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Roving Librarian: The Suitability of Tablets in Providing Personalized Help Outside of the Traditional Library

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Emanating from the ground-breaking Library Impact Data Project, the aim of the Roving Librarian project first initiated in 2011 was to offer personalized help outside of the traditional library to library non-users in social or academic settings using Android and the iPad tablets. It was thought that the portability and flexibility of these devices would allow staff to reach students and help them at their point of need. To test out this premise, an action study was carried out to examine the use of tablets and their suitability in facilitating the roving librarian project as well as evaluate roving as a vehicle for teaching information literacy on the move. Data was collected through peer observation, individual reflections, and a questionnaire conducted with subject librarians to find out more regarding their usage of the tablet and to ascertain whether they have found it conducive in roving. The project demonstrated that the affordances of both devices enabled librarians to provide personalized mobile help to students whilst building stronger relationships and arguably having the type of conversations about library resources and facilities that would not have happened if staff had stayed within the physical library building.

KEYWORDS roving librarian, outreach, academic libraries, tablets, Library Impact Data Project

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INTRODUCTION

This is an action research study conducted on the roving librarian project at the University of Huddersfield, a mid-sized University positioned between the cities of Leeds and Manchester in West Yorkshire, England, to assess the suitability of tablets for teaching information literacy on the move away from the library building and enabling 11 subject librarians to meet users on their own turf.

Recent studies have highlighted concerns about the information literacy skills of the Google Generation, a phrase commonly used to depict the group of students born after 1993 who currently make up the majority of the undergraduate university population. Studies documented by the LLiDA project (Beetham, McGill, and Littlejohn 2009) state that these skills are generally weak with students often having no concept of this problem. The study *Information Behavior of the Researcher of the Future* (CIBER 2008) revealed despite increased access to information technology, learners rely on basic search tools, predominantly using Google which they find intuitive to use unlike some of the library systems. They spend little time evaluating retrieved sources, have limited understanding of their information needs, and thereby manifest poor information retrieval strategies using natural language rather than identifying key words. Further research by the CIBER's Google Generation Research Program revealed:

> The propensity to rush, rely on point-and-click, first-up-on-Google answers, along with growing unwillingness to wrestle with nuances or uncertainties. . .or inability to evaluate information, keeps the young especially stuck on the surface of the "information" age, too often sacrificing depth for breadth. (Nicholas et al. 2011, 44)

The situation is often compounded by some tutors who themselves lack appropriate skills and confidence in using information technologies, thereby providing a poor example to students who, evidence suggests, are strongly influenced by their example (Beetham, McGill, and Littlejohn 2009).

This evidence is backed up by findings from the Huddersfield University Library Impact Data Project (Goodall and Pattern 2011; Stone, Pattern, and Ramsden 2012). This research revealed that many students are not using the library's resources. This behavior can ultimately affect the final grade as the impact data research revealed a consistent correlation between e-resources use, book borrowing and student attainment across all disciplines not only at Huddersfield University but across the seven institutions with which the data was benchmarked.

To help address this problem, while at the same time equipping librarians with the skills to take advantage of the mobile orientated digital future the roving librarian service was established. The aim was to offer

personalized help outside of the traditional library environment in areas frequented by students such as cafes, thoroughfares or School resource centers. Librarians were to interact with students, find out about their information seeking behavior and then with the tablets demonstrate how they could improve their information retrieval skills, suggest library subscription resources that they have most likely never used. To facilitate this teaching on the move, tablets were purchased for all the librarians.

It was thought that the portability and flexibility of the tablets would allow staff to roam around the various university buildings to reach potential library non-users and help them at their point of need. To test out this premise, an action research project was carried out to examine the use of tablets and their suitability in facilitating the roving librarian project as well as evaluate and improve roving as a vehicle for teaching information literacy on the move.

LITERATURE REVIEW

To help inform the project professional and academic literature has been consulted, drawing particularly upon the work of Widdows (2011), McCabe and MacDonald (2011), Lotts and Graves (2011), and Brown, Sulz, and Pow (2011) to briefly trace the concept of roving over the last 30 years, demonstrate its benefits, and in particular show how the introduction of new technologies have become the key driver in enabling librarians to offer this mobile service.

The concept of roving is not a new one. McCabe and MacDonald (2011) state that roving is a library activity carried out throughout the past three decades. They describe "roaming reference," as being "services provided in a non-traditional manner: roving, outpost, offsite, and point of need reference services. In essence, it is anything occurring away from the confines of the reference desk" (1). Del Bosque and Chapman (2007) claim that a form of outreach gaining popularity is "taking reference to where the patrons are" (248). They name it "library-on-location," providing services to customers at the point of need and identify three common approaches that have been adopted:

1. Specified times where librarians offer advice and support at resource centres/computer labs and halls of residence;
2. Specified times where librarians offer subject specific advice or office hours in an academic School/Faculty; and
3. A roving service within a library building away from a help desk (Del Bosque and Chapman 248)

As previously mentioned, one of the reasons why roving has become so popular in recent years is that the number of enquiries dealt with at a traditional help desk is decreasing (McCabe and MacDonald 2011). While the face to face encounters on the help desk maybe falling, there has been no significant reduction in gate counts (Smith and Pietraszewski 2004). This could be for a number of reasons: students may be reluctant to ask for help perhaps because they fear their trip to the help desk may result in them losing their well sought after computer (Trump and Tuttle 2001), students could be reticent to display their lack of knowledge to a public audience which they feel they would be doing by approaching a highly visible help desk where they can be observed by their fellow students (Lee, Haden, and MacMillan 2004), they may perceive the librarian to be "intimidating and aloof" or simply too busy with their own work with little time to help students (Atlas 2005, 315).

