subcategories, 'building', 'shopping', 'travel', 'food'. The blogger then put it in the category of 'life'.

(2) They did not browse the subcategories carefully or merely regarded 'life' as the easiest category to choose.

Sometimes the mobloggers did not classify the blog entries in subcategories. In the following example, the blog author 'Wanzi' regarded her blog entry as belonging to the general category

of 'life' but in fact she could have posted it to 'food'.
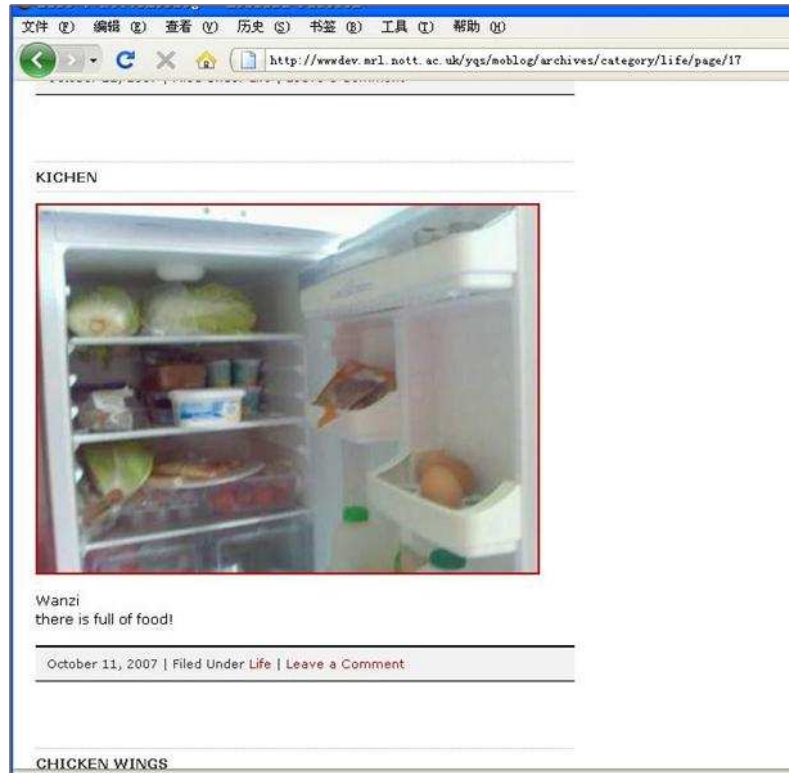
Figure 7.7 Example of imprecisely-categorized blog entry

From the blogger's sentence "there is full of food" we know that she tried to express the idea that there was a lot of food in the fridge. There may be some other meanings beyond this picture, but it could be easily directed to the 'food' subcategory.

(3) They thought their blog entries were cross-categories.
Sometimes the blog author assumed his/her blog entry related to several categories and so included all these categories. In the following example, the author assumed the bread-cutting machine was relevant to 'food' as well as to 'shopping' because it was found in Sainsbury's supermarket.
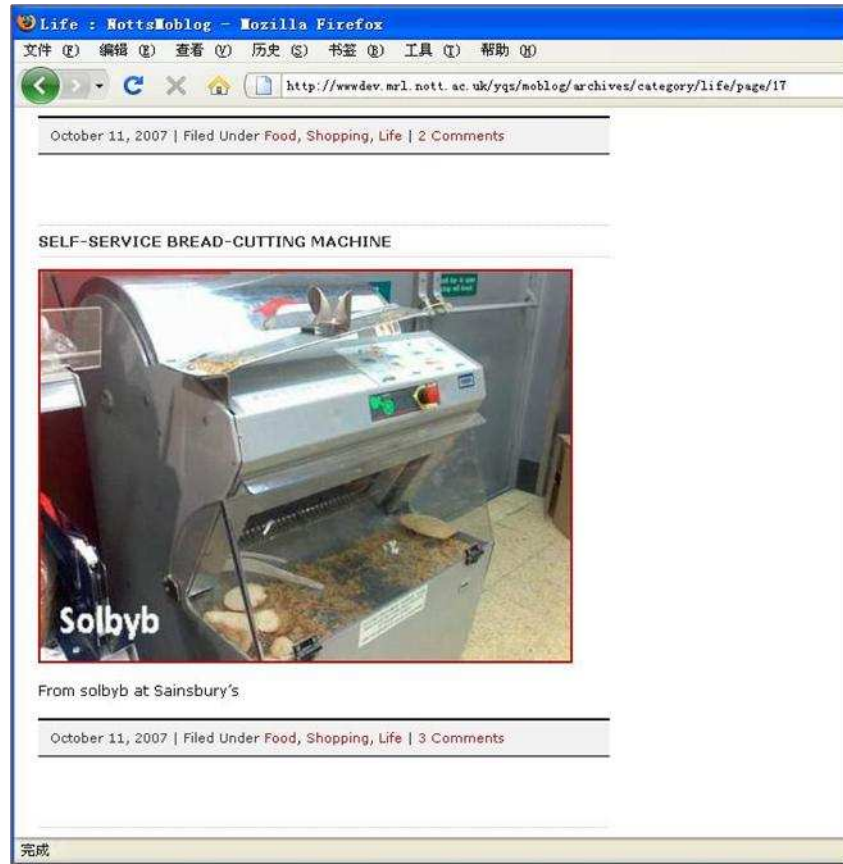
Figure 7.8 Example of cross-category moblog entries

(4) They did not recognise which category their blog entry should belong to, as they involved too many aspects of life, so the blog entry could not be placed in one specific category. Blog entries in this case were often textual, as in the example below:
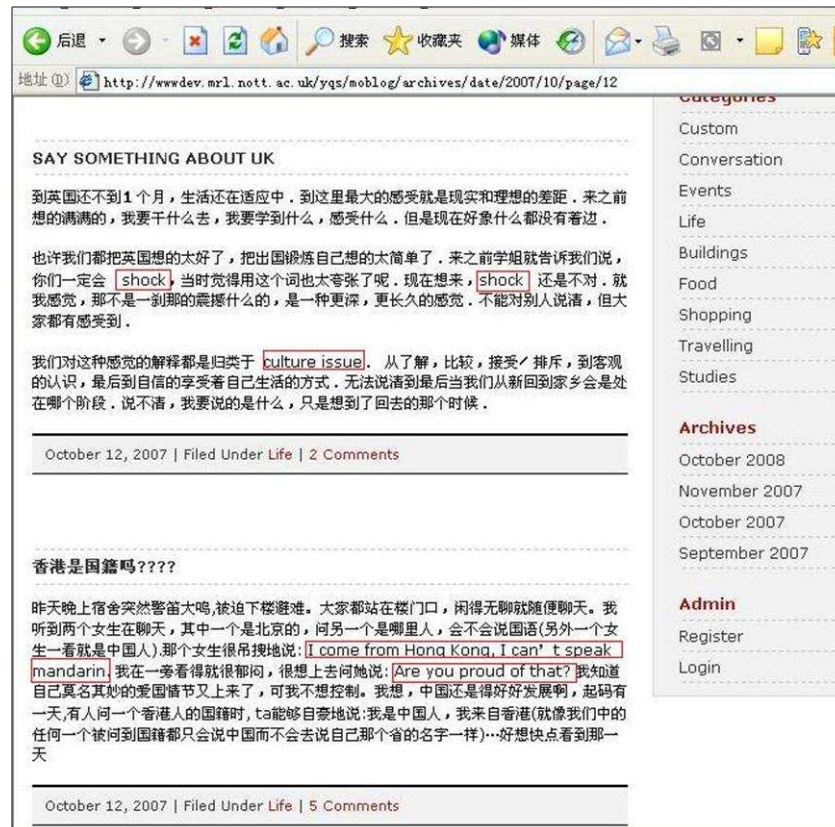
Figure 7.9 Example of blog entry difficult to categorize

In Figure 7.9, the general topic of 'Say something about UK' was a textual blog written almost entirely in Chinese. The entry was written in the middle of the first week and is a short summary about her experience, expressing her confusion, disappointment, and homesickness, and also her understanding of cultural issues. Furthermore, she sought to share her thoughts with others and showed a desire for feedback beyond the lines. These covered a lot of aspects in life for which the blogger seems to have no idea about which subcategory it should belong to. Then he put it under the big category 'life (others)'

7.3.2.2 The category of 'building'

'Building' represented the highest proportion of blogs within the four sub-categories (17.7% - ref. Figure 7.5). For example, under 'building', participants submitted photos of their accommodation, other buildings on the campus, street buildings and even the environment of the campus.

However, the content of a few blog entries were placed wrongly in this category which had little relationship with 'building' at all. For example, pictures of trees in the park, complaints about the broadband service and even people's 'portraits' were posted to 'building' although

unrelated to it. One possible explanation for this was that if the moblogger did not select a category before he/she submitted a blog entry from the mobile phone, the settings automatically defaulted the blog to 'building'.

7.3.2.3 The category of 'food'

'Food' was one of the most popular categories among participants.

Figure 7.10 A blog example in 'food' category

Members of the group blog shared photos of British food, their housemates' international food and food they had cooked themselves; 38% of comments were also in this category - for example what they thought of the food and information about where they obtained it. All blog entries in this category were clear and related to 'food'. There were no mistakes or confusions found in this category.

Figures7.9 and 7.10, show that these texts were in Chinese with some English words included. The earlier blog entry in Figure 7.9 (posted October 12th) had many Chinese characters while the blog entry in Figure 7.10 (posted November 2nd) had only three Chinese characters. This may indicate the author's adaptation to language, a potential transition from Chinese to English.

7.3.2.4 The category of 'custom'

Another popular category is 'custom', which was chosen in 9.1% of total blog entries. People's behavior, social regulation, British cultural factors, and British humour all belong to this category. This is the category in which participants raised a variety of interesting questions covering a range of topics. What they captured and described always encouraged readers to think more deeply. Sometimes they captured the phenomena that they could not understand in order to prompt discussion and answers from their readers. Below is an example (Figure7.11).
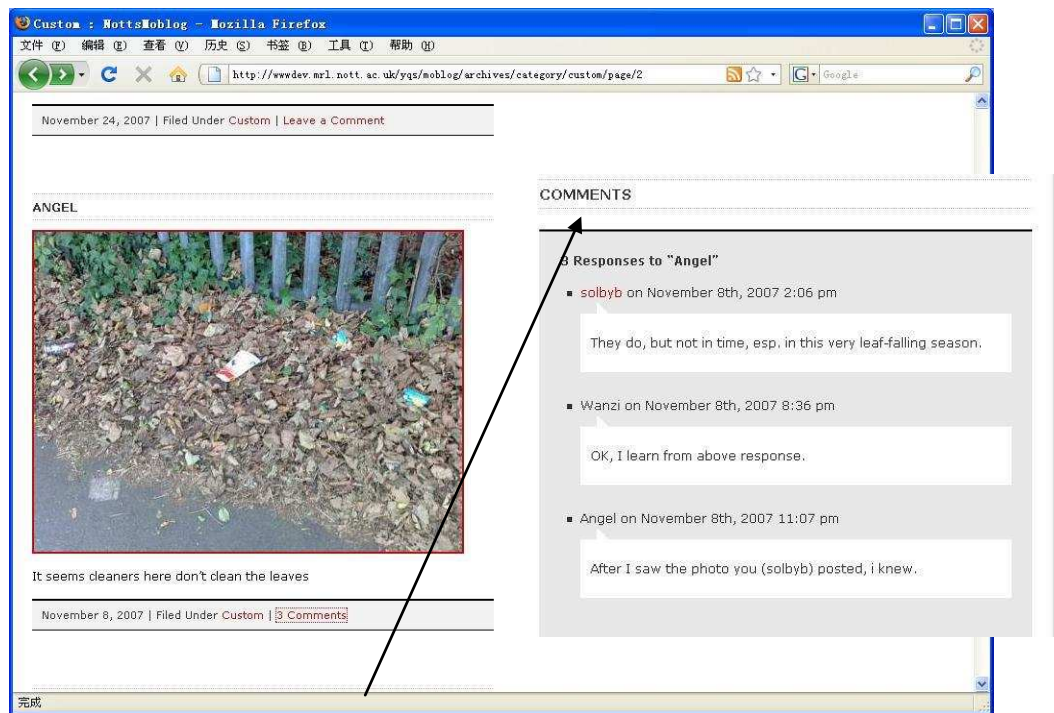
Figure 7.11 An example of blog entry in the 'custom' category

'Angel' took a photo of the fallen leaves on the ground and was curious about why they were not swept up. 'Solbyb' and 'Wanzi' both commented on her blog. 'Solbyb' gave her answer to 'Angel'. 'Wanzi' said she also learned from 'Solbyb's answer. This also indicates that through their communication they also learned from one another, thus extending their knowledge.

7.3.2.5 Community interactions with this mobile group blog

The mobile group blog formed an online virtual community for these Chinese students, most of whom were previously unknown to one another. Within the group blog, each participant knew the explicit purpose of this study, and shared their experiences, encouraged people who encountered problems, answered questions and discussed phenomena observed.

In addition, while most participants shared their happy and interesting experiences in the group

blog, some also vented their frustrations. In the following example, 'Owen' expressed his great disappointment with the long waiting time and other troubles he had encountered with the Virgin broadband service.
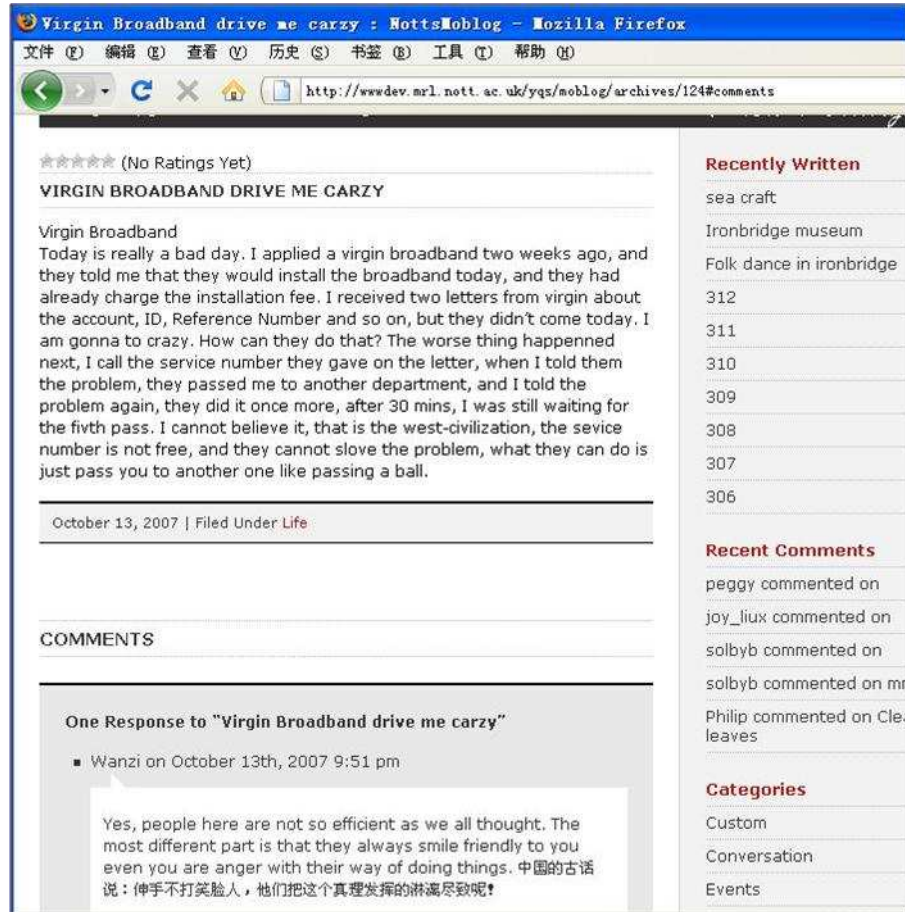
Figure 7.12 Example of negative impressions in life

'Wanzi' agreed with his opinion and gave her impression of British people and their behaviour. She even cited a Chinese proverb to support her comment. From this example, we can see these participants did not always report positive transition experiences. They dared to express their innermost thoughts and unhappiness. Unlike the always-positive descriptions on some institutional websites, in this group blog people felt able to express their true negative thoughts and opinions. The informal community gave participants a casual and relatively free way for honest expressions.

