From eLending to eTeaching: Transitioning e-Reading Tools from the Library to the Classroom

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Abstract

In 2003 Texas A&M University established an engineering campus in Qatar Foundation’s Education City in Doha, Qatar. In addition to engineering, instruction is also provided in science, mathematics, liberal arts and humanities. From the beginning it was intended that the library at Qatar campus would have a small physical presence but have full access to all Texas A&M electronic resources. One of the by-products of this has been a concerted ongoing investigation into electronic alternatives to hard copy formats such as books. The library has been an “early adopter” of both eReaders and tablet computers. The library has also sought to make use of online video streaming services as an alternative to hard copy DVD collections. With the release of the iPad in April 2010, the library and the information technology departments bought and deployed three Apple iPads and made them available on a lending basis. Input was sought from faculty, researchers, students and staff and efforts made to understand the usage patterns of groups and to determine what, if any, benefit this particular device might bring to the learning environment. Devices were circulated for one week periods and input was requested via survey. Additional input from iPad owners was solicited and studied. This device added to the portfolio of digital readers (Sony, Kindle, iRex), streaming media services and flipcams deployed by the library in 2008, but also added a large diversity of applications in addition to reader and video capability. In the latest phase of this experiment the library is working with the I.T. department and two academic departments (Liberal Arts & Petroleum Engineering) to integrate the iPads into the teaching programmes of two specific courses. The next phase is to seek feedback on the success of these initial trials whilst also beginning to look at alternatives to the iPad such as the Android-based Samsung Galaxy tablet. This paper seeks to provide a background to this experiment at Texas A&M at Qatar and discuss some of the issues involved.

Keywords: Electronic Learning, Technology Uses in Education, Educational Technology, Handheld Devices, Academic Libraries, iPads, eReaders, eBooks
Introduction

The headlines are everywhere. The Apple iPad is everywhere. At the launch of the last model earlier this year more than 3 million were sold in 3 days (Apple, 2012). With the convenience, ubiquity and user-friendliness of the iPad it is increasingly common for the iPad, or devices like it, to also be used in an educational setting. This is brief explanation of how one particular library got involved in this process and progressed from a lending service that transitioned in to a classroom support arrangement.

Background

The Texas A&M University at Qatar (TAMUQ) Library is an early adopter of mobile technologies. This early adoption can only be understood in the context of the particular background of this satellite campus and the library that is set up there.

Texas A&M University was established in 1876 in College Station, Texas - a rural setting an hour’s drive northwest of Houston. The university was originally a male only military institution. The “A&M” in the name was once an abbreviation for “Agriculture & Machinery” and there remains a clear focus at A&M today on practical disciplines such as engineering. Texas A&M is a powerhouse in the Texas state tertiary education system and the 2012 statistics on the College Station Libraries and their users reflect this:

<table>
<thead>
<tr>
<th>5 Libraries @ College Station</th>
<th>Servicing…</th>
</tr>
</thead>
<tbody>
<tr>
<td>• 4 million+ print volumes</td>
<td>• 2800 faculty</td>
</tr>
<tr>
<td>• 1300+ databases</td>
<td>• 5500 staff</td>
</tr>
<tr>
<td>• 900,000+ eBooks</td>
<td>• 37,155 undergraduate students</td>
</tr>
<tr>
<td>• 100,000+ serial titles</td>
<td>• 8943 graduate students</td>
</tr>
</tbody>
</table>

Table 1: College Station library resources and clientele (2012)

In 2003 Texas A&M established a campus in Education City in Qatar. The state of Qatar sits in the Persian Gulf and, at 11,437 square kilometers, is around the size of Switzerland. It has a small native population number of around 300,000 and a total population of nearly 1.8 million (World Bank, 2012). Unlike Switzerland Qatar is hot, flat, dry and surrounded by sea. It also sits on an enormous reservoir of natural gas. It is the revenue from this natural gas that makes Qatar, per capita, one of the richest countries in the world and allows things to be done a little differently there.