Alongside this reduction in the numbers of enquiries are developments in technology, in particular the advent of tablets such as the iPad, the introduction of the Internet, and the wireless network. The result is the availability of portable devices that release librarians to proactively leave the comfort of the library and the help desk and go out to their customers offering personalized one to one help rather than expecting students to approach them (Wagner 2004; Hibner 2005).

It was the advent of the Apple iPad that seemed to bring roving into the mainstream, certainly within the UK. Widdows (2011) at Warwick University documents how staff experimented with using the smart phone for roving within the library. However, she reports that two problems affected its suitability to the task: the small screen caused difficulties in web browsing and they witnessed a negative perception of its deployment from students as they assumed staff were using it for the purposes of their own personal communication. They therefore decided to trial the iPad but initially this did not enjoy the success that they had first anticipated. It only had access to a mobile version of their library catalogue; there were security issues; difficulties recording statistics and the fact that the iPad was not a phone and couldn't be used to contact other members of staff. These matters were resolved and the staff feedback was very positive revealing that "the real value of the iPad was in the improved flexibility, ability to meet demand at point of need and increased student engagement" (5). The only real area for concern was the wireless coverage in sections of the building but not related to the iPad itself. iPads have been trialled in other roving projects (Brown, Sulz, and Pow 2011; Lotts and Graves 2011; McCabe and MacDonald 2011), although again this was for use within the library. It seemed to be its portability and long battery life plus quick and easy access to the Internet and other tools that made the iPad the tool of choice. For example, McCabe and MacDonald (2011) chose the iPad when they trialed a "roaming reference service" at the University of Northern British Columbia: "We were looking

for something that was small, light, mobile and user-friendly. The iPad was a natural fit" (4). The features they found to be the most appealing were the 9.7 inch screen which was larger than a netbook and yet with a weight of only 1.5 pounds and a battery life of up to 10 hours, the device is arguably more portable.

There were some disadvantages in using the iPad when roving as reported by the studies. For some librarians the downside of using this mobile technology was that it was not a true replacement to the traditional laptop. Staff were frustrated by a lack of data storage which they felt impeded the everyday activity of word processing and the touchscreen keyboard was reported as being detrimental to typing (Duncan et al. 2013; Lotts and Graves 2011).

Basic functionalities possible on a lap-top or desk-top computer that have been sacrificed on the iPad to give the device greater portability, e.g. the various keyboard layouts for numbers and symbols in addition to the one for letters as opposed to just having one as on a laptop (Brown, Sulz, and Pow 2011). An alternative solution to the iPad might be the Android operated Asus Eee Pad Transformer, winner of Stuff Magazine's Gadget of the Year award for 2011. This has the added flexibility of a detachable docking keyboard with its own battery and bundled office software allowing it to not only be used as a tablet for roving without the keyboard, but also as a laptop for professional activities such as note-taking in meetings and conferences, a requirement articulated by Duncan et al. (2013) in their project (Griffey 2012). It is also critical if librarians are going to adequately support the mobile technology currently being used by our students, that they have experience in both the Android and Apple operating systems (Lee and Gleason 2012).

Most studies agree that the reaction of students to the new technology has been highly positive and has generally made the roving service easy to market.

The devices seemed to possess a "wow factor" and would help initiate conversations as the students would approach the librarian to find out what technology they were using (Cheetham and Gray 2007; Hibner 2005; Widdows 2011). Brown, Sulz, and Pow (2011) wisely warn against dwelling too much on being technically "cool" as this new technology could quickly become old and the wow factor may be short-lived. Many studies state the importance of librarians feeling confident and comfortable in using these new technologies and recommend giving staff opportunities to "play" with the technologies both at work and taking them home before using them when helping students (Cheetham and Gray 2007; Brown, Sulz, and Pow 2011).

McCabe and MacDonald (2011) argue that it is not just the technology alone that makes roving a successful library venture. It is the willingness of librarians to participate in this proactive service that is a crucial factor if

roving is to be classed as a mainstream library activity. They claimed "The iPads made service providers visible, but the technology was not always used when answering patrons' questions. . . Therefore all a roaming reference service needs to be a success is staff members who are willing to roam and any mobile device that can tell them where to go" (14). This is an interesting point as several studies have found library staff reaction to having to leave the relative security of the help desk can also be a hurdle that needs to be overcome if roving is to be a success (Del Bosque and Chapman 2007; Wagner 2004; Schmehl Hines 2007). Barratt, Acheson, and Luken (2010) in their introduction of roving at the University of Georgia, reported that it was perceived by library staff as being potentially intrusive to students and they were fearful that this proactive personalized form of help could appear aggressive. Although the tablet is crucial in allowing librarians to reach students in their own space, it is arguably positive staff attitudes and their willingness to engage in proactive activity which would be the crucial contributor to the success of this project.

The location where librarians choose to rove is also important. Del Bosque and Chapman (2007) describe a pilot roving program at the University of Texas at San Antonio Library. They chose five venues to rove which comprised a writing center, tutoring center, computer laboratory, and two student residences. They found that the academic support areas, contrary to expectations generated few interactions with students. This was because students were visiting these areas for specific tasks and therefore had little need of librarian assistance. The computer laboratory was much more successful as a roving venue. Librarians initiated 50% of the enquiries by asking students if they required help whilst for the other 50% students approached them. The findings from the halls of residences were the most surprising. At one of the halls, for the first session, students were offered pizza in exchange for asking librarians a question. The questions were genuine and turned into a mini ten minute workshop. The second session without the pizza incentive was equally as fruitful. One of the librarians commented ". . .they seem to be amazed by the time, help and service that we are willing to give them. I really think that they are just unaware of what the library is able to do for them. Our willingness to come to them seems to make a big difference in their willingness to come to us" (255).