In addition, they not only discussed British culture, events that had occurred, and new and stimulating things they had found, but also shared in the mobile group blog the sadness, agony, difficulties and troubles encountered in their everyday life.

The following example shown in Figure 7.13 gives responses to a blog entry previously posted

by 'Eva' who had lost her uncle, who was dear to her, suddenly in the second week of her arrival in Nottingham. Her blog conveys how she felt heart-broken about her uncle's death, and how - touched by the sadness of being away - she felt the distance, isolation and fragility of human beings, .

Figure 7.13 Example of discussion through comments

Three other people in this group, although strangers to her, consoled and encouraged her. The blogger's own comments show that she gained some strength from their words. In a sense the responses from other members of the group blog helped her to release some of her stress. The example also indicates the positive psychological effects on individuals that can be gained from social interaction in the mobile group blog community.

7.4 FINDINGS FROM INTERVIEWS AND FOCUS GROUPS

The following general questions were given to all bloggers in interviews and focus groups:

- Did they like the experience?
- What did they get from the group blog?
- How did they conquer the technical problems?
- How often did they review the group blog site?

Specific questions were tailored to certain individuals in response to their moblogging behavior and activities:

- Why did he/she stop blogging for some days?
- Why did he/she submit only a few blog entries?
- Why did he/she often submit blog entries in batches?
- Why did he/she stop blogging from mobile phones?

Combined with the findings from log files and the content analyses in previous sections, a summary of results was made from three aspects: the implementation of technology, the community issues and the contents of learning.

7.4.1 The utilization of the mobile group blog

All participants in this study attempted mobile blogging. Ten of them said they would like to continue mobile group blogging, if the technology was improved and the cost lowered.

7.4.1.1 Motivation for mobile group blogging

According to the information shown in Figure 7.2 and also obtained during later interviews with them, 'Elsa' and 'Piscescancer' preferred writing textual blogs as they believed that texts can better express deep inner thoughts. 'Elsa' reported several failures on login to the system in the first trials which explained why she started mobile blogging very late. The frustration she experienced could help to explain her unwillingness to use the mobile group blog. Half of the participants did moblogging only, indicating that they had readily accepted this method. They reported on their motivation for mobile group blogging:

a) Sharing experiences
Participants claimed they could gain from other people's experiences and would deploy this knowledge in their own life if they were in a similar situation. They shared opinions and found some points in common with people from the same ethnic backgrounds. Most participants reported that they enjoyed the experience of using mobile blogging to share their own experiences and stories of cultural transition.

b) Expecting comments
People hoped for positive feedback from their blog readers as this would encourage them to blog further, while negative comments would make them feel frustrated.

c) Keeping inspiration and passion

Two of the participants pointed out that the outstanding advantage of mobile blogging, compared with using a digital camera, is that, by submitting information immediately, the moblog can capture and keep their inspiration and passion instantly, and enable them to feel confident about posting facts. Otherwise they might later feel ridiculous or ashamed.

7.4.1.2 Time and place of moblogging

Compared to the traditional blog, the mobile blog freed people from locations and time. All participants in this study were newcomers to mobile blogging. They posted most blogs in the afternoon or in the evening and night. Figures 7.4 and 7.5 indicate that some still preferred to do blogging in the evening. This does suggest that people stayed indoors to do their moblogs; seven of them (see Figure 7.4) even submitted blog entries in bulk, which indicates they were still in the habit of writing blogs as a diary, making a short summary at the end of one day's activities. In this study, only one-third of the participants tried mobile blogging outdoors, the reasons for this being:

- they needed time to check photos taken

- they could not blog while walking

- they could not remember their username and password for access

All participants claimed they often did moblogging in their dorm in the evening after classes. Although photos could be taken at any time, texts required time to type. They reported they also did moblogging on trains and buses, in the park, cafe and some public places. Participants submitted blogs only when they had enough time either strolling or sitting down. They did moblogging during their leisure time out of class.

7.4.1.3 Image recording

All participants believed that the mobile phone was unsuitable for taking professional photographs. Two of them stated the quality of pictures taken by mobile phones were not as good as they had anticipated, although the others stated that they could accept the quality of pictures if they were only for recording events. 'Eva' was dissatisfied with the quality of photos taken with embedded camera mobile phones. Several times she took pictures with her own digital camera, copied them to the mobile phone through the cable, and then submitted them to the group blog site from the mobile phone.

Another significant phenomenon was fewer and fewer texts in the moblog entries in the later weeks. In the end, some mobile blogs only had an image and title. Some participants said they uploaded images through mobile phones and later added words from a desktop/laptop. They explained that it was difficult to input a lot of text with the mobile phone keyboard. Furthermore, 'Solbyb' mentioned that the new generation of users is an 'image' generation who prefer 'reading' images to texts.

7.4.1.4 The cost of mobile blogging

Each participant expressed concern about the cost of a mobile Internet connection. 'Piscescancer', who preferred traditional blogging, said she used mobile Internet quite often in China but found it was too expensive, a view shared by other participants. High costs could prevent mobile blogging being widely used.

7.4.1.5 Setbacks for technical or other reasons

From Figure 7.4, we can see that 'Elsa', the latest starter, continued with moblogging for only two days. Later in the interview, she explained that she had encountered a technical problem with her username and password due to unfamiliarity with moblogging. However, she was not especially interested in the new technology. 'Elsa' also reported frustration due to critical comment on her blog.

Another limitation came from the mobile phones used in this study, which could not support reading and inputting Chinese characters.

7.4.2 Cultural transition within the mobile group blog

These students not only shared their experiences of cultural transition on the group blog, they also felt that their cross-cultural awareness had been increased through this study.

7.4.2.1 Cross-cultural awareness

"The purpose of this group blog always reminds me of the awareness about the cultural contexts I am in. Sometimes I neglect something in the context but some other people noticed them in similar context and put them on the group blog. Thus I realized the cultural difference there. They may have better observational skills, which make them more sensitive to the *environment. This is useful."* (Phillip)

This comment indicates that the study spontaneously encouraged people to enhance their

cultural awareness. 'Solbyb' is the only person who wrote in English from beginning to the end. This could be related to her background in studying English literature in her undergraduate course in China. She reported that she always noticed the cultural differences by comparing her own experiences and her previous knowledge. Four other participants, 'Zack', 'Eva', 'Angel' and 'Wanzi' said this study encouraged them to notice cultural differences and their transition, especially when they raised questions in their blogs and received answers.

7.4.2.2 Useful information in the mobile group blog

Eleven of these participants reported they received useful information from what they shared on the blog, especially those problems encountered by the blog author. They found the information on the group blog expanded their experience and knowledge. All of them except 'Owen' held positive opinions on the contents of the group blog. 'Owen', the least active blogger in this group, considered most blogs were issues too subtle, small or trifling.

7.4.2.3 Underlying shift from Chinese to English

A further phenomenon (see Figures 7.9 and 7.10) in the group blog was the unconscious shift in language use from mother tongue to English. We can see that several English words were woven into those Chinese sentences. In the first week, many blog entries were written in Chinese, but gradually we saw some English and Chinese mixed sentences by the end of the first week. Later, when more moblog entries were found, fewer and fewer blogs were written in Chinese. From the beginning of the third week, English texts completely replaced Chinese texts, even for those who wrote traditional blogs using desktops/laptops.

In interviews and focus groups participants indicated that they had not been aware of this shift in language use. Two of them explained that they had started to adapt to life in Nottingham, as stated in the following example:

"Perhaps because now we have to write coursework in English. And everyday we have lectures in English, talking in English. We are gradually getting used to speaking, reading and listening to English. Then unconsciously, we s*tart writing blogs in English"* (Wanzi)

This could be considered as further evidence of cultural adaptation. It can be assumed that speaking and writing more in English promoted their adjustment to new situations. Language improvement is one proof of successful transition.

7.4.3 The online community formed by this mobile group blog

The group blog provided a space online for these students to share and exchange their thoughts and experiences. These participants formed an online virtual community by being part of it, engaging in the blogging, reading and commenting activities on the group blog.

7.4.3.1 Engagement in the group blog

From the information shown in Figures 7.1, 7.2 and 7.3, we can conclude that there were different levels of engagement in this mobile group blog. 'Solbyb' was the most engaged participant, while 'Owen' appeared to be the least engaged. 'Kin', 'Angel' and 'Wanzi' were relatively active in blogging and posting comments. Although they did not send blogs everyday or regularly, most of those taking part continued to blog and review the website during the 4-week period of the study. Most people stated that they were too busy to do moblogging every day. Some would send several blog entries in a batch in one day when he/she was at leisure.

All participants read blogs more often than posting them, and all read the blogs from desktops/laptops. Three stated they reviewed the mobile group blog site everyday, and two of them set the link to the blog site as Favourites.

Participants had different levels of activities in this study. Active mobloggers were reported having more enthusiasm with new technology. And particularly the most active moblogger was the only person who didn't have her own mobile phone during that period and took the loaned mobile phone everyday with her. Therefore one possible implication is that bloggers could be more active in moblogging with their own mobile phones. Also their sensitivity to the cultural issues had an impact on their engagement. The most active moblogger, 'Solbyb' was found having more previous knowledge about British culture from her courses.

7.4.3.2 Audience consideration

Bloggers in this group explicitly considered their audience. Compared with their own blog, eleven out of twelve participants stated the content in their personal blog differed from that in the group blog. As with the group of people in the first study (described in Chapter 5), these participants claimed they felt freer to describe their personal lives to their own friends in personal blogs. Considerations about their audiences affected their selections on what to post

to the mobile group blog. Further, when their mobile phones were checked, it was found that generally these participants stored four times more pictures than those posted to the mobile group blog site. They reported concern about privacy and security issues in the mobile group blog. This echo the results of the group blog study (see Chapter 5, section 5.2.5.3).

7.4.3.3 Collaboration on the move

Furthermore, they believed that the mobile blog, bringing a new freedom of instant publication, blazed a trail for more flexible communication at any time anywhere. Two participants mentioned that they went out together. They exchanged their photos through the 'blue tooth' of their mobile phones, and reviewed those photos together helping each other to decide what to submit. They gave each other advice when encountering problems in using that mobile phone, and also shared skills on how to use the phone to take better photos.

7.4.3.4 The learning community

Authors and readers carried out online discussions through comments. Most bloggers said they would often check their blog comments after posting. Feedback from others sometimes encouraged authors to write more blogs.

As a result of the significant contributions by 'Solbyb' to the blog, nine other participants were eager to know and befriend her. It indicates a "visibility" that participating in this kind of moblog be to the benefit of the conspicuous individuals in terms of developing friendship networks in a new place.

Two of them thought she might have been in the UK for a longer time because she always could answer their questions raised in the group blog. This indicates that they also anticipated getting to know people who could offer them help.

Beyond online discussion in this virtual community, participants said they also discussed blog contents in real life. Three participants who studied law stated they only realised their classmates were also taking part in this study when they happened to talk about the study, two weeks after the study started. This shows that communication occurred not only online but also in the offline world. This could be evidence that the group blog bridges virtual and physical worlds.

7.4.3.5 Potential psychological aids

Participants could not only gain knowledge from reading blogs from others, but also built up

confidence and the feeling of being in a community. The mutual comments in discussions also benefited students in learning collaboratively or solving their emotional problems. The blog was considered a method of reducing feelings of isolation and loneliness.

All participants except 'Solbyb' and 'Wanzi' reported their sense of isolation and uncertainty after they came to the UK. They all reported that through this group blog, they felt closer to familiar people because they were from similar backgrounds and always had similar opinions about their experiences. Further, discussions on the group blog site also helped them to release their agony, anxiety and confusion. They developed a greater desire to know and learn about cultural differences and made more effort to obtain answers from local people. This reduced their feelings of emptiness, loneliness, or loss, as some of them described.

7.4.3.6 Demands for out-group help

The students taking part in this study were very happy to share their experiences with other people with the same background (with Chinese cultural background). This resource at the moment was for in-group supports. Although they helped one another within the group, they found they could not get all their doubts explained and so they searched for more help outside their group. 80% of the participants sought to get more people involved, including both international and home students. The demand for out-group support was considered as the 'experts help' inquiring from local people who could answer their questions about local culture more correctly, precisely and promptly. Participants also suggested that they use the mobile group blog site to share multicultural understandings with other international students.

7.5 DISCUSSION

Participants in this study gave positive responses to the mobile group blog. This study has contributed explanations of questions raised at the beginning of this chapter:

(i)   Do students find the mobile group blog accessible, engaging and useful in their cultural transition?

Students found it quite useful to share and exchange knowledge through the mobile group blog. Both face-to-face interviews and in focus groups participants stated that they were motivated by being able to share experiences, expect

responses from readers and keep on-the-spot inspiration and passion..

(ii)　　How do students adapt to the new technology?

They were still used to traditional blogging from laptop or desktop indoors during their leisure time, and it took a few days to adapt to mobile blogging which was new to them. That more blog entries from mobile phones appeared in the later weeks revealed the transition from traditional to mobile blog in this study.

(iii)　Do students feel themselves part of the community?

Yes. They enjoyed being the members of this community and sharing of their experiences, commenting and collaborating on the blog.

(iv)　　What are the changes from group blogging to mobile group blogging?

The significant decrease in texts on the mobile group blog site revealed participants' demands for more convenient tools to express their thoughts for moblogging. Mobile group blogging was regarded as a tool to keep the real-time passions and inspirations for sharing.

(v)　　What methods could scaffold and guide learning in the mobile group blog in the everyday context?

The method used in this study by the researcher was playing the role of moderator, building up a step-to-step curriculum based on learners' improvement that is feasible and reasonable.

The results of this study support the idea that the mobile group blog forms an online community. Collaboration on the move, communication and interaction online through the mobile group blog and real life discussion all suggest that the mobile group blog could bridge the virtual and real worlds. Participants developed a strong awareness of being a member of the community, illustrated by their serious consideration of blog audience, and eagerness to know other people through their comments on the blog sites.

The overseas students in this study also admitted to be more sensitive to cultural issues than they had supposed. 'building', 'food', 'custom' and 'life (other)' presented the cultural issues that these participants were most concerned about. The study has also gone some way towards enhancing our understanding of informal self-help group in cultural transition. Their

engagement with the mobile group blog, their sharing of useful information and the psychological effects as a result of this study all demonstrate the positive aspects of this application in cultural transition. The underlying trend of language use revealed in this study, from Chinese to the weaving of Chinese with English, also indicated their transition from their native culture to the host culture.

These findings suggest ways in which the application of the mobile group blog could be developed and implemented:

- Given a cheaper cost for mobile Internet, form an online mobile community for people with similar cultural backgrounds to share experience and tackle problems encountered in everyday life

- Apply the mobile group blog in language learning, especially in second-language learning

- Apply the mobile group blog in enhancing people's interpersonal skills by reducing their isolation and encouraging them to engage in and contribute to a community to improve their communication skills.

A number of caveats need to be noted regarding the present study:

- The study was limited to a small sample of participants.

- Technological problems frustrated some participants; reading and inputting Chinese was an obstacle to reviewing via mobile phones.

- The duration of this study was short - participants suggested that mobile group blogging should continue.

7.6 CHAPTER SUMMARY

The empirical study of mobile group blogging in this chapter explored the six questions identified at the beginning of this chapter about its application in the real world. Participants found the mobile group blog was a suitable tool to support cultural transition with flexible access and substantial authentic materials contributed by overseas students themselves. The study presented the positive effects of using the mobile group blog in cultural transition despite of some technological constraints. Assessments of the application of the mobile group blog

system were conducted through face-to-face interviews and focus groups with bloggers. Results from these echoed the phenomena appearing in log files and the contents analyses. In order to explore the impact and potential of the generalization of the mobile group blog in another context, a further study following up the reflections and feedbacks to this mobile group blog site was also conducted in China; this will be discussed in the next chapter.