Education City was set up in conjunction with the Qatar Foundation and is now a subset of it. The Qatar Foundation has three specific areas of focus: (a) education (b) science & research and (c) community development. A number of U.S. and European universities have set up subject specific campuses in Education City:

- Carnegie Mellon University
- Georgetown University
- HEC Paris
- Northwestern University
- University College London
- Virginia Commonwealth University
- Weill Cornell Medical College
- Texas A&M University
The specialist focus of Texas A&M University at Qatar is engineering and, in particular:

- Petroleum Engineering
- Chemical & Process Engineering
- Electrical & Computer Engineering
- Mechanical Engineering

As at the main campus in Texas, all students must also include a liberal arts component in their degree studying English, Political Science and History. Although student numbers are still relatively small research funding is already a significant component of the work done on the Qatar campus.

TAMUQ Library was always intended to be small (Gilreath, 2006). It has a small physical footprint and a small stock of print books. It is a “just-in-time” library rather than a “just-in-case” library. As of May 2012 the Library has a print collection of around 10,000 volumes. More than 90% of this is a borrowable collection focused on the main disciplines taught and researched on the campus. The collection also includes the usual mix of DVDs, magazines, newspapers, textbooks and reference materials that is common to many academic libraries. The textbooks would be the most used items even though all students are issued copies of all their text books at the beginning of the year with the costs included in their tuition fees. There is also some demand for study guides for English as a Second Language and relevant American examinations such as the GRE and SAT. Being near the meeting points of Asia, Africa and Europe, various forms of travel literature are also popular. The Qatar campus has full access to the electronic resources available at the main campus in College Station (see above). The core of the Qatar collection is therefore electronic – e.g. more than 90% of the book collection and nearly all the journal collection are electronic. Texas A&M Libraries spend around USD 12 million annually on ebooks, databases and ejournals. With access to 100,000+ electronic serial titles and more than 900,000 electronic books it makes sense to think of electronic access first. Complimenting electronic access there is an inter-campus and inter-library loan service from the College Station campus using FedEx couriers and a fledgling inter-library loan system within Qatar.

eReaders

With an early focus on electronic access at TAMUQ Library, and a clientele that are avid mobile device users (Warraich, 2012), as soon as eReaders became available on the market it made sense to consider them for lending. The added advantage of rapid delivery when ordering online was particularly appealing. The eReaders also required additional up skilling for staff. With multiple types of eReaders this requirement was increased. However, the main advantages of fast delivery and savings on handling and storage outweighed any disadvantages of having to learn new software and systems. The various eReader systems and software, although different, all had similarities making it relatively easy for Library staff and users to transition from using one to using another. Initially a number of different eReaders were tried at TAMUQ Library but over time the Sony Readers were settled upon as the preferred reader. This was partly due to anecdotal user feedback (particularly at the desk) but also due to (a) the ease of keeping multiple readers synchronized (b) a large collection that was easy to order from (Sony Reader Store) and (c) the fact they could facilitate the multiple file types we needed to be able to use – i.e. pdf, epub.
### Table 2: Timeline of eReader acquisition at TAMUQ Library

<table>
<thead>
<tr>
<th>Year</th>
<th>Month</th>
<th>Brand</th>
<th>Model</th>
<th>Units</th>
<th>Retired?</th>
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<td>2nd edition</td>
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<tr>
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<td>PRS505</td>
<td>2</td>
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<tr>
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</tr>
<tr>
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<td>Sony</td>
<td>PRS700</td>
<td>2</td>
<td>No</td>
</tr>
<tr>
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<td>Kindle</td>
<td>DX – 1st Generation</td>
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<td>Yes</td>
</tr>
<tr>
<td></td>
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<td>PRS900</td>
<td>2</td>
<td>No</td>
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<td>PRS600</td>
<td>3</td>
<td>No</td>
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<tr>
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<td>May</td>
<td>Sony</td>
<td>PRS-T1</td>
<td>5</td>
<td>ordered</td>
</tr>
</tbody>
</table>