METHOD

Action research was conducted over the spring term in 2012 with data being collected during a three week period toward the end of the term and beginning of the Easter holidays. The 11 librarians each assigned to the 7 Schools that make up the University had had much of the autumn term in 2011 to familiarize themselves and gain confidence in operating the

technology as well as experience roving outside of the library building. They were offered a choice of two tablets, the Apple iPad or the Android Asus Eee Pad Transformer. The tablets both required little set-up, connected easily to the university wireless network and thus enabled staff to access the library electronic resources from anywhere on campus. The majority of librarians chose the Android tablet over the iPad. Each librarian was encouraged to "play" with their tablet and use it as much as possible prior to roving, experiment with downloading apps, making notes and generally exploring the capabilities of these mobile devices. Meetings were also scheduled for them to share any apps or tools they had found useful as well as talk about the practice of roving. The Librarians were then encouraged to rove. They were given the freedom to choose their own location of roving, based upon their knowledge of the School they worked with and its buildings.

It was decided to triangulate the data by gathering evidence using three different methods of data collection (McNiff and Whitehead 2010). The researcher practitioner was also a roving librarian as well as a line manager of some of the librarians. Approaches used were direct data gathering in the form of a questionnaire, and indirect data collection through the personal reflections of the author's own roving experience as well as peer observation of a colleague roving in two Schools over the same time (O'Leary 2010). It was decided to conduct an anonymous questionnaire with all librarians to seek out their opinion of the project and find out more about their experience of using the tablet while roving and to ascertain whether they have found it conducive in reaching students. Two questionnaires were produced using the Bristol Online Survey, one for staff using the Android tablet and one for those using the iPad. This was because some questions were only appropriate questions to a specific user of tablet. There were two sections to each questionnaire, the first dealt with the technology, and the second covered their general experience of roving. A covering letter/introductory statement to the survey was sent by email, allowing as O'Leary suggests, all ethical issues to be covered by explaining the reasons for the research and stressing that all answers would be anonymous and also confidential. Both McNiff and Whitehead (2011) and O'Leary (2010) stress the importance of seeking feedback by having a pilot group. In ideal circumstances this advice would have been followed but there was little time for such practices. To obtain some peer validation and get a fresh perspective on my research as recommended by McNiff (2013), feedback was sought through a critical friend, a fellow colleague who was experienced with mobile technology and practitioner research. He suggested ways in which the questionnaire could be improved to give the results greater validity.

The use of open questions allowed for the collection of mostly qualitative data. This would be more time consuming to analyze but would hopefully provide the "rich information and insights" that McNiff and Whitehead (2011, 144) state more open questions will produce and help support

the validity of the findings. The questionnaire was felt to be preferable to interviews given the time constraints and the numbers of staff. Also, the librarians could choose when to answer the questions. They did not have to wait to be interviewed. There was a potential risk of bias which could affect the validity of the results. O'Leary (2010) claims "the closer you become to your respondents and the closer they become to you, the bigger the challenge you will face in managing the process" (196) and there could be problems in "facilitating honest and open responses" and "suspending all judgements. . .to gather credible data" (197). She is discussing here the disadvantages of interviews as a method of data collection but the same arguments could be applied to conducting questionnaires with colleagues, particularly those whom you line manage. This risk was arguably reduced, however, due to the anonymity of the questionnaires which should help guard against problems with bias as there should be a greater honesty from all respondents. This point will be discussed later in the results section.

Data was collected through "reflection in action" as documented by Schon (1983, cited in McNiff and Whitehead 2011, 145). The first method was the peer observation of a colleague roving in the School of Computing and Engineering over a two week period. O'Leary (2010) warns of the difficulties presented by using observational techniques, one of which is inherent bias as the observer hears what they want to hear and translates the interaction to fit in with their preconceptions. The participant was told when the observation was conducted and it is possible that he found it hard to act natural when he knows he is being watched especially by his line manager.

The second method was the author's individual reflections of her own roving experience in the Business School over the same time. She reflected on the results by blogging about her observations whilet roving, recording "personal action, reflection on the action and the learning arising from it" (McNiff and Whitehead 2011, 144).

RESULTS

The main findings were that both kinds of tablets, despite occasional problems with the speed and accessibility to the university's wireless network, were effective for roving and overall there was little to choose between the two operating systems. As previously mentioned, we offered all librarians a choice between the two tablets. Results from the questionnaire revealed that librarians choosing the Android tablet over the iPad had very specific reasons that they cited as influencing their choice (see Figure 1). The overriding reason (71%) was the added functionality of the removable docking keyboard that could transform the tablet into a notebook so that it could be used throughout their working day as well as in a roving situation as well

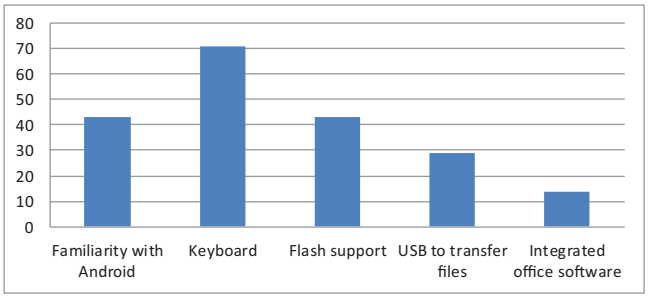

FIGURE 1 Reasons for choosing the Android tablet over the iPad.

as extending the battery life proved to be an appealing addition that was lacking with the iPad.