Chapter 8 Alternative study of reflections to the mobile group blog

8.1 INTRODUCTION

This chapter describes an alternative study which aimed to find out how the contents of the mobile group blog contributed by bloggers in Chapter 7 could benefit students in a different location. As this group blog was publicly viewable throughout the world, a number of Chinese students in China who intended to study abroad were recruited to be its readers. The contents of the blog were therefore explored as a compensatory pre-departure resource for these students. The study also investigated their views and attitudes on using this technology.

Section 8.2 describes the methods used in this empirical study. Section 8.2.1 formulates the research questions of this study. Section 8.3 gives the results of the study. Participants' feedback to the technology and contents is also described.

8.2 STUDY METHODS

Students were asked to review the contents of the group blog by accessing the web site from laptop or desktop. The researcher observed their behaviour and conducted follow-up interviews and focus groups in China.

8.2.1 Study design

This study aimed to identify how useful the contents of the group blog were for those prospective overseas students who are currently away from UK. It also intended to find out if people from the same cultural background but living in different cultural contexts have the same desires and curiosity to know the cultural differences between two countries. Several questions were formulated in this study:

- What did they expect to gain from the mobile group blog site?

- Did they understand all the contents?

- What attracted these people most after they had viewed the contents of the mobile group blog?

- What was their view of the mobile group blog technology?

8.2.2 Participants

All the participants were current students of Southwest University in China. Sixteen undergraduates were recruited as a result of a call from a lecturer at the end of her class and seven postgraduates were recruited from a board announcement. They volunteered to read through the blog site and gave their comments about the group blog. Thirteen participants were female and ten male. Ages ranged from 19 to 23. All these students had their own personal blogs. Their details are listed below.

Table 8.1 Profiles of participants

Participants	Gender	Program	UG/PG	Age
P1	F	Educational Technology	PG	22
P2	F	Educational Technology	PG	22
P3	F	Educational Technology	PG	21
P4	F	Educational Technology	PG	23
P5	M	Educational Technology	PG	23
P6	M	Educational Technology	PG	23
P7	M	Educational Technology	PG	23
P8	M	English literature	UG	19
P9	F	English literature	UG	20
P10	F	English literature	UG	19
P11	M	English literature	UG	20
P12	M	English literature	UG	20
P13	M	English literature	UG	19
P14	F	English literature	UG	21
P15	F	English literature	UG	19
P16	F	English literature	UG	20
P17	F	English literature	UG	19
P18	F	English literature	UG	20
P19	F	English literature	UG	21
P20	F	English literature	UG	19
P21	M	English literature	UG	19
P22	M	English literature	UG	20
P23	M	English literature	UG	20

8.2.3 Procedure

Participants were first given a brief introduction to this study. They were informed of the authors of the group blog and the moblogging process was outlined. They were given the link

to the mobile group blog site and instructed to read through the website. The researcher gave a brief description of the structure of the mobile group blog.

Two pre-reading focus groups (one comprising of eleven students, the other twelve) were conducted for 15 minutes before their reading. Participants were then divided into six groups and asked to view the group blog. In each group, three or four people viewed the blog site together. Each group spent about 30 minutes on the reviews, during which time their conversations were recorded by audio recorders. Next, three follow-up focus groups were conducted; eight people were in each of two groups and seven in one group. Each focus group lasted for 20 minutes. Suggestions and comments were collected during those conversations.

8.2.4 Problems encountered

Due to the infrastructure of the Southwest University and the capacity of the Internet in China, the reviews were hindered by a low-speed connection. Some participants complained about the frustration of this when they tried to open a new webpage.

8.2.5 Analysis

As the conversations and focus groups were conducted in Chinese, the recordings were transcribed and then translated. Transcriptions were then reviewed, categorized and analysed by the researcher.

Comments from participants in China reflected their opinions of the contents of the mobile group blog posted previously by the bloggers in Nottingham, as well as indicating their views on the mobile group blog technology. This feedback is described in the following section.

8.3 FINDINGS ABOUT CULTURAL TRANSITION

Participants of this study reported that they increased their knowledge of cultural issues from the mobile group blog. They recognised the culture shock that appeared in the comments. The mobile group blog was found to have the following positive results in assisting prospective Chinese overseas students to prepare for cultural transition.

8.3.1 Authentic and personal information

Participants found that the information on the mobile group blog site supplemented traditional supports for cultural transition. They had some doubts and fear of cultural shock and inappropriate behaviours, and predicted some difficulties; examples are listed below:

"We may have cultural conflicts. For example, I heard if we stayed with foreign people, they would ask you to have a shower after you played basketball and sweaty." (P21)

"Definitely we will encounter a lot of difficulties, for communication, shopping etc. There would be much more difficulties to get into a new community with a completely different cultural background. Even in China, it takes time to adapt to a new place. " (P5)

"I guess there could be some barriers for me to get into the local community, such as language, culture, aloneness, new situations and so on." (P4)

"What do they eat for three meals in one day? The food could be the most difficult adaptation for me. " (P7)

"What about the security there? Are they safe?" (P19)

Participants were eager to know the true personal lives of those overseas students.

8.3.1.1 Motivation to know more about local life

The extent of their previous knowledge about cultural transitions varied amongst these students. Although they gained knowledge from lectures, agencies, the Internet or friends, they felt that this institutional information was not enough.

"Here we attended some lectures specially for overseas studies. However most of them only introduce the ranking of universities and institutional information about courses. We know little about the true life of those overseas students. " (P2,)

"I would like to know people like us, coming from the same background. Would like to know their lives over there. What are they exactly doing there everyday? " (P13,)

"Studying abroad not only for professional knowledge study, it covers other parts of life. For example, to experience the local custom and culture, to broaden our views. " (P23)

These quotes reveal participants' intention and expectation of knowing about the 'true' life that overseas student have from different aspects. Below are some examples of their expectations:

Shopping: *"Where to buy what we need particularly?"*

Travel: *"How to get to the destination after arrival at the airport?" "What are the*

landscapes for travelling?"

Food: *"Where to buy Chinese food?" "What are the manners when you have British meals?" "What is the main food in their meals?"*

Life: *"Where do Chinese students often go after school?"*

Study: *"What are those current students'* real personal comments on courses and *programmes they are taking? Do they have to study and work hard all day as us?"*

Communication: *"How to make friends?"*

From these questions we notice that some questions were personal and based on real life. It is not easy for any organization or institute to supply this type of information officially and very specifically. And the mobile group blog could make it.

8.3.1.2 Previous knowledge compared and confirmed

Participants reported that some existing knowledge was confirmed while some new knowledge gained from this mobile group blog site. For example, they commented that they had previously heard about the good environment and facilities in the UK and were satisfied when they browsed the blog site.

"Beautiful environment, clean and tidy" (P14)

"Art in life. The status look so beautiful on the street" (P20)

"The nature looks less polluted than ours." (P16)

"We also have buildings of European styles, but not harmony with its environment." (P22)

"The train cart looks luxury. Better than ours. " (P19) (Ref. Figure 8.1)
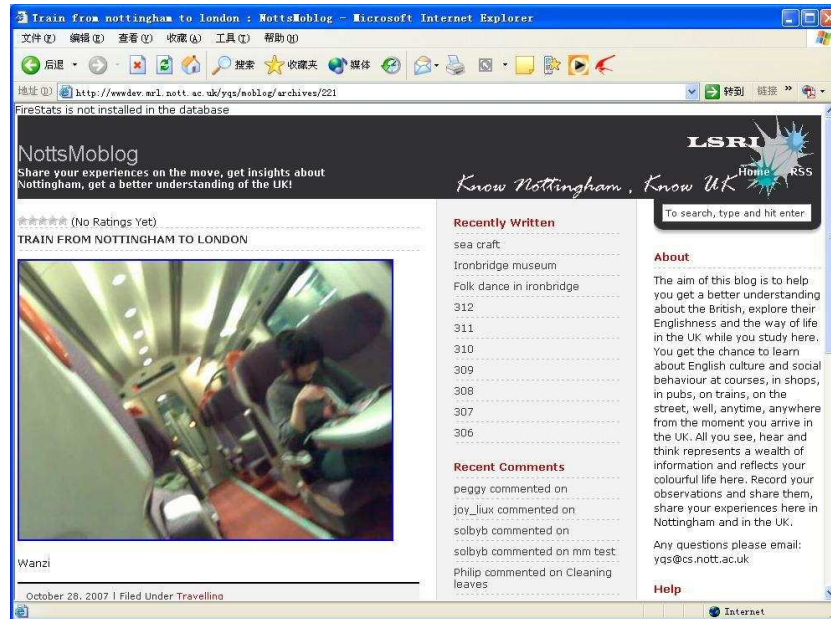
Figure 8.1 Blog entry about the train

For those who were concerned about their transition to UK food, they commented: *"The food looks not as good as ours. Their food looks much simpler than ours. "*(P15)

"The food is so different. Chinese dishes are exquisitely prepared, delicious. They are very good in color, flavor and taste." (P16)

Although they knew that food items were expensive they were still shocked by the prices they saw. Below is an example. (Ref. Figure 8.2)

"Xiaolongbao, 3 for 2.5 pounds? Is it true? "(P17)
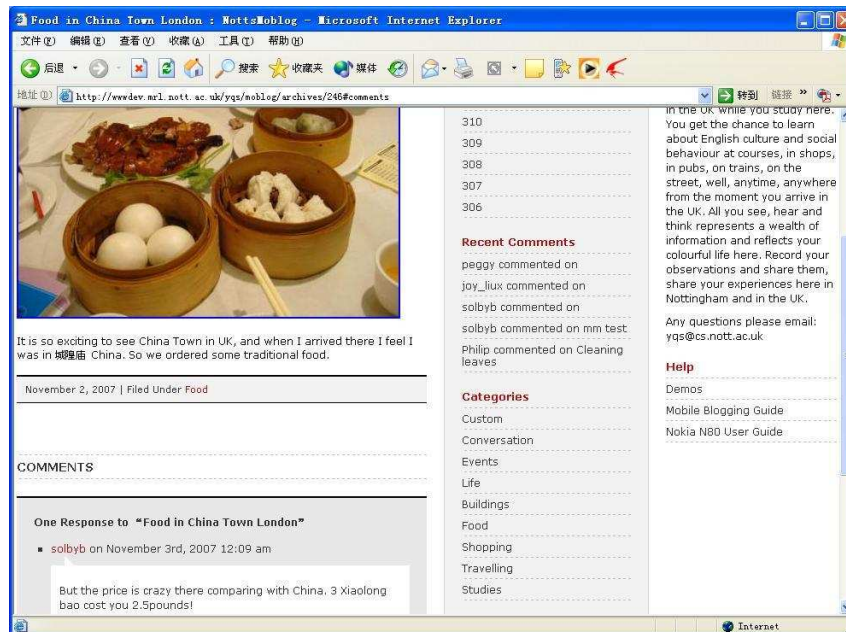
Figure 8.2 Blog entry of 'xiaolongbao'

More questions followed. For example, another participant asked further questions about expense:

"Things are so expensive there. Do they have bargains there? " (P3)

Their reviews revealed that participants compared what they read on the blog site with what they already knew.. They identified these blog entries as evidence of their previous knowledge.

8.3.1.3 New knowledge

Participants also found new and interesting information from the blog site, although they still compared this with what they were already familiar with in China: *"The coursework box looks interesting. The method of handing in coursework is special"* (P10)
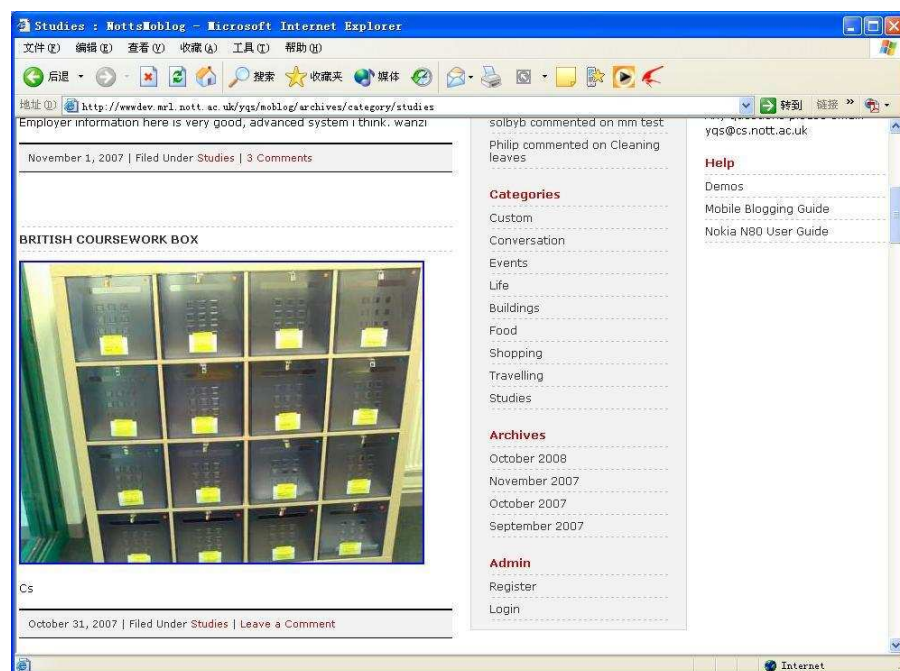
Figure 8.3 Blog entry of 'the coursework box'

In this example (Figure 8.3), these students were already aware of this new system of handing in coursework. The following comment indicates that the blogger had learnt new knowledge about Robin Hood but made comparisons with Chinese culture:

"The clothes he wears looks like the style of Spartacus. Robinhood, was he the similar role as our Liangshan trueman?" (P11)

"Robinhood. Looks so familiar, like similar to Chinese people in ancient time" (P7) (Ref. Figure 8.4)
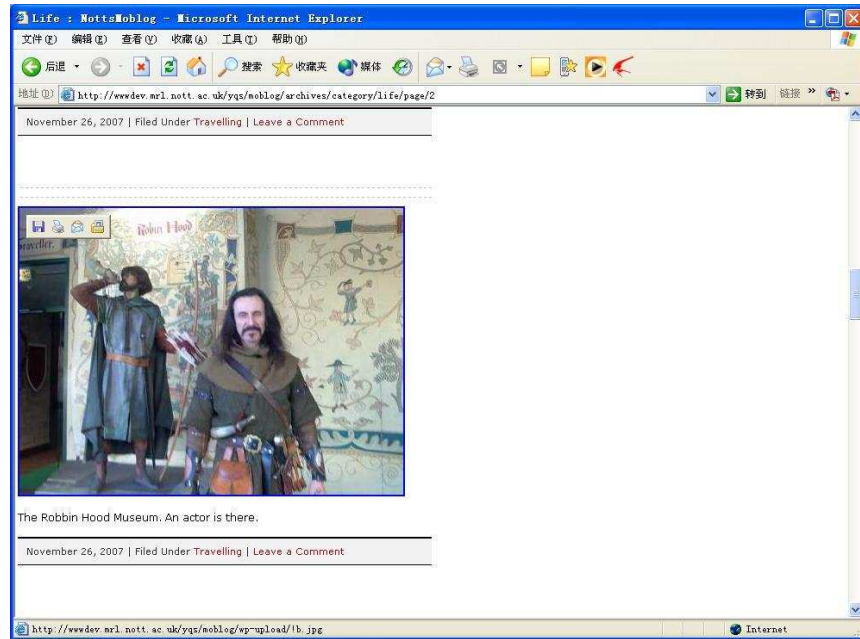
Figure 8.4 Blog entry of 'Robin Hood'

In the same way, they linked new knowledge with their previous knowledge:

"The Stonehenge, look like ancient China. " (P16)

"The ducks, oh, similar to those in my place." (P17, P10)

*"Cambridge , the cam bridge. Looks so common bu*t sounds so romantic only because of

Xuzhimo " (P7) (Ref. Figure 8.5)
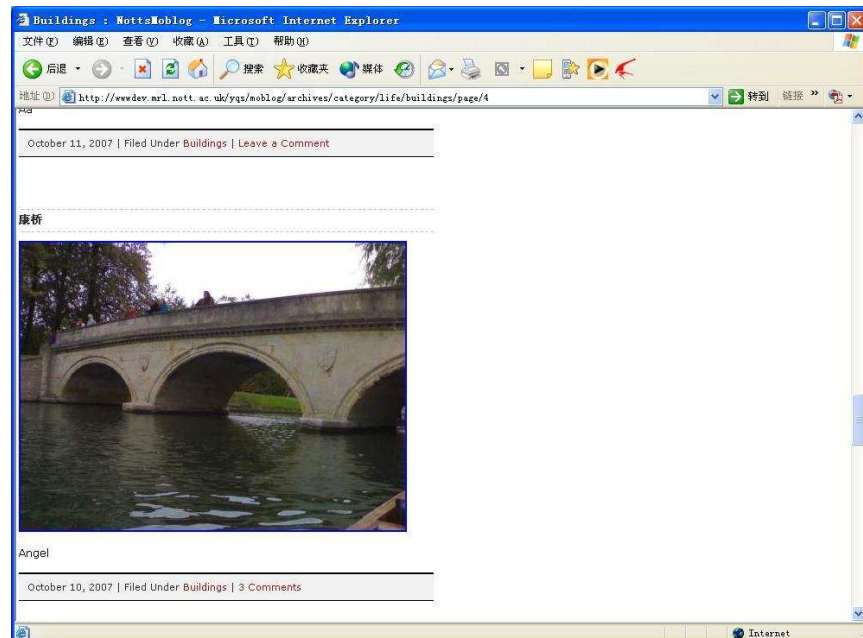
Figure 8.5 Blog entry of 'Cam bridge'

Furthermore, they raised new questions:

"Why are there so many Chinese goods? Is it a Chinese supermarket? Student union shop."