#### The Apple iPad

With the launch of the iPad in 2010 testing the iPad as an eReader seemed a natural progression. The Library began purchasing iPads in May 2010. Mostly they were purchased at opportune moments in ones or twos as we slowly familiarized ourselves with them and then made them available for lending. Two were acquired from at beginning from the I.T. department and tested for library needs. All were wireless only and memory varied between 32GB and 64GB. In January 2012 two 64GB generation 2 iPads were purchased. This took the Library owned collection of iPads to 10. Certain advantages of the iPad were immediately apparent: (a) a known and proven operating system –very similar to the already popular iphone, (b) the additional functionality that the eReaders did not have such as web browsing and (c) specific use applications or “Apps”. As an eReader, though, the iPad had some clear disadvantages – in particular the much shorter battery life, the bulkier size and a screen that some readers found less comfortable than the e-ink displays of the eReaders. Other institutions have had similar feedback from some of their users regarding the screen (p.5., Huthwaite, 2011). Other disadvantages over the eReaders were the cost and the additional complexity that comes with additional functionality incorporated into the more sophisticated ipad IOS operating system.

#### Android Tablets

With the release of the Android based tablets an option other than Apple became available. Samsung has rapidly risen to be become the dominant Android based hardware supplier and the Android tablets therefore became the obvious candidates for consideration. The Library chose the 7 inch and 10 inch “Tab” models and bought one of each. First Library staff used them on and off for around a month familiarizing themselves with the Android operating system and the peculiarities of the Samsung variant of it. A few free applications were also added over this period but nothing particularly specific to science or engineering. With only two Android tablets and little publicity few library users have so far borrowed these devices. We are intending, however, to promote them more in the future and seek feedback from users.

#### Peripherals

Peripherals such as wireless keypads and covers were also purchased for the iOS and Android tablets. These were issued with the tablets and items such as chargers were issued in separate bags with their own barcodes. As students became aware we had chargers they would sometime just come to borrow them for their own iPads/iPhones. Over time covers have become worn and we are looking at replacing them with new ones. Some peripherals have performed better than others and those that have will be the ones purchased again in the future. Students also have the option of taking disposable alcohol cleaning pads with any items issued.
The Classroom

From lending in the Library to assisting in classroom use of tablet technology was a natural progression. A project was set up between the I.T. and the Library to assist two specific classes to make use of iPads in the classroom environment. The two classes chosen were:

- PETE 435 – Technical Presentations
- ENGL 251 – The Language of Film

The two classes were chosen as they were not particularly engineering oriented and did not need any engineering specific applications. The iPads therefore could be used at an introductory level without having to introduce engineering specific applications at an early stage of adoption. Another factor in choosing these two classes was that the lecturers for both classes were very open to trying out the use of iPads with their students.

Applications

For both classes a standard Library install was done that included a number of general-purpose applications. The main intent was to get the iPads into the hands of the students in an educational setting. A secondary consideration was tailoring the iPad install with applications specifically suited to each class. Each iPad was synchronized with the following applications using a separate iTunes account for each class:

- Citrix Receiver
- Converter
- Converter Plus
- Documents to Go
- Dropbox
- Flip Board
- Goodreader
- iBooks
- IMDB Movies & TV
- Keynote
- Kno textbooks
- Notetaker HD
- Numbers
- Pages
- PCalc
- Prezi
- Quickoffice
- TAMU Mobile
- Twitter
- USB Disk for iPad