Conversely, for the iPad the librarians were less definite about why they had chosen the iPad over the Android tablet (see Figure 2). There were similar reasons such as familiarity with the iPad technology (50%) but there were less cited reasons overall and whereas for the Android tablet each librarian had specified a number of different reasons for their choice, iPad users individually only voiced one. However, in contrast 50% of the librarians choosing the iPads had considered what their students would be using and cited this as influencing their decision whereas for Android users they were all personal reasons.

When the librarians were asked about whether the Android tablet was an effective tool for roving, the overwhelming answer was yes (100%). The portability and flexibility, of the device was described by the majority of respondents (86%) as being a positive attribute. "It's easy, bigger than a mobile phone, smaller than a laptop" claimed one of the librarians and it allowed them to "access resources on the spot and help students to use Summon." One respondent claimed that the best feature of the Android was "The flexibility. I have done roving before using a laptop but it was quite an old computer which wasn't conducive to showing students library resources.

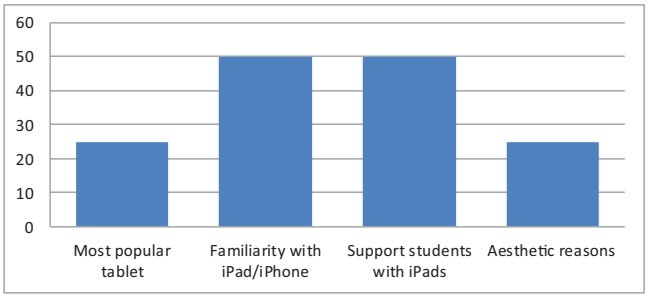

FIGURE 2 Reasons for choosing the iPad over the Android tablet.

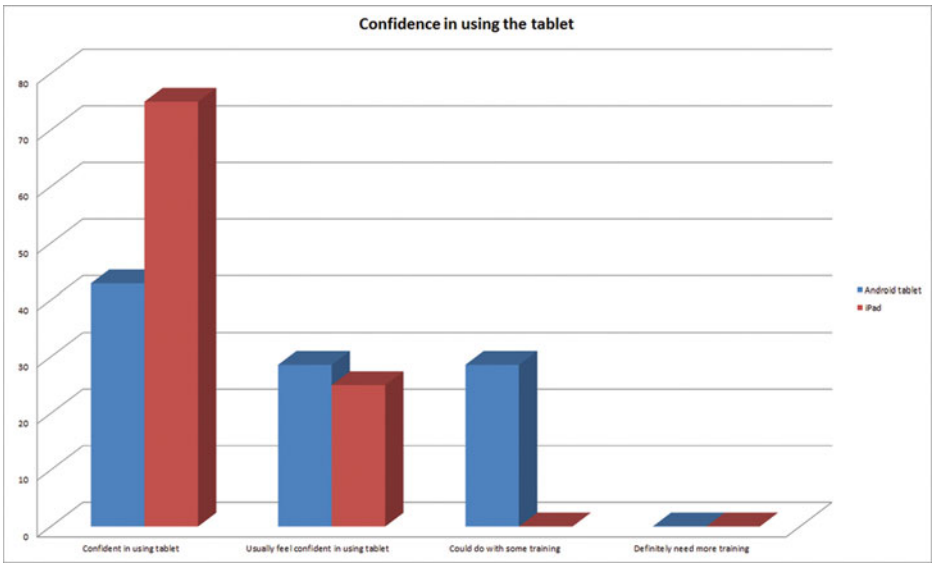

FIGURE 3 Confidence in using the tablet.

It was heavy and cumbersome whereas the tablets are the opposite so are much more suited to the roving concept." The Android tablet did have the added functionality of the keyboard and staff using this device did find this to be a useful addition and just under half (43%) said they usually use it with the attached keyboard while out roving. These responses were replicated by those of the iPad owners who also emphasized their flexibility, portability, and the fact they allow instant access to library electronic resources: "Yes it is great to just be able to wander around with it and set up shop wherever you happen to be. They are definitely more flexible than laptops would have been and easier to cart around. Sometimes I think students are keener to chat to us because they are interested in the iPad too."

Confidence in using the technology did appear to be high, particularly with the iPad (see Figure 3). 100% of iPad users described themselves as confident or very confident in using their tablet. Confidence in using the Android tablet was significantly lower with 71.5% of respondents feeling confident or very confident in using the Android tablet.

The introductory meetings were fairly successful with 71.5% of Android users saying they were useful or very useful in helping them use the technology (see Figure 4). The 75% of iPad users felt the introductory meetings were useful or very useful in helping them get to grips with the technology; this is slightly higher than the Android tablet users.

