

A strange title for a presentation at a National Library Technician's Conference you may think, however it will become clearer as we progress on our journey.

I am the Library Technician at Hale School in Western Australia, an Independent boys school which has just celebrated its 150 birthday. Part of the celebration was the designing and building of not only a new library, a whole new learning commons area plus a new classroom block. This is where the childbirth came in.

Four years ago the planning started, it was euphoric at first...the prospect of correcting all the problems from the previous library, new colours, styles of furniture, more space, better shelving, new technology would make things easier, allow more flexibility for everything. We were going to give birth to a beautiful, very special baby at the end of it and all would be lovely. Isn't that how it is? You tend to forget that the pregnancy is just the beginning and not the end.

This is not a technical paper but a look at the journey from the 1969 Hale School Senior Library to the 2009 Forrest Library. Along the journey we learnt many things, about ourselves and our capacity for change. Anyone who was at the Tasmanian Conference in 2001 will remember that, like Odysseus, it is the things that happen along the journey that are important, not necessarily the journey itself.¹ The five library staff had a very eventful, often frustrating journey which at times looked and felt like it would never end. We were evicted from our home of many years, temporarily lost all our possessions, were separated but after all these happenings came back together; picked it all up and started over again. This time in a beautiful, bright, colourful, spacious new building.

We had learnt how to read builders plans, electrician's symbols, why things could not go there but had to go **there**, how shape matters, texture is important and we had to believe in everyone engaged with the project and ourselves. It was a daunting task, as those who have done this sort of thing before will know. Planning the building from the initial thought to completion took approximately 3 years. Then in late 2008 it was decided to implement RFID into our circulation and security system, which entailed more planning and revision of furniture requirements. Plus we had to come up with a plan to tag every item of the collection with the required RFID tag.

More presentations from those interested in providing our system, more discussion, deliberation and decisions. Finally EnvisionWare from Adelaide was selected and this is where the Eurovision part of the title came from. Whenever asked who was providing our new system I went blank and said 'Eurovision'. Everything had to be done whilst still maintaining a busy and

¹ Ian McCallum <http://conferences.alia.org.au/libtec2001/papers/mccallum.html>

vibrant library. Over 5,000 items were weeded just before the end of Term 3 2008: Term 4 we closed the library. Quite traumatic for the students, teachers and of course us.

We spent many an hour putting the RFID tags into and onto every single item in the collection. This appeared to be a daunting task at first, but with the help of EnvisionWare, parent helpers and members of staff we not only finished the task but finished it well ahead of schedule. It became not quite a race to see how many thousands we could tag a day, but there was a pile of empty cardboard inserts which we counted on a regular basis...our version of 'are we there yet' possibly. There was no brain work required for this particular task, just repetition so we had to make it as fun as possible. We all learnt quite a lot about each other! Then the tags had to be linked to each item. This was again a repetitive task but needed people to be paying lots of attention to what they were doing. We file all our different media pertaining to one title together; books, CDs and DVDs are next to each other but required different tagging on the RFID stations so we had to be very careful. There were a few cries when the realization that you had tagged a whole bay of books as DVDs because you never changed it back after the one DVD...but we learnt quickly. This all completed, bins of backs of tags removed we were ready to completely shelf read the collection and prepare for packing.

Both of these last processes were very time consuming and repetitive. Again I cannot emphasize how important the help of Suzi from EnvisionWare, parents, some students and members of staff from other areas of the school was. The remaining items were boxed and stored off site. Useful items of shelving, tables, anything that other areas of the school or libraries might need were disposed of and we were left with an empty shell. There was a 'farewell to the library' party where we swapped good and bad memories and we closed the doors.

The 5 staff moved to areas throughout the school to carry on working. When we did this, with great faith I might add, the roof was on the building but there was no sign of the air-conditioning that we were desperate for. However, a week before the start of Term 1 2009 we moved in; it was habitable but not totally finished. Students arrived as planned 3 years before on the first day of Term 1 2009 and we were in business. In order for the system to work it had been decided to use the boys Smart Rider transport cards as their library cards. They already had a photograph on plus a barcode and could be linked into the Horizon Integrated Library System via the Synergetic, our student management system. If they still had their old library card, that would work too, but the push was for the Smart Rider.