(P10)
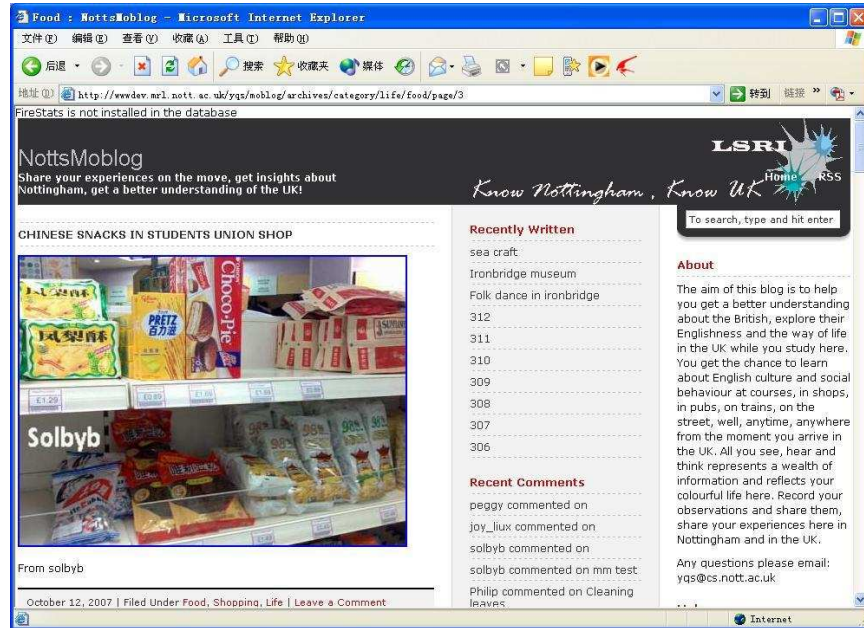
Figure 8.6 Blog entry of 'student union shop'

"Where do Chinese people often go after classes in their leisure time?" (P7)

They also raised questions about some blog sequences which depicted similar images:

"Why are there so few people in the railway station?" (P17) (Ref. Figure 8.7 and Figure 8.8)
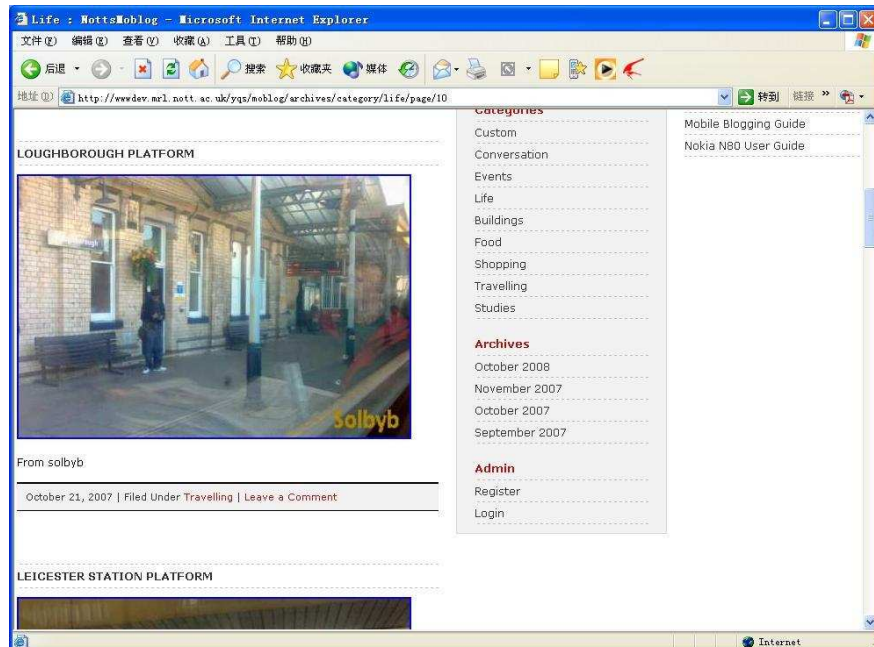
Figure 8.7 Blog entry of railway station 1
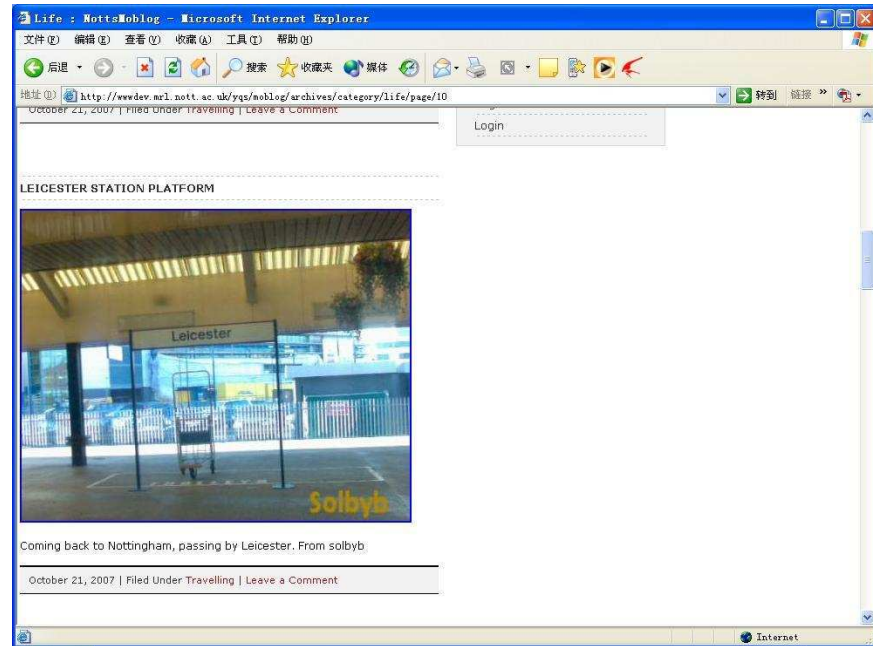
Figure 8.8 Blog entry of railway station 2

Another relevant question was raised: *"What are the differences between the city and* countryside in Britain. From these *pictures, we can't feel great differences."* When they got new knowledge, they also raised new questions. In this way, people have been well motivated to learning, searching fore help.

8.3.2 Resource for seeking help

These participants also discussed the mobile group blog as a resource for seeking help. Previously they had had several paths for support, the most important of these being the apprentices. Most people preferred to seek informal help rather than the support offered by their institution: *"I would look for help from people like senior apprentices. It's better* somebody I know is there and I can search help from him/her, for example friends or relatives. *"* (P7)

*"We used Internet to look for information about overseas students' life over there. An*d asked *for their experiences"* (P6)

They explained that the senior apprentices were students who already had experience of being overseas students, and particularly in the same university. That is, the bloggers of the mobile group blog were those people they would like to ask for help. This kind of help was regarded

substantial and real, covering more aspects of everyday life than that institutional guidance. Some students therefore wanted to join the mobile group blog during this study. They were not merely satisfied with being readers but also wished to be part of the blog community. They wanted to have direct communication with the bloggers even though they were strangers. *"Can we give comments?"* (P21) This potential prospective students' concerns show the possible generalization and value of developing the mobile group blog as a global learning community between the future visitors and current arrived students as well as a resource for all of them.

They claimed that this method of support, although similar to a forum, could be more efficient. *"This is similar to a forum for overseas study. But people in a 'forum' don't update the contents as frequently as blogs."* (P5)

This also indicates that these readers spontaneously considered themselves as the members of the community and were willing to join it. This feeling of belonging encouraged them to engage in the community activities through making their own comments and interacting with the bloggers.

8.3.3 Language efficacy

Language is also a barrier for some participants in understanding the contents of the blog site, which is a very important factor in cultural transitions. Some participants complained about their difficulties in understanding English.

"I am not good at English thus I can't understand some sentences, especially some places they mentioned in the blog. Really don't know what they are talking about. Could you force them to write in Chinese?" (P7)

In order to introduce these prospective students to the British culture while still in their own country, their mother tongue could be the first choice to develop their understanding because of their low proficiency in the English language. That means the pre-departure information could be more accessible if it is written in their own language.

On the other hand, the phenomenon also indicates that the bloggers in the previous study (Chapter 7) were much more confident to talk and write in English than these people who were still in China. This could be another evidence of effective cultural transition.

8.3.4 Confusions and doubts

Participants expressed confusion and doubts over some blog entries. These came from several aspects:

8.3.4.1 Risks of distortion due to insufficient and unclear expressions in the blog entry

Some of the blog entries were depicted as photo-only blogs, with a title and a photo, and no accompanying text This gave rise to misunderstandings, as shown in the following examples:

"What is O2? Does the shop sell oxygen? " (P1)
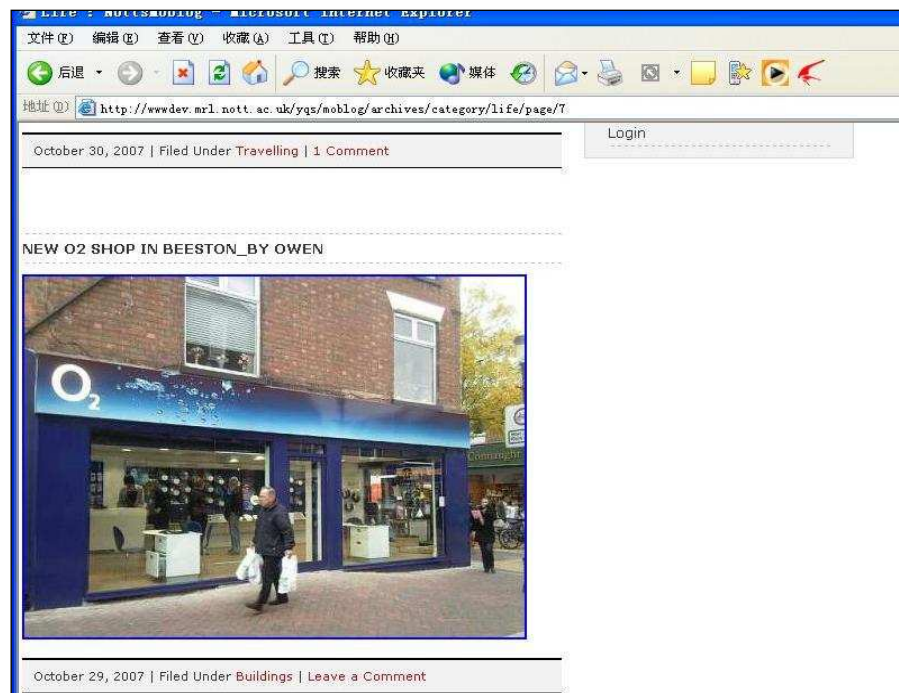
Figure 8.9 Blog entry of the 'O2 shop'

Most people in the UK recognise O2 as a telecom company while not everyone in China know this. The blogger 'Owen' in this example did not give any explanation for his photo. This suggests that photo-only blogs can fail to express the blogger's meaning, so more explanation is needed.

The following comment is a further example of misunderstanding:

"What is this man doing? Selling goods? " (Halloween celebration)
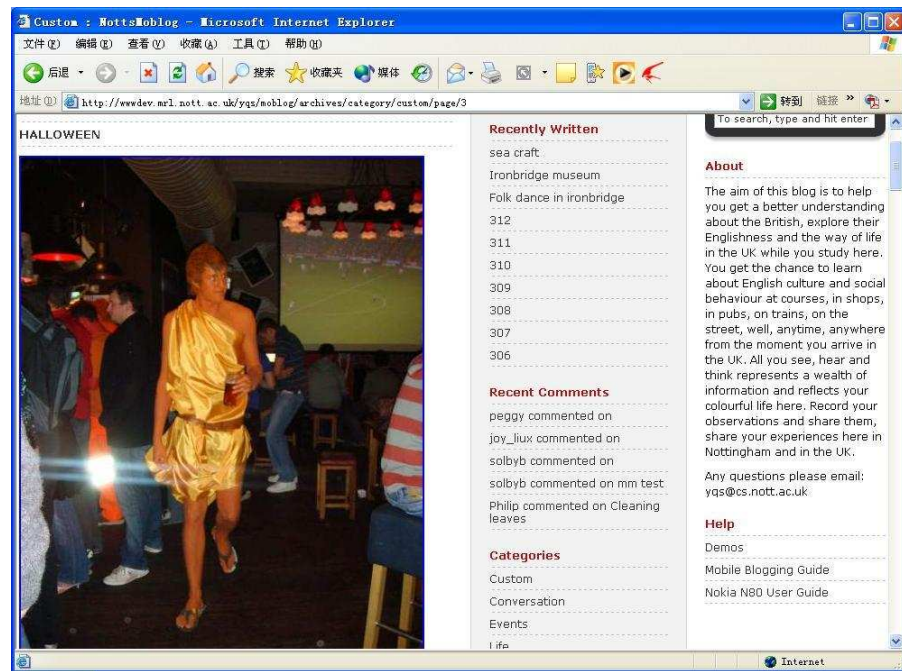
Figure 8.10 Blog entry of 'Halloween celebration'

Again, the blogger confused their readers. Participants in the previous study had no difficulties in understanding it, all recognising that this person is a man in fancy dress celebrating Halloween. Indeed they regarded this blog entry as one of the most impressive blogs posted. However, the participants in China could not understand it correctly. They regarded the person as a salesman, thus distorting the blogger's original intention..

These two cases illustrate that the participants may have misunderstood other people's meaning because they were not in the same cultural context and information is incomplete. There is therefore a great risk of failure in understanding for the transformation of cross-context information..

8.3.4.2 Interferences in understanding due to missing information about location contexts

There were also questions like "Who is Robinhood", "What does Beeston mean" and "What is Bath? " whenever readers encountered something new. Some of these questions could be eliminated once they had read more blog entries, but some remained unanswered to the end of the blog reviews. However for possible solutions to deal with those doubts, they could post questions to the blog site by commenting for explanatory conversation that bloggers could give answers.