Figure 5 shows the problems experienced by librarians when using the two tablets. From these results, there are arguably more problems in using the Android tablets than the iPad especially charging problems, connecting to

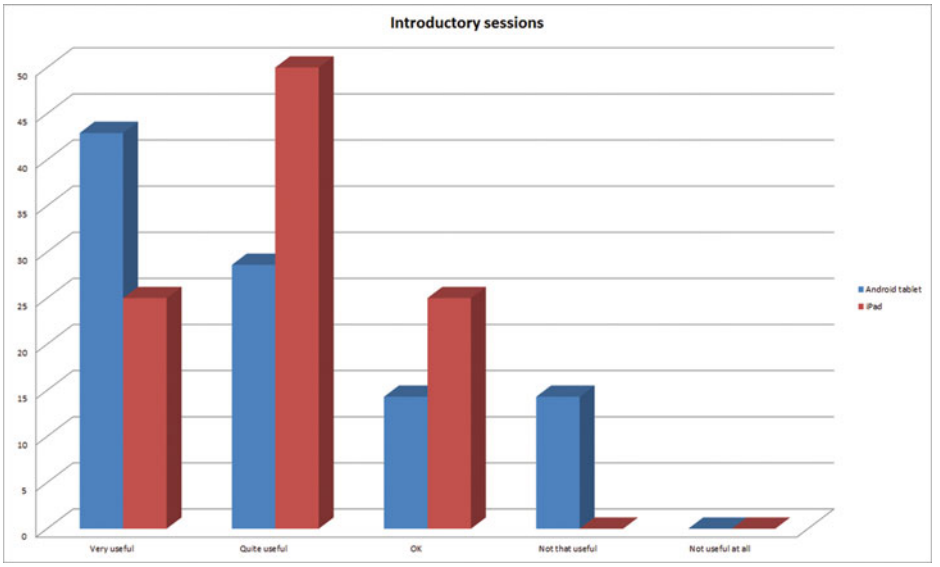

FIGURE 4 Introductory sessions.

e-mail and exporting files between devices. Users of both tablets indicated that they had used their devices in work situations other than roving. However, the questionnaire did not measure the frequency of use and it could be that the bundled office software and keyboard may have enabled Android owners to use their tablets more in everyday work activities such as note taking in meetings and therefore they naturally encountered more problems.

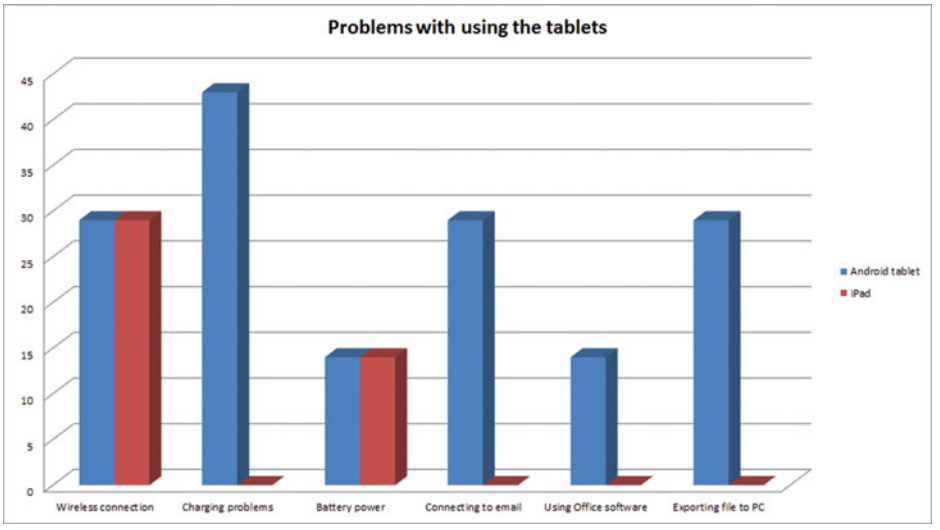

FIGURE 5 Problems with using the tablets.

Some of these problems were due to lack of familiarity with using the product and were most likely eradicated over time as the librarians got more used to the device. One librarian did say that they had noticed a "significant improvement in the performance of the tablet" since the latest software update. The only other difficulty faced by staff using the Android tablet is that on this device Summon defaults to the mobile version. This can be temporarily solved by going into the settings and selecting the "Request desktop site" but it does seem to revert back to the original setting when the tablet was shut down. Conversely this does not seem to be a problem with the iPad although using the slider to set the date range was an issue which was not mentioned with the Android tablet. For a true comparison, this needs further investigation to verify if on the iPad Summon does default to the mobile version and if using the Android tablet the slider can be used to set the date range. Not being able to view Flash was an issue for iPad users. This does work on the Android tablets and was one of the reasons they were selected by the majority of librarians. The 75% of iPad responders felt they were at a disadvantage not having a keyboard and one librarian had actually purchased a keyboard to alleviate this obstacle.

Both Android and iPad users had downloaded specific apps and software. All users had downloaded Dropbox to help facilitate the transfer of files. Evernote was also a popular addition. A couple of librarians had added specific databases apps such as EBSCO and ScienceDirect, and also free referencing tools such as Mendeley and Easybib. Tools to help with reading journal articles and other documents such as PDF Readerlite, Adobe Reader, eBook, and presentation readers were also popular particularly amongst iPad users. Apps to help them communicate with library users through social media channels such as Seesmic Ping were also cited by a couple of users. Finally, several respondents had downloaded the University App known as UniApp. Many of the librarians had created shortcuts to resources such as Summon, library catalogue, library homepage, and the Harvard referencing guide. The majority of librarians had added a link to the questionnaire set up using the Bristol Online Survey which featured three questions for librarians to ask students they had interacted with to determine whether their encounter with the roving librarian would result in an increased usage of the physical and online library resources. One librarian had added shortcuts to eBooks which was a popular feature with the Occupational Therapy students as it saved them having to trawl through the catalogue every time to find their favorite eBook.