Outcomes

The project was started by the Library in conjunction with the I.T. department. Library support for this project began enthusiastically. Shortly after the start of the project, however, the departure of key library staff, from what was already a small team, meant that library involvement had to be somewhat curtailed. Other, more day-to-day, priorities had to be met. Library involvement in the project and the desired outcomes for the project were re-assessed. A decision was made to maintain a minimum level of commitment – essentially only supporting the synchronization and distribution of the iPads and providing only limited support for resolving any technical problems that were brought to the attention of the Library. Selection of specific applications and content for the chosen classes was no longer delved into as deeply as it had initially been intended. The Library still maintained a role in basic technical support as they had proven experience with iPads, having leant them previously, and the Library service desk was open longer hours than the I.T. helpdesk. During I.T. hours that was another support option. In the early stages of the project ordering, delivery, synchronization and dispersal took significantly longer than originally anticipated. Synchronization of content and operating system updates, in particular, took around 30 minutes per iPad with the 30 iPads to be shared between the two
classes. With the time it took to get the iPads ordered and delivered and then synchronized and distributed increasingly the objective of the exercise became to get the iPads into the hands of the students before the term had progressed too far.

Classes have recently finished. Only limited feedback on actual use has been documented so far. The I.T. department has completed a survey but the results of this have not yet been cumulated. There has, however, been quite a lot of anecdotal feedback at the library service desk already regarding the use of iPads in the classroom. Students in the Language of Film class have also blogged their thoughts on the use of the iPad over the period they used them. The Language of Film students were probably most positive about using the iPad as a film watching device. Initially there was also definitely a "cool" factor with some excitement amongst the students at the prospect of having an iPad for individual use. This quickly turned, though, to comments regarding the perceived appropriateness or inappropriateness of the iPad for the classroom environment. A number of students used the terms “toy” or “play” in reference to the iPad. When questioned further they indicated their view was that it was not so much a device for serious study or learning but more a device for “entertainment” or “having fun”. Comments were specifically made that students definitely did not want the iPads to replace their standard issue laptops. Overall the feedback so far has been somewhat ambivalent with some negatives and some positives.

So, given that so far there has only been limited or a constrained involvement by the Library in the classroom use of the iPads, the question has to be asked “What was actually gained by the Library from this latest step along our journey?”

Gains

Although there are no obvious immediate benefits that have been documented in the learning environment there have been benefits to the Library. These benefits have to be understood in the context of the particular environment of the library – a Library that is very focused on electronic access and needs to have a good understanding of the technologies that complement this.

For the Library itself the following was gained:

- A better understanding of the technology to the level where we can now relatively easily support our own lending of tablets & eReaders without specialist technical support.
- A new user base that have come in to borrow eReaders/ipads and may look to make use of other resources and services while they are there.
- Extended relationships (that can be built on) with the I.T. department, the two particular lecturers whose courses were trialed and the student users of the iPads who may not otherwise have come into the Library.

Where to Next?

- Initially the Library will not commit to any of the summer school classes. There will be a pause to catch our breath while we review our staffing levels.
- We have purchased a Griffin Multi-dock station to make the charging and synchronization process easier – 10 iPads at a time
- We are interested in testing out a Samsung Note particularly for the stylus functionality and whether or not this is more suited to science and engineering applications compared to the Samsung Tab and the Apple iPad
Conclusions

The Texas A&M University at Qatar Library has a long and active involvement in electronic access to information. With a large electronic collection progressing to lending ebook readers and tablet devices like the iPad has been a natural next step. TAMUQ users still get print books out every day and these transactions and other everyday library work like reference enquiries and information literacy classes will always remain a standard part of academic library work. Tools and technologies will come and go. With ample funding TAMUQ is one library that will be able to experiment with these options. The information landscape will chop and change as time goes on but as television did not spell the end of radio technologies such as eReaders and print books will continue to live alongside new mobile devices such as the iPad and the smartphone. Where the information goes we will follow. In access to that information we will be leaders and in an academic environment this means we will sometimes lead in a classroom setting. This is a good thing.

Endnotes

(i) My use of the term “eReader” as opposed to “ereader” or “ebook reader” is intended to convey that perhaps in the last few years a little too much emphasis has been placed on the “e” at the expense of the “Reading” which, after all, is what it is really all about in the end.

(ii) For more on eReaders in academic libraries generally see article by Tees. For more on eReaders at TAMUQ see article by Thompson.
References