The appearance of these questions again reflected that lack of contextual information

hampered full understanding. This might explain these comments made by a participant:

"This mobile group blog site might suit for current overseas Chinese students who now are in *the UK mostly. It's not suit for us particularly. "* (P7)

8.3.4.3 Information not provided

Comments made by participants after reading the blogs revealed that they were not very satisfied with some content of those blog entries – it did not meet their expectations nor did it give enough detailed information: *"Those things were not as what I expected to see. Too little information about study"* (P5)

"Those contents were too plain, not splendid enough. So little number of bloggers, there should be *more people submitting blog entries"* (P21)

"A few more texts are anticipated for more detailed introduction about the blog entry." (P17)

As there were few pictures depicting people, they would have liked to have learnt more about the bloggers' own activities.

"I would like to see more personal views about the life there" (P7)

"Too few blogs about people themselves, a lot of pictures about the environment. I would like to see more human culture, not just nature" (P1)

Comments such as *"I would like to know* the real conversational examples between the *teacher and the students"* and *"More shots about the blogger themselves, for example, reading, doing coursework, sleeping, practise etc"* represented their curiosity and desires to know more about the true life of those bloggers.

Their comments revealed that these participants were eager to know more about the genuine experiences of the current overseas students,. Their demands, too, for cultural information showed their great interest in learning about British culture. They were also curious about communication with local people - information about this on the mobile group blog seemed to be thin.

"What should we do to avoid misunderstanding and prejudice? What is the decent way of behaviours?" "How to behave correctly and how secure the place is?"

In summary, these participants put great premium on communication with local people as well as communication with expatriates. At the same time, these feedback to the 'bloggers' suggests new guidelines for scaffolding in future empirical studies.

8.4 FEEDBACK ON THE MOBILE GROUP BLOG

The structure of the mobile group blog site was considered inadequate for seeking information. Feedback collected as a result of continuous iterative develop-and-test cycles will be essential as guidelines for modifying and refining the design of the software system. Three main improvements to the mobile group blog were recommended:

8.4.1 Improve the structure of the mobile group blog

Although generally satisfied with the structure and with the category settings in the mobile group blog, participants suggested the blog should be more "well-organized".

8.4.2 Improve the management of the mobile group blog

They also recommended stricter regulations for administration to avoid disorders, since they had found some bloggers did not enter their blogs under appropriate categories:

"The categories covered most aspects we want to know. But the contents are still not enough. For us, those contents should be filtered, well organized and perhaps re-categorized in more *details. "*

"The contents of these blogs should be filtered and managed. Omit that information without any meanings."

As both the structure and the management of the blog system aim to provide readers with a method of seeking information. It would benefit them by making the present structure clearer.

8.4.3 New features could be added

Drawing from their experiences of using other technologies for seeking information about cultural transition, participants recommended the following:

"Need a special area on the website for mutual communication like asking and answering questions"

"Can design an interface for desktop/laptop users and another interface for mobile users separately"

"You may integrate some features of a 'forum'. But people in a 'forum' don't update the

contents as frequently as blogs. You can set new area like 'making friends', 'discussions' of specific topics. *"*

Their comments about adding new features to the mobile group blog reflect their desires to communicate with the bloggers. They emphasized the importance of this interaction with the blogger, which also indicate their strong awareness of being part of the blog community.

8.4.4 More participants are required

In addition to suggesting improvements to the features, they also suggested there should be more participants, especially the original bloggers whose continued engagement and contributions were in great demand:

"You do need more people to take part in"

"To enhance participants' engagement, you can highlight those good blogs by putting them to the top."

"Its better if we can join the group blog and have direct interactions with people who are now there. In this way we can have more doubts clarified and problems solved. "

"Set up a big community and ask more people to join in, for more discussions"

Their desire to form an online community is surprisingly well matched to the aims of this research into how the mobile group blog can aid cultural transition. It can therefore be assumed that the investigation should focus more on this aspect.

8.5 SUMMARY AND DISCUSSION

The study has two significant achievements. It collected the readers' comments and suggestions about the design of the mobile group blog and it investigated how useful the contents of the mobile group blog were for these prospective overseas students. Feedback includes:

- The category of the design is proper and useful

- Pictures are necessary and important

- The contents of the group blog should be filtered and better-organized to facilitate search, by, for instance, improving the sub-categories

- The administrator of the blog site should discard information which is of little or no use and re-organize information classified as faulty.

- A "questions and answers" section should be added for discussions, bringing bloggers and readers together for specific topics or for making friends

These participants started cultural transition, when they compared what they saw in the mobile group blog with their previous knowledge or their expectations. They sought more authentic and personal information from the current overseas students. They benefited both from reinforcing previous knowledge and acquiring new knowledge from the real experiences of those bloggers. They felt that the mobile group blog was another channel for support, although they suggested some improvements. For instance, to avoid confusion and doubt, they recommended that bloggers post more information to the mobile group blog. They were enthusiastic to join the blog community. Although they commented that the current blog content was more useful for people already living in the host country, they felt a need to interact with bloggers, which indicated the setting up of an international community.

The study itself revealed not much success of socializing the contexts for this group of Chinese students through this mobile group blog site. An implication of this is the possibility that they had no communication with those bloggers in the previous study. Thus they couldn't have their questions answered and discussed. Further research might need to explore the ways of enhancing the mutual communication among these kinds of groups across the context.

8.6 CHAPTER SUMMARY

In this chapter, a study was conducted within a group of prospective overseas students who were currently in their home country, China. They were asked to review the contents of the moblog that the group of overseas Chinese students used in the previous study. Their feedback indicated potential in applying the mobile group blog to aid cultural transition. Limitations of blog content were illustrated but improvements were also suggested to build up a mutually interactive community, connecting the bloggers who were geographically isolated in the host country to readers in another country, in order, for example, to remove their doubts and questions. The outstanding advantage of the mobile group blog was the authentic evidence

collected by overseas students. The students in China did not experience the advantages of mobile technology, as their reviewing was asynchronous. The conclusions of this study will be further discussed in the next chapter, combining with three other studies in this research and leading to future work.

Chapter 9 – Conclusions and Future work

9.1 OVERVIEW

This chapter brings together the key themes, processes and outcomes of this exploratory research. By reflecting on the four studies, the design process and the analysis of the empirical data, the chapter considers how each of these constituents contributed to the overall aims and achievements of the research. The discussion also includes limitations and challenges of future development and indicates possible future work and factors to be considered for improvements.

9.2 SUMMARY OF KEY OUTCOMES OF THE RESEARCH

This thesis explored how the users of mobile group blog could apply it in their cultural transition, a theme previously neglected as a form of learning. Four studies in this research also explored the possibilities of building up a global mobile community for mobile learners to learn within the context, communicating through mobile technology whenever and wherever they located knowledge, reflecting and discussing with others. Two of these studies conducted needs assessments: Study 1 (audio diary) and Study 2 (the group blog study); Study 3 was an empirical study of mobile group blogging; and the fourth study was a mobile group blog content assessment.

9.2.1 Conclusion of audio diary study

The audio diary study in Chapter 4 investigated the needs of a supportive resource for cultural transition. In this study, participants used cheap and easy-to-use MP3 recorders to record their individual experiences, thoughts and feelings. Participants did not report any technical usability problems.

The audio files recorded their personal comparisons and awareness of the host culture and their own culture in everyday life. All participants except three spoke in Chinese - the English diaries from these three participants were not as long, detailed or as emotionally deep as those

written in Chinese. Participants did not share their diary files with others, instead only recording what they saw and heard when they could not get support from others. This indicates there was no interaction mediated by technology in this study. Participants did not benefit from one another by knowing about other people's experiences.

The study also reported the variety of culture shock these Chinese overseas students encountered. They addressed the confusions, surprises and uncertainties accompanied with their cultural transition and their demands of recording experiences for sharing, although there is a warning that most of them tended not to record them verbally on the move.

9.2.2 Conclusion of group blog study

No technical problems were reported in this study by the participants when using digital camera for blogging in texts and images, although one usability issue that arose is that Chinese is not applicable in the group blogging. Participants found it a challenge to start blogging in English from the very beginning. Their preferences to make comments to acquaintances, which also indicated that some people regarded that there was little difference between their personal blogs and the group blog.

Participants also captured information in everyday life with their general and personal comparisons of the Chinese and British cultures. They generated and contributed their collections to the group blog site for sharing. They extended their knowledge from reading the blogs and mutual commentaries. The self-reflection and group reflection when reviewing blog content assisted the participants in gaining authentic and contextual information of their overseas lives.

The study also found differences in content between personal blog and the group blog site. Participants felt themselves part of the community, a sense of belonging with people who came from the same cultural background. They also considered their audience seriously, taking care to filter their information to the group blog site. The community formed by the group blog helped participants to release stressful feelings such as loneliness and isolation. No participants dropped out during the study period and the contents on the group blog site could be accessible anytime and anywhere for either short-term or long-term review. The sustainability and

accessibility of the group blog enabled context transition and socialization, transferring knowledge from one context to another in the long term. The study found people tended to be closer to acquaintances in real life, which leads to another issue of design in the next study: people's behaviour when they were all strangers to each other.

9.2.3 Conclusion of practical mobile group blog and its evaluation study

In this study, the researcher recruited participants who were strangers, except for two. Participants in this study reported minor technical problems in logging in and in being unable to return to the blog main page on the mobile device. They had no difficulty in using the loaned Internet-enabled mobile phone with which they collected on-the-spot information, and some participants shared this information immediately by mobile blogging to the group blog site. Results of the study showed that participants spent about one week to become accustomed to mobile blogging. In the study period, no participants dropped out. It was also found that some participants also carried out mobile blogging collaboratively as they discussed what to submit before posting. These participants did not do mobile blogging regularly. Most still submitted blog entries indoors and two of them preferred the traditional way of blogging from the desktop/laptop. All participants, however, showed interest in continuing to carry out mobile blogging, indicating it would take some time for participants to accept and get used to this. As in the group blog study (Chapter 5) participants also contributed their collections to the mobile group blog site in the form of texts and images.

Participants did more intentional blogging than those in the previous two studies. The results also showed that on average participants in the group blog study (Chapter 5) had 1.6 blogs, 5.29 hits to the blog site and 1.5 comments; participants in the mobile group blog study (Chapter 7) had 4.5 blogs, 23.45 hits and 2.27 comments each week. We can see a considerable increase in the number of actions in the mobile group blog compared to the group blog. This indicates that the mobile bloggers were more active in contributing and retrieving. They were guided to blogging with the purpose of helping one another in their cultural transition. There were two noticeable trends in the study: participants showed a natural transition from blogging in Chinese to blogging in English; there was also a decrease in using texts in their blog entries. The first trend indicated that their capability and confidence in using the English language

improved during the study period, also suggesting successful cultural transition. The second trend implied that text was not the most suitable form of representation for mobile blogging.

The mobile group blog was "structured" and monitored by the researcher, guiding participants to contribute to the blog under the theme of cultural transition. Participants in this group had a stronger awareness of being members of a community. Although they were strangers to one another, they also made frequent comments and looked forward to making friends through the mobile group blog. They also showed a desire to involve more students from other countries and local students.

The study concerning the evaluators' assessment of the mobile group blog contents suggested that this blog could enhance the opportunities for transferring information across, and socializing, the contexts. However, this study in fact revealed that there was not obvious value in context socializing since participants in China were shown to have had difficulties in understanding some mobile group blog contents. It is possible that this result is due to a lack of experience in the same context and the asynchronous participations of two groups. The fourth study was conducted about half a year later than the third study It is even more likely that these participants from Study four completely had no communication with the previous group of mobile group bloggers. In spite of this, participants in Study four admitted contents on the group blog were useful and they anticipated interactions with the bloggers. This also indicates that the ideal model of learning through mobile group blogging should include learners in different contexts remotely and provide them with synchronous or asynchronous communication with the blog authors across the context, i.e., real context socializing. In this way, the context that bloggers are in can be better conveyed through the mobile group blog to the learners by their mutual communication in different contexts.

9.3 CONTRIBUTIONS MADE

The mobile group blog was proved to be an effective medium to enhance culture awareness and improve cultural transitions, as a result of learning in everyday life. The blogger generated authentic knowledge to share with all group members, and readers as well as bloggers gained benefit from the mobile group blog site. As a result of generating and sharing knowledge,

group members learnt and enhanced their cultural awareness.

9.3.1 Learn the culture and improve the awareness of culture

The following aspects illustrate how the mobile group blog promoted cultural awareness and assisted socialization:

9.3.1.1 Motivation and cultural awareness

In Studies 1 and 2, participants were not given specific topics for their recordings and bloggings. Instead, investigations gathered issues that most concerned by these overseas students. In Study 3 participants were asked to collect useful and interesting information with the purpose of information sharing and helping others. Participants commented that they were more alert to cultural transition issues after taking part in this study. In Study 4, these students in China were eager to know the true experiences of the current overseas students in the UK. We can conclude that these participants were becoming increasingly awareness of cultural issues and more motivated to be involved in sharing their experiences and opinions.

9.3.1.2 Authentic information as knowledge

Personal collections of authentic information and personal experiences can be regarded as their own knowledge or self-generated knowledge. In Study 1, this knowledge could only be reflected upon alone. In Studies 2 and 3, this knowledge was available for blog members to withdraw. The knowledge in Study 3 was delivered remotely to those participants in Study 4. In study 4 (section 8.3.1), participants also expressed their motivations to get more authentic and personal information in real life, the evidence of real cultural transition was represented by authentic knowledge generated by different individuals for others to view. Participants believed this evidence, as they came from the real personal lives, which were much more authentic and reliable than their institutional formal knowledge.

9.3.1.3 Encourage interactions

In Studies 2 and 3, communication among participants was found to encourage participants to be more active in blogging. The participants in Study 4 had a strong desire to communicate with bloggers in Study 3, suggesting that these students were interested in the authentic information as knowledge from other people in the real world. Readers were encouraged to communicate more with blog authors.

9.3.1.4 Language capability and confidence

From all these studies we found the Chinese overseas students had become more capable in English. At the beginning of their transition, they felt difficult to speak or blog in English. The phenomena described in Study 3 showed the process of transition from pure Chinese to English mixed with Chinese and then to English. Further, participants in the UK showed more confidence in expressing their thoughts in English while students in China were less confident and had difficulties even in reading. This indicated that their language capability could have also been improved by encouraging them to practise English in British cultural contexts, and achieving successful transition from one culture to another.

9.3.1.5 Reflection

When using the audio diary, the participants could only carry out self-reflection by replaying the audio files, while in Studies 2 and 3, bloggers could do this by reading their own blogs, and at the same time the readers could review all the blog entries. Study 4 was itself a group reflection undertaken remotely outside the bloggers community at some later time. The blog site was therefore sustainable both short-term and long-term, and for self and group reflections. This implies that blog entries on the group blog site can be informative and reflective for anyone for as long as the group blog exists – this could be synchronous or asynchronous.

9.3.1.6 Learning about culture in the process of mobile group blogging

Studies in this research found that cultural awareness was gradually enhanced through the process of participation in the group blogging. During the process of moblogging, different thinking skills were identified which corresponded to their different blogging activity. The following table explains this:

Table 9.1 Learning activities and thinking skills in the process of mobile group blogging for cultural transition

Learning activities	Thinking skills
Being aware	Inquiry skills
Information gathering	Information-processing skills
Information transfer	Reasoning skills
Information sharing	Collaboration skills
Feedbacks	Evaluation skills

The participants, as learners, tended to question in their search for new understanding of the country's people, laws, religion(s), customs and etiquette by exploring the social culture in the UK. They posed questions, defined problems and expressed their own understanding in searching for answers, solutions and how these relate to previous knowledge. Fundamentally, inquiry and exploration are about questioning and seeking answers to those questions.

Information gathering & information-processing skills

Information processing starts with the motivation to gain knowledge, with specific questions in mind to prompt inquiry. At this stage, learners started to develop information-processing skills in locating and collecting information, sorting and classifying it, and having it published. Information is collected either individually or collaboratively. Some participants in this research blogged in pairs, exchanging ideas whilst capturing information. They even exchanged their collections privately through bluetooth.