Librarians when asked if given the choice again would they choose the Android tablet over the iPad, the answer was an 86% yes they would choose the Android tablet again and this was mainly due to the added functionality of the keyboard, the fact they were more familiar with the operating system and the apps available on Android devices, but not so familiar with Apple products. One person felt that the only drawback with the Asus was the

screen responsiveness, which was felt to be inferior to the iPad, although they felt like it matched it and even exceeded the performance of the iPad in every other way. The respondent who was double minded as to whether they would again pick the Android tablet said that although the Asus was practical, the iPad dominated the market and indicated that this would have an impact on their choice. When the same question was asked of the iPad users 75% replied that they would still choose the iPad over the Android tablet. One person believed that the sole reason to choose the Android tablet is the keyboard but this could impinge on its portability as it could make it heavier when roving. The only librarian who said they would choose the Android gave their reason as being students are more familiar with a keyboard rather than the touch screen technology.

The librarians had had a positive response to them using the tablets and in some situations it had even helped to initiate conversations with students as can be seen from the following response: "It's been positive, they seem to be interested in the technology I'm using which in turn kind of acts as a conversation starter. I feel the tablet then allows me to quickly show them some key resources I think would be beneficial for their studies." A couple of iPad users did report that they felt a bit self-conscious about using the technology. One reason was that whilst some students in the particular School that s/he was operating in, had been given iPads, most had not and consequently there was some bad feeling among some of the students towards their iPad owning peers and therefore the librarian aware of this iPad envy reported to being discreet in her use of the tablet. The other reason was "Sometimes I am a bit self-conscious using it as I worry that people may think 'They have money to buy themselves iPads, but there aren't enough copies of that book on the shelves!"' This self-consciousness was not manifested among the Android tablet users. They had generally experienced a positive response from students. An interesting point made by one of the librarians was that using the tablets to demonstrate the use of Summon and other databases while roving helps emphasize to students and academic staff that resources can be accessed from a PC 24/7: "library resources are mobile—not fixed on hand whenever and wherever." It was also beneficial for their own personal staff development and one respondent said that s/he now ". . . feel more up to date with how people may use our resources (from tablets) than I otherwise would have been." Finally, one librarian stated that they had had the opportunity to demonstrate resources to academic staff in meetings they had attended in the school.

The responses to the survey backed up my hunch that both sets of tablets facilitate the roving process.

There were some positive replies to the section of the questionnaire that asked the librarians for some of their reflections on roving. Locations used by the librarian for roving were predominantly Schools and included social spaces (cafes) as well as thoroughfares and working spaces (see Figure 6).

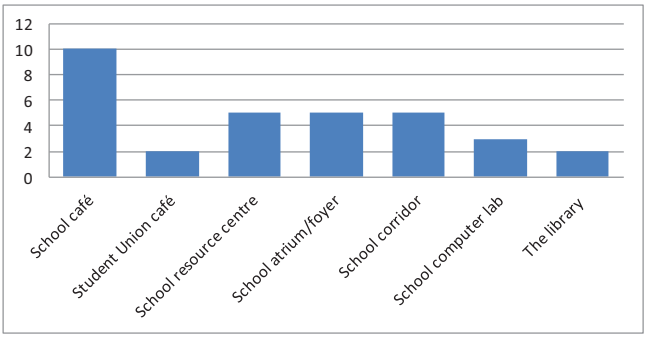

FIGURE 6 Locations used for roving.

The approach used by librarians was usually proactive. A total of 100% of iPad users said they usually approached students. Eight-six percent of the Android users said they either usually or always approached students. The approach used can depend on their chosen location. For example, if roving in the School resource center where students are studying, several librarians said that they wait to be approached by students unless it is particularly quiet whereas in other areas of the School they have gone up to students. One of the resource centers was next door to a computer lab, and a librarian said s/he would pop in to announce their presence next door and this would result in some enquiries. Some librarians were more likely to be proactive in cafes whereas other librarians felt uncomfortable in inhabiting such social venues as they felt were encroaching upon a student's space if they approached them whilst they were having a coffee or eating. For example, one respondent claimed they prefer to rove in the "Resource center as students were already doing work—in the cafe I felt as though I was interrupting." There were some comments that librarians felt their boldness in initiating conversations with students increased when they went out in pairs and they were more likely to be proactive.

In particular, their interactions with students had resulted in helping students improve their information seeking behavior. When initiating conversations with students, to engage them in interaction one of the techniques used include asking students how they are progressing with their research. The immediate reply is usually "fine" but then as the conversation progresses usually admit "well there is one thing. . ." and this usually leads to an information literacy one to one session. One of the problems of using Summon that students often cite is that they are overwhelmed with the number of retrieved articles. Librarians were then able to show students how they could generate more relevant and manageable results by changing keywords, using quotation marks and using the refining facets. "Student [sic] who thought they were fine using library resources but then said they struggle slightly

narrowing down searches. Turned out they had awful search skills and within 10 minutes I had helped them find really useful information for an assignment – felt it made a major difference to how they'd use our resources in future, though they'd have never felt they needed to ask for help in the library." A specific example of an encounter with a student where the librarian was able to provide immediate assistance was, "I was talking to a fourth year engineering student who was writing his dissertation. Eventually he explained that he was struggling to find relevant journal articles for his area of research. I was able to suggest some improvements to his searching and show him the results on the tablet. He was really impressed and said he would definitely use the technique when conducting further searches." After receiving help from the roving librarian, students had not only indicated that the encounter would result in their increased usage of library resources (86% of the students surveyed during the academic year 2011/12 said they would be more likely to use the physical and eLibrary more), it had also led them to recommended the service to other students: "I helped a final year podiatry student find information and the following week his friend turned up saying that his friend had found the service really useful."