Information transferring & reasoning skills

The research revealed that some participants gave serious consideration to what should not be published in the group blog. They compared, contrasted and filtered the collections and made judgments based on authentic materials. It was also found that participants had taken almost twice as many photos than those they published to the blog site. Learners developed their reasoning skills in the process of information transferring.

Information sharing & collaboration skills

Participants felt that the online community provided by the mobile group blog reduced their sense of isolation and confusion about the cultural differences of individuals. Each individual was involved in collecting information and contributing to the community. They felt happy to share their experiences and were concerned for others . Peer advice was given on what to post, and there was discussion on the blog site about solving problems. Discussions sometimes arose from comments from several readers posted to blog entries, indicating that participants learnt adjustment to the new environment by collaborating with one another.

Feedbacks & Evaluation skills

Participants reviewed other people's blog entries and their own. They evaluated the contents of these blog entries, and gave their feedback. In so doing, they developed their evaluation skills and deepened their understanding through mutual evaluation.

Table 9.1 implies the development of high-order thinking skills through the mobile group blog. We can conclude that both bloggers and readers, i.e. the contributors and the consumers of the blog, learnt through the activities of the mobile group blogging. As knowledge accumulated on the blog site, and the number of participants to the mobile group blog increased, a learning community was gradually formed. These skills could be strengthened and enhanced through their spontaneous engagement in the mobile group blogging. In other words, the group blogging process develops thinking, mirroring natural learning in everyday contexts.

9.3.2 The mobile group blog forms a community

Results from the group blog study (Study 2) and the mobile group blog study (Study 3), and especially the structured blog, indicate that an ordered online community had been built for sharing information, as well as feelings and thoughts.

9.3.2.1 Being part of a community

In Studies 2 and 3, bloggers and readers formed an online community, sharing information and carrying out discussions. Results showed that participants in Study 4 also wanted to feel part of the mobile blog community. The sense of belonging to the online community provided by the group blog helped to reduce feelings of loneliness for participants in Studies 2 and 3. The positive psychological effects of the group blogging activities assisted in reducing cultural shock.

9.3.2.2 Sustainability

Audio files could be kept only for individual storage. Contents in the blog site could be kept for access by anyone, at anytime and anywhere once the blog site existed. It was therefore possible to visit and revisit the site both in the short and long terms.

9.3.2.3 Scaffolding

In Study 2, there was no pre-set structure for blogging and information search using the group blog, and participants felt this was not well organized. In Study 3, bloggers were guided by 'category' settings, which acted as scaffolding. Readers in both Study 3 and Study 4 could read blogs by selecting different categories, indicating that their readings were also navigated by the structure of the blog. This also implies that the role of a moderator or a guide in this kind of

community is important.

9.3.2.4 Needs for external (out-group) support

All participants showed a desire for problem solving. In Studies 2 and 3, they were supported in this by sharing problems and experiences in the group. In particular, the participants in Study 3 asked for out-of-group help from local people. In Study 4 participants asked for remote help from people who were in real contexts. The need for external support also suggests that the resource for in-group help provided by the group blog was inadequate, indicating the potential for expanding the group to include contributions from a wider community.

9.3.2.5 The accessibility of social context (socializing the context)

In Study 1, only those students currently in Nottingham were in the personal, local social context, while in Studies 2 and 3 participants used the group blog site as their in-group community, sharing specific contextual information as they recorded their experiences. This provided opportunities for people at different times or in different places to gain knowledge of specific social contexts. The remote group in China in Study 4 joined the community of Study 3 only as readers. It was a pity the two groups in Studies 3 and 4 had no interactions, since they were eager to communicate; provided with real-time communication through the mobile group blog between people as remote as these participants, the contextual information could be delivered immediately to people who are distant from the current context. This has significant practical implications for shedding light on socializing a context within a group of people, within a community, thereby ultimately distributing the social contexts. It also indicates the ultimate opportunities for learning within and across contexts.

9.3.3 Published works related to this research

At the time of submission, some research works have previously appeared (or are scheduled to appear) in publications, as presented in the following list. The full references for these publications are:

- Shao, Y. Motivating Learning through the community of Mobile Blog. CSCL Alpine Rendez-Vous. Switzerland: Trinity College Dublin Press (2007) 26-29.
- Crook, C., & Koleva, B.,andShao, Y., (2007). Designing a Mobile Group Blog to

Support Cultural Learning. Conference proceedings at the mLearn 2007, Melbourne.

- Crook, C., & Koleva, B. and Shao, Y., (2008) Assisting Learning of a New Culture with a Mobile Group Blog. Conference proceedings at ED-media 2008.

- Crook, C., & Koleva, B. Hartnell-Young, E. and Shao, Y., (2008) Cross-cultural Adjustment With the Support of Mobile Group Blogging for Student Sojourners, Conference proceedings at mLearn 2008.

- Crook, C. Deng, H., Rodden, Tand Shao, Y, (2009), Learning Cross the Border towards a Global Mobile Community: Context-based, Communicative and Collaborative, Conference proceedings at mLearn 2009 (In press)

The framework for the mobile group blog design in this thesis (Chapter 6, section 6.1) is highlighted in Shao (2007). A brief description of the design of the mobile group blog system (Chapter 6, section 6.3) is displayed in Crook, Koleva and Shao, (2007). The result of the empirical mobile group blogging study (Chapter 7. section 7.3) is discussed in Crook, Koleva and Shao (2008). The rationale of the mobile group blog enhancing learning skills (Chapter 9, section 9.3.1.6) and the matching with cultural transition (Chapter 3, section 3.3) were detailed and discussed in Crook and Koleva, Hartnell-Young and Shao, (2008). The key results of the mobile group blog study are highlighted in Crook, Deng, Shao and Rodden (2009).

9.4 SCOPE AND CHALLENGES

This research explored a new way of building a resource for supporting cultural transition for overseas students. However, a few challenges require attention.

9.4.1 Limitation of technology

The technology of mobile blogging was in its infancy when I conducted the studies, and sometimes impeded its application and the popularity of the mobile group blog. There were still many improvements to be made to the group blog, as well as to the applications on mobile devices.

Tiny screen syndrome

The small screen of the mobile phone hampers reading texts and browsing photos. The small

text size and the picture quality frustrated people and made their eyes feel tired. The layout for the latptop or desktop of the mobile group blog site was 'cut' by the new lay-out for mobile devices. Although the blog page was specifically designed for mobile devices, the main page and other webpages were more suitable for desktop/laptop web browsers than for reviewing with mobile browsers. Readers using mobile devices had to spend an inordinate amount of time awkwardly scrolling up and down as well as left and right. Anadaptive layout of the mobile group blog site is therefore recommended.

Input dilemma

Participants had great difficulties in typing on a miniature keyboard, using buttons for scrolling and selection, and for entering texts to the mobile phones. Elderly people may have even more difficulties than these young participants in this project.

Mobile device hardware

In this study participants were given high-tech Internet-enabled mobile phones for their mobloggingasnot all mobile phones have this feature. The general application of mobile blogging also relies on the owernerships of these high-tech mobile devices.

Connectivity

The bandwidth limitations for mobile Internet are issues to be considered. Downloading failure and lengthy waiting time is always frustrating . The network connectivity determines how widely the mobile technology could be accepted and be successful; the infrastructures in different locations affects the connection, as illustrated by the problems reported in Study 4. During our studies the mobile group blog server was running in the UK and the mobile Internet connection was satisfactory. However, participants who reviewed the blog site from China found it took a long time to open a new webpage. Future practitioners should consider the varied infrastructures in different countries, especially for the mobile network for cross-context mobile practice.

Costs

The expense of Internet connection from mobile phones is another frustration for mobile bloggers. Tariffs and airtime for mobile Internet were not yet affordable for these young

students even though the cost had been reduced. The situation is now improving, however, as mobile companies provide better services and lower costs.

Usability

Participants suggested that the system should personalize the mobile phone to keep their username and password once they logged in, to avoid having to enter these for each blog entry. Participants liked to review their blog immediately after submitting it, and they also required comments to be submitted from mobile phones so that they could communicate with people more freely.

9.4.2 Human factors involved in the mobile group blog

Most participants submitted their blog entries when they were back indoors. Only active mobloggers were aware of where they were when they made their submission as they blogged in real time, on-the-move. It can be concluded that the success of a mobile group blog depends not only on the quality of technology it provides, but also on how active the participants are.

Engagement

Most participants were well engaged in the mobile group blogging activities. At the same time, some participants still preferred the traditional method of blogging. To encourage all participants to be active, both methods of blogging should be allowed. Furthermore, due to the small number of participants in this study, the community requires more people to take part.

Continuity

Because of lack of time and funding, this research has taken only an initial step towards the application of the mobile group blog in the context of cultural transition. The small number of participants and limited amount of information generated could not reflect the overall situation of mobile blogging, and the scope of the application was limited. As participants suggested, more people should be involved in group blogging to provide a greater supply of frequently updated information, thus maintaining continuity.

Discipline in the group blog

In this small scale- blog, the researcher acted as administrator and moderator. Although no

disorders occurred, some unwitting mistakes were made by participants. If the group blog is more widely available, and more people join the community, then it would be increasingly difficult to maintain the system, and so complex guidance is needed and regulationsestablished. The role of moderator should be kept to impose discipline.

Establishing an adaptive curriculum

The learning process through mobile group blogging involves the retrieval and management of knowledge. In the informal learning environment, the learning purpose was explicit, but a learning curriculum was not set; it had yet to be established step by step during the whole study. In Study 3, the researcher played the role of administrator and moderator, answering questions arising from both technical and cultural issues;limited guidance was given to the participants, based on the researcher's own knowledge and experience. Participants wished they had more 'experts' to consult. As their level of cultural transition developed, senior learners could also act as consultants for junior learners, while curricula would be established for different levels of learners.

Possible gender differences

There could be another limitation arising from recruitment to the project. For all studies in this research, participants were recruited randomly and voluntarily. However, more females were interested in this project,sothe results may contain some gender bias. It was not possible to conduct more detailed investigation , so this could be a issue for future research.

From the overall review of the four studies in this research, the following issues have emerged for designing a wide-scale mobile group blog to support cultural transition. Pictures were most appropriate for capturing real-time events and context-based information. Text expressed people's internal thoughts and feelings more easily, but did not transfer quickly and directly from the mobile devices. Blogging either indoors or on move not only kept the original impactof texts but also enhanced the opportunities to obtain authentic information more instantly from the context. Specifically, the following challenges should be considered for future work:

1.   It is necessary to improve the structure of the blog. The category settings in the mobile

group blog study were valuable for both bloggers and readers, but structuring work such as adding 'tags' to each blog entry could give more guidance.

2. The purpose of a group blog should be more explicit. People may find it difficult to navigate without determined goals, and the contents would be disorderly and unsystematic.

3. People prefer textual blogs in traditional blogging, but Study 3 found that texts were not the best way to capture people's verbal expressions on the spot. They had difficulty in inputting texts using the small keyboard of mobile devices, and people may have less time to type when they are on the move.

4. The system of the mobile group blogging needs optimization. For example, providing 'what you post is what you see' after submitting the blog entry would bring a more direct view of their contribution.

5. The setback from technical problems may run the risk of frustrating bloggers. Mobile blogging therefore requires improved mobile broadband and mobile devices, a more efficient blogging system and lower costs.

9.5 FUTURE WORK

This research illustrates the importance as well as the difficulties of integrating mobile group blogging into learning scenarios for   day-to-day informal learning to support cultural transition. The results have been promising while the limitations and challenges exist.

Within this research the learners succeeded in utilising the flexibility and multimodality of mobile group blog in creating and negotiating knowledge other than receiving cognitive-orientated learning materials. To strengthen awareness and collaboration between students some features could be added. The results of these studies suggest several areas for improvements or new practices of new applications. A list is given below for future development and other applications.

9.5.1 Improvements in technology

The results identified demands to improve technology, which could be achieved by attending

to the following:

9.5.1.1 Audioware

The attention of mobile service providers has become increasingly concentrated on the application of visual and sound symbols; the screen, and in particular the small screen, has been identified as a promising domain of research by experts on visual languages (Nyíri, 2002).Posting short audio clips to the blog site, other than complicated text typing, could be recommended if a participant is struggling with inputting text. On the other hand, considering the larger memory space and the lower bandwidth now available,saving uploading and downloading time, the ideal solution could be short audio clips or the mobile client application of speech-to-text synthesizer.

9.5.1.2 Usability and privacy issues

Participants drew attention to the usability problems they experienced at login before submitting blogs. Auto-login features on the same mobile device was suggested, as well as "what you post is what you see" immediately after they post the photos and contents directly from their mobile phones. Adding a thumbnail list of all pictures ready to be submitted was suggested in order to save time in searching pictures. The instant data synchronization between the mobile application and the website server should be efficient and effective for the possible frequent change of contextual information. This is also related to the security issues of the system and privacy strategy for mobile users.

9.5.1.3 Location awareness

The application for mobile phones and added possibilities for localisation and awareness, such as a GPS and map, could be included in the design to make mobile devices and the corresponding software even more beneficial for collaborative work. The vision for this application is that when a blogger visits a place, the GPS receiver records the physical information. A map could be provided on the group blog site, dynamically tracing the blogger's location when he or she submits a mobile blog. With geographical information stored in the group site, the readers could easily obtain more contextual information about the location. If people want to repeat their exploration in the same cultural context at a later date, the information built in the map could provide guidance.

9.5.1.4 Privacy and security

The recent emergence of Camera Phones highlights the disadvantages of mobile technology with public privacy, which may be a concern for some people. It has been argued that the ways in which a minority of the population have chosen to use the device has interfered with the rights of innocent victims (Nyíri, 2002). Laws should be introduced to restrict people's use of mobile blogging. In this research it was observed that participants were hesitant in uploading photos with human faces They were also instructed to ask for permission and attend to notices relating to the taking of photos. The contextual information collected and posted to the mobile group blog site must be stored securely to prevent misuse or interpolation by others. Ethical and privacy issues, as well as online identification in the mobile group blog, should be taken into account for personal or group data protection. To deal with these privacy and security issues, therefore, we need not only advanced technology to prohibit digital violation but also an awareness of regulations.

9.5.1.5 Navigation tools

There is a demand for an improved pre-structure for the input of blog entries. The 'category' system was found useful yet bloggers might have other assistance such as a 'tag' to specialize what they tried to express in each blog entry - these draw from the key words of blog contents. This would, to a certain extent, improve the effectiveness of reading by giving a reminder to readers.

9.5.2 Human issues

In addition to addressing technology issues, human factors should be also taken into account to achieve a more successful investigation.

9.5.2.1 Community awareness

Participants were strongly aware of being in a community and motivated to become acquainted with more people and even to make friends. Some suggested their profile should be visible to group members to make it easier to get to knowother bloggers.They also suggested conducting private conversations using a personal messages box on the group blog. The real application should be carried out in a larger community on wider scale. In the next stage, the mobile group blog could be expanded to all students, including all international students, rather than

being limited tothose from China. The recruitment of local British students to participate as 'experts' is also important.

9.5.2.2 Establishing instant communication across context

In conclusion, the mobile group blog could be an effective platform to bring together prospective and current overseas students in an online virtual community to share information and experiences. By socializing the context, this cross-border community could benefit them not only for their present life but also for learning in the future.

Because there is no restriction of time or place, the mobile group blog can also benefit people in an international organization or institute to enhance their cultural awareness before or after their arrival in a new place. The authentic content generated by users with their mobile phone would bring new and extensive knowledge to people through the online community, bridging the real world with the online world. This research, has also opened up some new areas for future investigations; one added-value is language learning in informal settings using the technology of the mobile group blog; or further research on the psychological problems of international student sojourners. In addition, this community could assist current mainstream higher education, orr it could support life-long learning in everyday contexts in different domains.

The thesis has shown that the mobile group blog is a feasible technology in supporting cultural transition. The work has sought to create practical communication among the members of the mobile group blog, whoever and whenever they are, in order to transfer information and knowledge and to learn across contexts through this system. The further application of the mobile group blog in cultural transition must broaden a global cross-border engagement and optimise these technologies into a stable and user- friendly connection alongside current and developing practices.