When asked how the roving activity could be improved, ideas included finding out the busy times/days for the various venues to help determine where and when to rove. As previously mentioned, there was the suggestion to go out in pairs to help give the rovers more confidence in approaching students. There was also the suggestion to improve the publicity about where and when we were roving, build the roving brand, and develop more of a roving presence.

Results from the authors own roving reflections and the peer observation backed up the findings from the questionnaire. Roving helps students improve their search strategies when using Summon and find more relevant articles by showing them techniques such as putting a phrase in speech marks and using the refining facets. It also provides an excellent forum for promoting library subscription resources that are not accessible through Summon but through the library website that many students are unaware of. These include many computing and business databases. Other benefits of roving include the promotion of resources to staff, for example a conversation with someone working in the Placement office resulted in the librarian agreeing to produce a one page guide to the databases that can help students find out about company information which will be useful to them when applying for placements. It also enables librarians to receive informal feedback about library services and helps them find out about problems that the students are encountering but never think to report such as books they are struggling to get hold of and requests for materials such as audio books.

CONCLUSIONS

The research aim was to examine the use of tablets and their suitability in facilitating the roving librarian project to help meet students outside of the traditional library building. The flexibility and portability should allow librarians to provide information to the students at the point of need and in their own territory. The evidence collected through the questionnaire, observation and individual reflections simultaneously supported this hypothesis. The literature emphasizes that it is this new technology that has become the key driver in enabling librarians to offer a mobile outreach service (Wagner 2004; Hibner 2005; McCabe and McDonald 2011; Widdows 2011). The iPad and Android tablets have allowed librarians at the University of Huddersfield to leave the traditional library and go to social spaces as well as academics ones where the students congregate. They have, also, rather than sticking to one fixed location, been free to roam around the various buildings until they find students that require their help. However, as the literature suggests, roving will only be a successful activity if librarians are willing to engage with students using their tablets in this very proactive practice that may well take them out of their comfort zones (Barratt, Acheson, and Luken 2010; McCabe and McDonald 2011). Indeed it is the proactive nature of roving which has been a cause of concern for some of the librarians. Although the majority of questionnaire respondents were generally supportive of this outreach activity, conversations with individual librarians and feedback from meetings contradicted this positivity. Instead, it revealed that some staff experienced a lack of confidence when approaching students in this way, more so than they betrayed in the questionnaire. They were also very concerned about being a disturbance to students. This highlights one of the limitations with this study. Even though the questionnaire was anonymous, a point which was emphasized in the covering email, it arguably does not reflect the true feelings of some staff perhaps because it was administered by one of their managers, staff may not have been as open and honest with their replies as they might have been if they were answering a questionnaire from someone external to the university.

A bespoke one day's training course delivered by an external company has since been offered to all staff and feedback from that day indicated that staff felt much more enthusiastic about roving and had come away with practical ideas about how to approach students and also market the service. Further research should be carried out to assess whether this course has made actually made a difference to the rovers' confidence and technique.

The findings show that the librarians might have felt uncomfortable in approaching students, they were fairly confident in using their tablets after they were encouraged to play with them and share their experiences of using this technology with their peers in organized sessions. This shows that

giving opportunity to the librarians to "play" with the technology as advised in the literature were fairly effective (Brown, Sulz, and Pow 2011; Cheetham and Gray 2007; McCabe and MacDonald 2011).

One of the observations regarding students that have been made from the experience of roving is that they fail to ask for help at the traditional library help desk. Unlike the literature which asserts that students are reluctant to approach the help desk for fear of losing their computer or appearing stupid in front of their peers (Lee, Haden, and MacMillan 2004; Trump and Tuttle 2001), the findings suggest that some students fail to recognize that they actually need help or maybe do not appreciate the role that librarians can play in helping them retrieve more relevant and higher quality information. Further study is required to find out why this is the case.

Comments for improving the roving library activity included building the brand and providing more of a presence. In collaboration with a student consultant staff have since attempted to develop the brand. Rather than calling the initiative the "roving librarian" which students claim means little to them, the project is now branded as "your library." Pop-up banners have been produced along with lanyards and badges for librarians to wear. The message is that students can ask staff anything and the pop-up banners emphasize what the student consultant feels is our unique selling point, librarians can show them how to access information that they will not find on Google. There has also been work on developing more of a presence and similar to the librarians from the University of Texas who gave away pizzas (Del Bosque and Chapman 2007), freebies, most of which are obtained from subscription database suppliers, are used to attract students to the stand. Recently, the team experimented with giving away cupcakes decorated with the brand "your library." The consensus from rovers was this was the most successful roving event to date as a result of the cupcakes, freebies and also the new location which rather than being in a particular school, was in the entrance to the main academic building, just outside of the library, one of the most busiest thoroughfares in the university.

The roving librarian project has definitely had some impact on students and helped librarians build stronger working relationships with them. The project has produced its challenges such as library staff getting used to working with portable technologies, moving away from the security of the library building, and working proactively with students. If these challenges can be overcome then the roving activity can move into the mainstream and become one of the library's core activities.

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REFERENCE

Atlas, Michel C. "Library Anxiety in the Electronic Era, or Why Won't Anybody Talk to Me Anymore? One Librarian's Rant." *Reference & User Services Quarterly* (2005): 314–19. Print.

Barratt, Caroline Cason, Phoebe Acheson, and Emily Luken. "Reference Models in the Electronic Library: The Miller Learning Center at the University of Georgia." *Reference Services Review* 38.1 (2010): 44–56. Print.

Beetham, Helen, Lou McGill, and Allison H. Littlejohn. "Thriving in the 21st Century: Learning Literacies for the Digital Age (LLiDA Project)." The Caledonian Academy, Glasgow Caledonian University for JISC, 2009. Print.

Brown, Christine, David Sulz, and Virginia Pow. Roving Reference with iPads: A Study of the Use of iPads as Technological Support and Service Assessment. *Annual conference of the International Federation of Library Associations, San Juan, Puerto Rico*. August 2011. Web. 24 May 2013. <http://conference.ifla.org/past/ifla77/197-brown-en.pdf>.

Cheetham, Warren, and Mei Lin Gray. "From Table to Tablet—How a Wireless Tablet PC Could Help to Deliver a New Customer Service Paradigm in a Public Library." *Conference Paper from ALIA Information Online conference, Sydney*. January. 2007. Web. 24 May 2012. <http://conferences.alia.org.au/online2007/Presentations/1Feb.A18.from.table.to.tablet.pdf>.

CIBER. "Information Behavior of the Research of the Future: A CIBER Briefing Paper." 2008. Web. 16 Mar. 2014. <http://www.jisc.ac.uk/media/documents/programmes/reppres/gg_final_keynote_11012008.pdf>.

Del Bosque, Darcy, and Kimberly Chapman. "Your Place Or Mine? Face-to-Face Reference Services Across Campus." *New Library World* 108.5/6 (2007): 247–62. Web. 14 Jan. 2014.

Duncan, Vicky, Maha Kumaran, Mê-Linh Lê and Susan Murphy. "Mobile Devices and their use in Library Professional Practice: The Health Librarian and the iPad." *Journal of Electronic Resources Librarianship* 25.3 (2013): 201–214. Print.

Goodall, Deborah, and David Pattern. "Academic Library Non/Low Use and Undergraduate Student Achievement: A Preliminary Report of Research in Progress." *Library Management* 32.3 (2011): 159–70. Web. 24 May 2012.

Griffey, Jason. "Chapter 2: The Rise of the Tablet." *Library Technology Reports* 48.3 (2012): 7–13. Web. 21 Feb 2014.

Hibner, Holly. "The Wireless Librarian: Using Tablet PCs for Ultimate Reference and Customer Service: A Case Study." *Library Hi Tech News* 5 (2005): 19–22. Print.

Lee, Angela, and Ann Whitney Gleason. "Tablet Mania: Exploring the Use of Tablet Computers in an Academic Health Sciences Library." *Journal of Hospital Librarianship* 12.3 (2012): 281–87. Print.

Lee, Jennifer, K. Alix Hayden, and Don MacMillan. "" I Wouldn't Have Asked for Help if I had to go to the Library": Reference Services on Site." *Issues in Science & Technology Librarianship* 41 (2004). Print.

Lotts, Megan, and Stephanie Graves. "Using the iPad for Reference Services Librarians Go Mobile." *College & Research Libraries News* 72.4 (2011): 217–20. Print.

McCabe, Kealin M., and James R. W. MacDonald. "Roaming Reference: Reinvigorating Reference Through Point of Need Service." *Partnership: the Canadian*

Journal of Library and Information Practice and Research 6.2 (2011): 1. Web. 24 May 2012.

McNiff, Jean. *Action Research: Principles and Practice*. London: Taylor and Francis, 2013. Print.

McNiff, Jean, and Jack Whitehead. *You and Your Action Research Project*. 3rd ed. London: Routledge, 2010. Print.

McNiff, Jean, and Jack Whitehead. *All you need to know about Action Research*. London, England: Sage, 2011.

Nicholas, David, Ian Rowlands, David Clark and Peter Williamset. "Google Generation II: Web Behaviour Experiments with the BBC." *Aslib Proceedings* 63.1 (2011): 28–45. Print.

O'Leary, Zina *The Essential Guide to Doing Your Research Project*. London: Sage, 2010. Print.

Schmehl Hines, Samantha "Outpost Reference: Meeting Patrons on Their Own Ground." *PNLA Quarterly* 72.1 (2007): 12–13. Print.

Smith, Michael W., and Barbara A. Pietraszewski. "Enabling the Roving Reference Librarian: Wireless Access with Tablet PCs." *Reference Services Review* 32.3 (2004): 249. Print.

Stone, Graham, David Pattern, and Bryony Ramsden, "Library Impact Data Project." *Sconul Focus* 54 (2012): 25–28. Print.

Trump, Judith F., and Ian P. Tuttle. "Here, There, and Everywhere: Reference at the Point-of-Need: Edited by Robert E. Dugan." *The Journal of Academic Librarianship* 27.6 (2001): 464–66. Print.

Wagner, A. Ben. "On-Site Reference Services and Outreach: Setting Up Shop Where Our Patrons Live." *Sci-Tech Contributed Papers for the 2004 SLA Conference*. 2004. Web. 26 Feb 2012. <http://scitech.sla.org/wp-content/uploads/2011/03/2004-Outreach-Conpaper-wagner.pdf>.

Widdows, Katharine. "Mobile Technology for Mobile Staff: Roving Enquiry Support." *Multimedia and Information Technology* 37.2 (2011): 12–15. Print.