9.6 FURTHER IMPLICATIONS

This research inverstigated the use of a mobile group blog by Chinese overseas students in the UK for cultural transition. Similalry it can be expanded to student sojourners in any other

country. For example, use the mobile group blog to support international students' study in China. Also in this research, the application of the mobile group blog in cultutral transition demonstrated the approprieates of this technology in informal learning. However, applications do not need to be confined only to these imformal scenarios. There could also be benefits of using a mobile group blog in formal learning settings to support different kinds of learning. Especially those learning situations that need more experience and activities in the real world of disciplinary practice, and where more context-based or cross-context forms of encounter were required. In particular, this could include learning some particular curriculuar subjects such as Geography, Archeture, Nursing and second-language learning.

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Appendices

APPENDIX I: PARTICIPANTS' WORK FOR
AUDIO DIARY STUDY

Participants' work for Audio Diary

I believe all of you have a lot of thoughts and experiences about being in this new place. Would you like to help with a project to assist new students from China adapt to their new surroundings? This is a good chance for you to tell us about your interesting, different and exciting stories. Here are some descriptions about this project.

The purpose of the project
The purpose of my project is to investigate the needs of establishing a digital resource to help new international students adapt themselves to the new environment. It aims at collecting individual's real experiences in everyday life.

What to do
As a participant, you can contribute to this project by recording your own activities in your life. You will get an MP3 recorder to record your own experiences. The way of recording is you speak to the MP3 recorder anytime you prefer, talking about what your observed, what your heard, what you did, who you met and talked, where you had been. It's very similar to the way of writing down what happened in one day for your diary. You can record anything you 'd like in your new life here. You may think about the following questions:
How's the environment here? Is it good or bad?
How are people here? Are they kind ? Are they friendly?
Do you see any interesting happenings?
Do you encounter any difficulties?
What makes you happy?
What makes you sad?
......

Any stories you may like to tell us about your new life here are greatly acceptable.

Thank you for your help

If you have any questions please don't hesitate to contact Peggy, with the contact details:
yqs@cs.nott.ac.uk

APPENDIX II: CONSENT FORM OF AUDIO DIARY STUDY

<div align="right">
The Learning Sciences Research Institute
Jubilee Campus
Nottingham
NG8 1BB
0115 8467672
</div>

Audio diary of Nottingham life

Dear Student

Thank you for taking part in this research study. We would ask you to complete the following form.

1.0 Background details
Please provide the following details:

Student name:	
Gender (M: Male; F: Female)	
Postgraduate/ undergraduate	

2.0 Permissions for use of recordings and images
In accordance with the UK Data Protection Act 1998, we require your consent to use transcripts of your voice recordings (not actual) and the visual images taken by you during this study for research dissemination purposes e.g. in academic publications or on educational webpages etc.

Your name, voice or personal information will not be disclosed.

Please indicate below if you agree for your materials to be used by the University of Nottingham in this way (tick relevant option)

Yes, I do agree: _____
No, I do not agree: _____

3.0 Student fee
Please sign below to indicate that you have returned the digital voice recorder and associated items in good condition, and that you have received the fee for participating in this study.

APPENDIX III: PLAN STATEMENTS FOR THE GROUP BLOG STUDY

Designing for learning through mobile blog technology
Statement of Research aims

General aims

I wish to gather diary records from incoming Chinese undergraduate and postgraduate students at Nottingham University. The aim of my research is to understand how records of individual's personal experience can be captured, collated, coordinated and made visible to others in the interest of helping learning within that community. To that end I shall employ miniature digital audio and video equipment to capture the diary material and web-based blogging infrastructures to collate and coordinate it.

Although I wish to converge on a mobile learning method that is suitable to the demands of an undergraduate course, I am at first exploring the techniques and procedures with a population who are engaged in a more informal situation of learning. More precisely, I am recruiting incoming overseas students whose informal goal is to learn about the local culture of country, town and university.

Methods

Data will comprise audio and image diary records submitted by individual volunteer undergraduates. These will be recruited at Nottingham University from the incoming overseas students from mainland China. I will opportunity sample these students through my involvement with the Chinese Students Association. I will supply them with details of the study and its purposes (attached) as well as a consent form (attached). Then, they will keep an audio/photo diary for as long as they are able – but, hopefully, for a period of several weeks. The contributions will be sent to me in three optional ways:

First, students who have their own MSN space could do their blogging everyday and share their space with me during the research period if they'd like. I can visit their MSN space to get those records.

Second, I will try to meet them individually or with a small group, talk with them and collect their audio and image records.

Third, they can send those materials to my email.

During that period, I will collate them into postings on a shared blog space and the postings will be organised into threads to which participating students are able to add commentary. Unless requested otherwise, these postings will be anonymous with respect to authorship.

Statements of Research procedures
Initiatives for motivation of Participants
"Would you like to help with a project to assist new students from China adapt to their new surroundings?"
I will explain the aim and their efforts to the project.
"I am managing a project that I think will be helpful to yourself as a new student but also to others – this year and in the future. It requires very little of your time. To take part, you don't have to attend meetings at any particular time. Yet (through a shared website) you may become part of a small community of newcomers, like yourself"

Participants Actions:
Participants would get a clear description of what they are asked to do and how they can

thereby contribute to the project.

"Over the first weeks of your adaptation to this new environment, you will just keep an occasional record of your impressions and experiences. I will act as the contact that will allow some of these experiences to be shared and organised (although kept anonymous, if you prefer). We can discuss how best to do this but you will probably use a pocket voice recorder and/or camera, or camera/recorder embedded mobile phones, we think this will be useful – but also fun!"

"At the same time, you can also blog via the MSN space and share all these records with your own friends. And within these small community of newcomers here, you may get a public website online (something like a blog of a group) to share experiences with all other participants of this project. Perhaps you can give your comments as well"

Researcher Actions:

First of all, I shall have informal conversations to these participants to raise their interest in taking part in the project. I will explain that I will be acting more like an editor – in collecting all these diary records from participants.

I will design an initial group blog and fit those selected contributions to certain places on the blog as threads. The sequence of postings may not be linear in terms of time of receipt. All these structured and categorized contributions are prepared to be scaffolding resources for participants on the process and later on. I will keep monitoring the blog or even comment on their comments from time to time and keep adding new receipts from participants.

Management of Research Data

Those data on the blog I have built and all information I subsequently gather will be stored in the Learning Sciences Research Institute (Jubilee Campus) in line with the Data Protection Act. I also intend to use the information to write reports for my PhD and papers for conferences and articles. Participants are not to be identified unless they ask, in publications, to be named.

APPENDIX IV: CONSENT FORM FOR THE GROUP BLOG STUDY

Designing for Learning through mobile blog technology

Consent Form

Yinjuan Shao
Learning Science Research Institute
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Name:

I have had this project explained to me and understand that what my data record with mobile technology will be collected and/or discussed with me on several occasions.

I understand participation is voluntary and that I have the right to withdraw from participation at any time. I may also withdraw any information I have supplied.

I am aware that my contributions will be anonymous on publications unless I ask the researcher to add my name.

I am satisfied that all the information I share with the researcher will be kept confidential, unless there is a legal requirement, such as a freedom of information request that makes this impossible.

I understand that I will not be identified in any publication arising from the research; unless I specifically request this.

Signatures:
(Participant)

(Researcher)

Date:

APPENDIX V: LEAFLET FOR THE GROUP BLOG STUDY

Nottinghan

Different Place !
Different Experiences !!
New Mobile Technology !!!

人生难得几回『博』
动感博客

Who are they?

THE TALES OF ROBIN HOOD

What is it?

What are they doing?

Life?

Study?

Culture?

Come & Join!

NO special skills, **NO** special meetings

Just an **INTEREST** to share your experiences on **NEW** learning and living surroundings

Contact Peggy **by:** yqs@cs.nott.ac.uk

LSRI
Learning Sciences Research Institute

APPENDIX VI: CONFIGURATION OF MOBILE GROUP BLOG SERVER

Some key points in the process of configuration for Wordpress 2.2.2 (in Chapter 6) is listed below.

In the file of "wp-config.php", made settings to the host requirement. This includes the changes in the following lines:

define（'DB_NAME'，'database name'）; // The name of the database

define（'DB_USER'，'username of MySql'）; // Your MySQL username

define（'DB_PASSWORD'，'password'）; //and password of database

define（'DB_HOST'，'localhost'); // 99% no need to change this value

As Wordpress2.0 has default theme for it's structure and interface, in order to change the theme, the property of 'chmod' in the folder of 'themes' under the directory '/wordpress/wp-content' should be valued as "777". Then changes could be made in "Theme editor" either from "presentation" option with administrator account or totally replaced by a new designed theme.

To use plug-ins, it's necessary to copy these plug-ins folder to the directory "/wordpress/wp-content/plugins/". Then entered the administrator's page, activate these plug-ins before use it.

1. Compatible to most Internet-enabled mobile phones although it fits best for Nokia phones.

2. Compatible to most PDAs

3. Applicable to laptops and tablet PCs which connecting through WiFi.

To make the blogging mobile, I installed the plug-in developed by Niksblick. This plugin involves two php files, one is wp-wap.php, and the other is wp-wappost. This plug-in asks for a WAP browser in the mobile devices. The configuration in my test shows there should be some changes in the code:
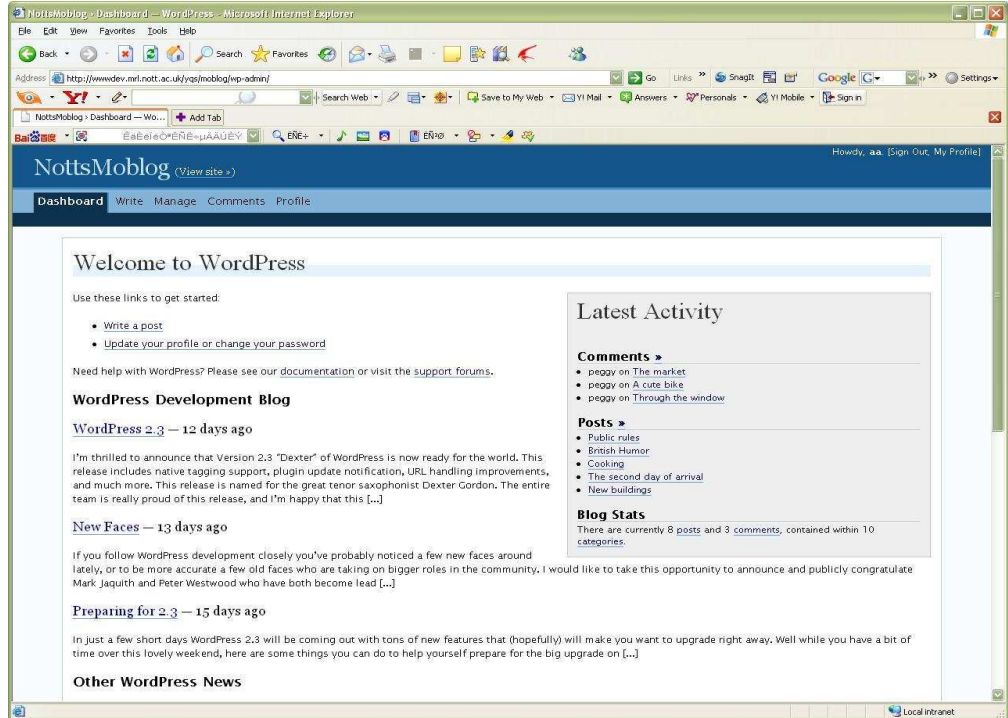
$picture_path = "wp-upload/"; // upload path (fill in the path for the pictures from mobile devices uploading)

$resize = true; // resize picture (can set it to false but if considering the consistence of pictures on the blog site, keep it as true)
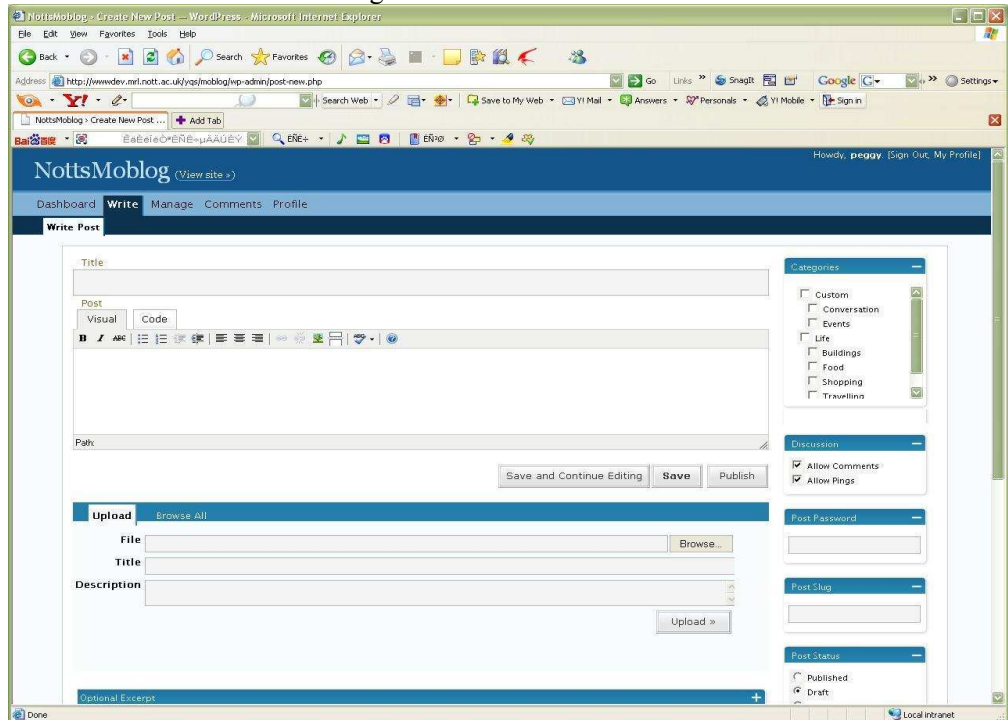
$nokia_jpg_fix = true; // Nokia JPEG fix (this is an option for allowing users fix the jpegs created by the Nokia picture phone. But it needs support of PhP server with GD library. I set it to false to let it works for more mobile devices).

APPENDIX VII: BLOGGING FROM DESKTOP/LAPTOP

After 'login', you will see the following webpage:

To post a blog entry:
Click the tab 'Write' to write blog

Upload files (images, audio & video files)
Input texts

For uploading files:

Browse your file and click "upload"

Click 'send to editor' to posting editor above it. If the picture is too big, you

can choose " "to edit the image, resize the image.

Remember to choose the "category" and then "publish" your blog entry.
Categories: short descriptions

Custom

- **Conversation,** anything about your communication with local people, their accent, language, place etc
- **Events**, events happened around, parade, ceremonies, fairs. Anything, happy, thrilled, sad.

Life

- Shopping, (food, cloth, any goods; people, their habit etc)
- Building, (accommodation, any buildings)
- Food (English food, self-made food etc)
- Travel (what you see, what you find during your trip)

Study

People, books, campus, events about your study.
To give comments:
Click "to give a comment", leave your words in the text box, submit it.
To rate a post: click the "five star" bar, more stars means you are more satisfied with the post.

Note: You can make changes to your blog even after you publish through "manage" tab.

APPENDIX VIII: CONSENT FORMS OF THE MOBILE GROUP BLOG STUDY

Mobile blogging Study: ' Learn the Culture of Nottingham'
Consent Form

Name: _____

I have had this project explained to me and understand that I shall provide blogging contents to the website with Nokia mobile phone loaned to me. These will be collated with and organised by researchers that are not aware of the identity of me as the original author.

I may supply some photographs that refer to my student environment and do blogging with mobile phones

I understand that some material may be quoted or used as illustration on a website that is made accessible to other participating students. I appreciate that I need not contribute to this and that specific material would only be cited with my email permission and anonymously.

I understand participation is voluntary and that I have the right to withdraw from participation at any time. I may also withdraw any information I have supplied.

I am aware that my contributions will be anonymous on publications unless I ask the researcher to add my name.

I understand that I will not be identified in any publication arising from the research; unless I specifically request this.

I understand that the Nokia mobile phone is to be returned at the end of the study. I will do my best to keep the device in good working order.

I agree to take part in the study.

Signatures:
(Participant) _____

(Research representative)
_____

Date: _____
STUDENT COPY OF FORM

Consent Form

Name: _____

I have had this project explained to me and understand that I shall provide blogging contents to the website with Nokia mobile phone loaned to me. These will be collated with and organised by researchers that are not aware of the identity of me as the original author.

I may supply some photographs that refer to my student environment and do blogging with mobile phones.

I understand that some material may be quoted or used as illustration on a website that is made accessible to other participating students. I appreciate that I need not contribute to this and that specific material would only be cited with my email permission and anonymously.

I understand participation is voluntary and that I have the right to withdraw from participation at any time. I may also withdraw any information I have supplied.

I am aware that my contributions will be anonymous on publications unless I ask the researcher to add my name.

I understand that I will not be identified in any publication arising from the research; unless I specifically request this.

I understand that the Nokia mobile phone is to be returned at the end of the study. I will do my best to keep the device in good working order.

I agree to take part in the study.

Signatures:
(Participant)   _____

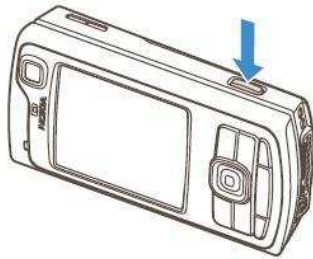(Research representative) _____

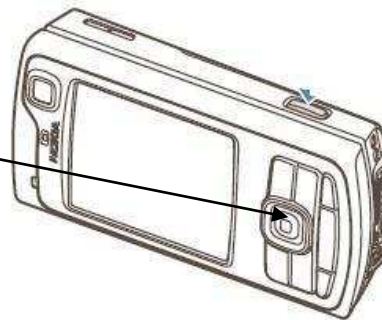Date: _____

INSTITUTE COPY OF FORM

APPENDIX IX: MANUAL SHEET FOR STUDY 3

Manual sheet for Mobile blog users

Use this button to take photos.

For uploading your favourite photo to blog directly

- Use these buttons pointed in the right image to move highlight and choose logo for internet access. You will enter the "Bookmarks" page
- At "Bookmarks" page, choose the "Lsri" bookmark and confirm
- If show "connection to server needed. Connect?" choose "yes" then you will see the following interface

Fill in details with

Login: **Lsrimo** (first letter should be capitalized)

Password: **ttt**

Post: Input some words here (including your own name). eg. The Fresh Asia supermarket. By Peggy

Picture: There are two main sources of images storage in the mobile phone. "

Phone memory" and "Datas"

      Choose "Datas"

      Choose the folder "Images"

      Choose the folder "200706"

      Choose the photo you taken and stored there

Category: There are several categories there. Choose one category. e.g. "Food & shopping"

When you finish all these steps, click the "send" button to submit the photo.

WAIT…. For uploading

If the photo submitted successfully, it will show:

"Successful entered ID **"

APPENDIX X: INDUCTIONS FOR MOBILE GROUP BLOGGING (CHINESE)

移动博客

目的：
本博客旨在帮助刚到诺丁汉的 overseas student 了解诺丁汉及英国的风土人情、文化生活的方方面面，以尽快地适应学习和生活环境。从你们的视角，把你们的经历和大家分享吧。

分类介绍：
风俗类：
——交谈（与英国人交流，英国人习惯风俗等等，语言障碍，聊天内容、地点、时间等等）
——活动（一些有趣、特色的活动事件，婚礼，goose fair 等，或者办事中碰到种种，好的，坏的都可以）
——规则 （英国人做事的方式，与英国人交往的一些注意点）
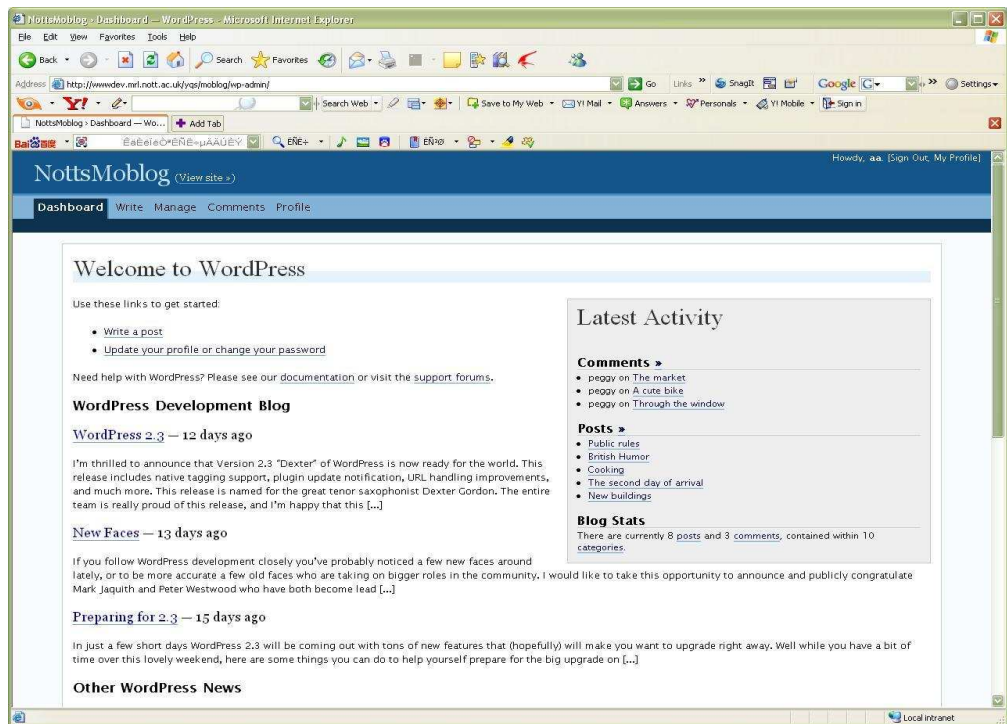生活类：
——购物（去购物时的物品，人，以及英国人购物喜好等）
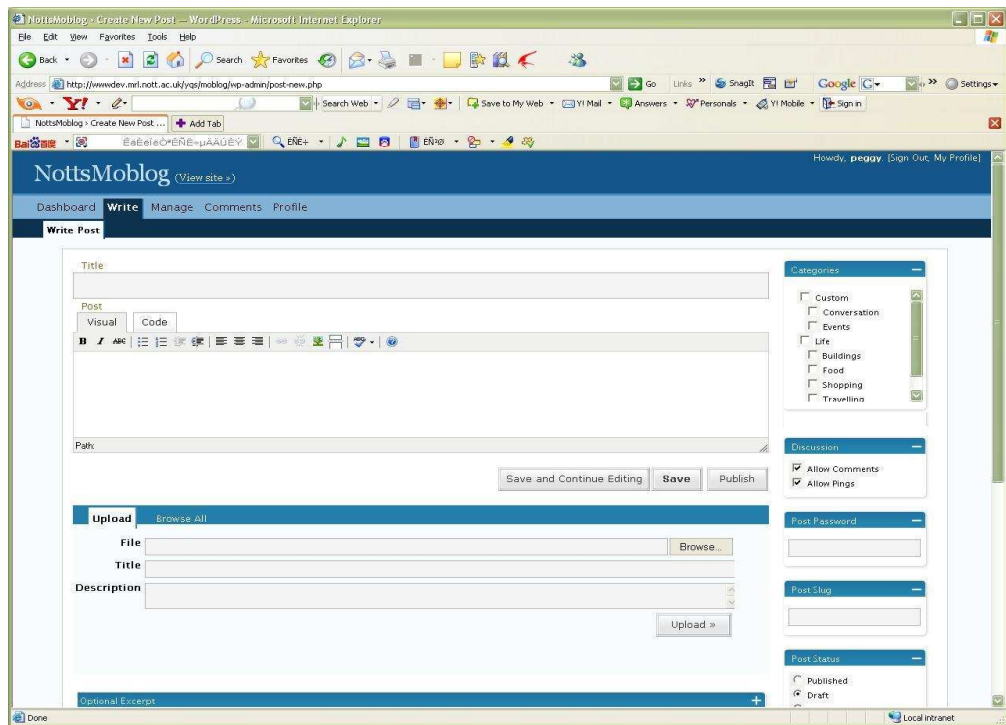——建筑物(包括特色建筑，宿舍等等)
——食物（英国食品，自己烹饪）
——旅行（旅游见闻）
学习类：老师、同学的特点，课堂的特点，以及相关的特色。

如何使用：在浏览器地址栏输入：http://wwwdev.mrl.nott.ac.uk/yqs/moblog/ ，输入用户名和密码。
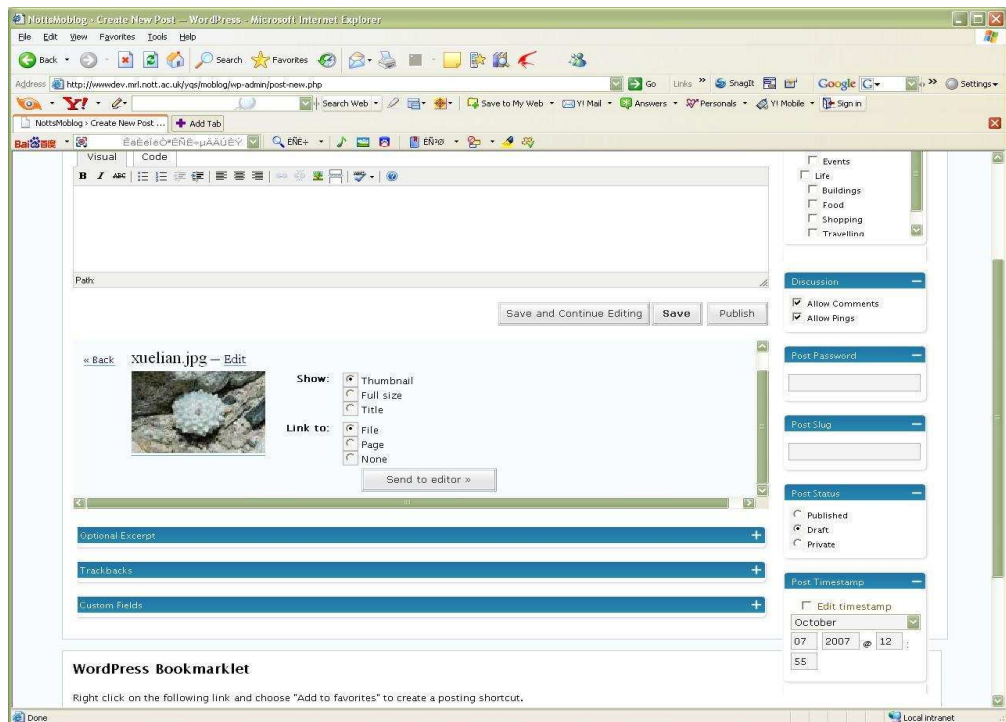After 'login', you will see the following webpage:

To post a blog entry:
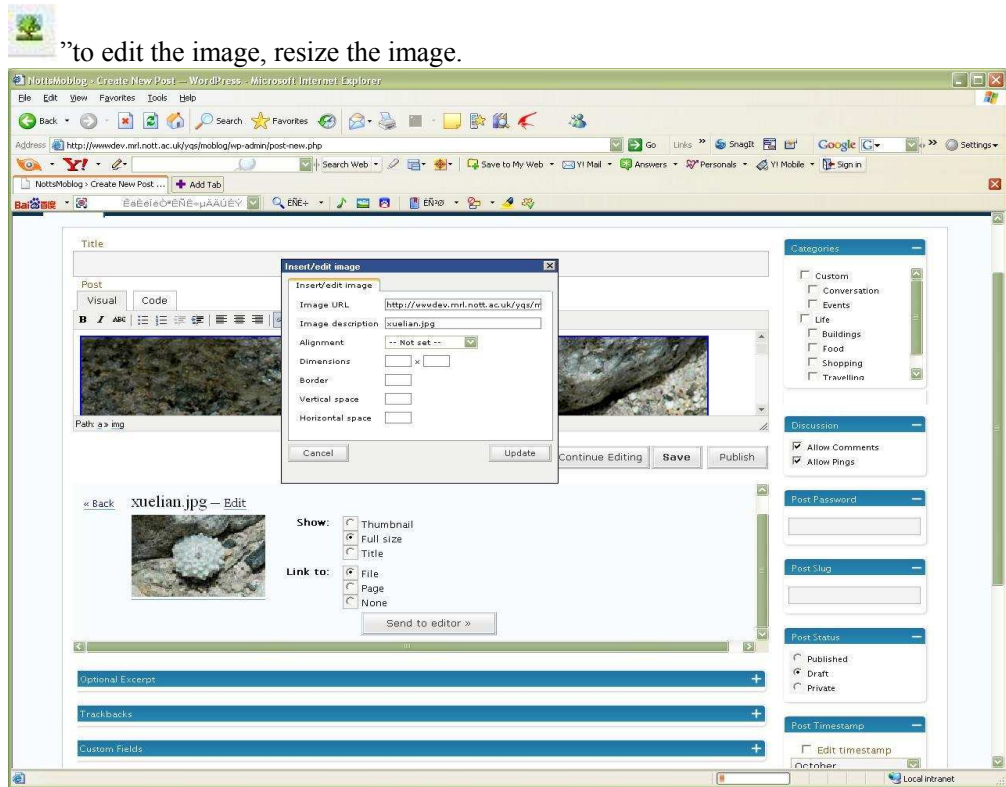Click the tab 'Write' to write blog

Upload files (images, audio & video files)
Input texts

 For uploading files:

Browse your file and click "upload"

Click 'send to editor' to posting editor above it. If the picture is too big, you can choose "

 ”to edit the image, resize the image.

Remember to choose the "category" and then "publish" your blog entry.
Categories: short descriptions

Custom

- **Conversation,** anything about your communication with local people, their accent, language, place etc
- **Events**, events happened around, parade, ceremonies, fairs. Anything, happy, thrilled, sad.

Life

- Shopping, (food, cloth, any goods; people, their habit etc)
- Building, (accommodation, any buildings)
- Food (English food, self-made food etc)
- Travel (what you see, what you find during your trip)

Study

People, books, campus, events about your study.

二、给出评论

To give comments:
Click "to give a comment", leave your words in the text box, submit it.
To rate a post: click the "five star" bar, more stars means you are more satisfied with the post.

Note: You can make changes to your blog even after you publish through "manage" tab.

到网站 http://wwwdev.mrl.nott.ac.uk/yqs/moblog/ 上浏览他人的博客，给出自己的 comments，并进行评分（共 5 个星级）

三、问题记录
在使用过程中可能遇到各种技术、非技术问题。请记录下来，发邮件给我，我的信箱：yj_shao@hotmail.com

四、帮助文件
http://wwwdev.mrl.nott.ac.uk/yqs/moblog/ 的最右边

五、积分奖励：
将根据个人活跃情况，及博客文章的反馈情况排名，给予奖励。

APEENDIX XI: QUESTIONNAIRE FOR GROUP BLOG ASSESMENT STUDY (ENGLISH)

Name: Gender:
Major: Grade:
Please browse the website of http://wwwdev.mrl.nott.ac.uk/yqs/moblog and answer the questions below:

1. Have you ever conducting mobile blogging? Which company or website you subscribed? What 's your experience like?
2. What do you think of this blogging site, interface and usability?
3. Do you understand all the blog entries? What do you want to know further from them? Give examples please.
4. What impress you most in these blog entries? Why? Examples please
5. Other than those mentioned in this group blog, what else do you want to know about study and life or local culture in British cities?
6. Compare to those online forums for overseas study, did you find the differences between this group blog and them? Tell the details please.