For those who are not sure what it is, I will explain RFID very briefly. It stands for Radio Frequency Identification; a technology that allows the identification of tagged items without a line of sight. That is, you do not need to see the tag for it to be read by the remote reader. The reader will send back information to the data base, and in our case for example check out the item, remove the security tag and write information to the tag which can be used for statistics.

Unlike a barcode that has to be seen by the scanner to be read and only performs the operation of sending information back to the Library Management System. They can, and are used for many applications. Wal-Mart in America require all suppliers to use them to track their products; if you have your pet chipped by the vet to keep track of it should it be lost – it is an RFID chip and the vet will have a reader. Attached to DVDs and CDs sold by K-Mart and Big W are small white tags-it is an RFID tag and will set off the alarm at the checkout unless the operator has unlocked the security on it with a device. There is a strong lobby against them in America as they are concerned that can infringe on person rights if they get into the wrong people's hands². Recently on the ABC there was a drama series where the bad guys were tracking a good guy by implanting tiny tags on every single item of his clothing. That took place in the future. We are only concerned with our circulation system!

An RFID tag containing a tiny microchip and an antenna is placed on an object, in our case every item in our collection. Most of the RFID tags, which usually carry information in the form of a unique serial number; require no external power to activate them as they are read by a another source – the reader.

In order for the system to function there needs to be special equipment. We selected:

- **RFID gates** which respond with both a visual and audible alert if anything is removed from the library with the security still locked on it.
- **EnvisionWare suite** of staff RFID applications
- **EnvisionWare Branch Manager**TM which provides alerts from the security gates (displaying the title that alarmed the gates) as well as alerts from OnestopTM (including out of paper and ILS offline alerts along with help requests from students).
- An **Intelligent Returns Box**, which reads the tag, takes the item off the borrower's record and locks the security back on the item almost instantly. This means that the borrower can return their loan, and immediately select another item, check it out and their previous borrowings have been deleted. No waiting for the bin to be emptied and everything checked in.
- We selected the **One Stop Self Checkout Station**. This was installed into the issue desk. It enables the students to check out quickly, see what they already have on loan, and print out a receipt with all this information on it for them to use as a book mark. It also unlocks the security on the item. We only have boy students and being boys they love the touch screen and pressing buttons and have taken to it like ducks to water. If there is a problem such as an item overdue or perhaps they have forgotten their card then it is necessary for the student to approach the person on the Issue Desk to sort out that problem; maybe put the item on hold for later.

² <http://news.cnet.com/2010-1069-980325.html>

- a **PDA** which the teacher librarian can take to the class and supervise loans where ever the WIFI network is ; or can be used for searching the shelves for missing or wanted items.
- For linking the RFID tag to the library item there is a special reader tablet which plugs into the Library Management System and with the help of a barcode reader links up the tag with the item barcode. There is one on the issue desk, One Stop Checkout Station, Intelligent Returns Station, and one in the workroom.³

The whole system works extremely well: of course there have been a few glitches but overall it has made the circulation of items much easier and less labor intensive. No more reaching in and out of the drop box, handling each item to check it in and resensitize it. Reports of items on hold can be printed and these items immediately stored in the appropriate place, with a docket showing who the item is on hold for. The queues at the Issue Desk at the end of periods have decreased as the boys prefer to check their own books out, even help each other learn how to do it. Previously there was someone on the Issue Desk for the last 10 minutes or so of each period only to allow the boys to borrow then. Now someone is there all the time and books are checked out without their help the majority of the time; remember there is the option of the roving PDA so teacher-librarians can also check items out in the class room if there are no problems. This gives them a better idea of what their class is reading and frees up the Issue Desk person for other things besides check-in and check-out.

“Robin Wake, Head of Library, said “Hale School has a long and proud history of achievement, dating back to 1858, but we are very focused on meeting the contemporary needs of our current and future students and preparing them for the world of tomorrow. The introduction of RFID will free staff time to allow our library team to expand our focus on the recreational and curriculum needs of the boys rather than on the check-in and check-out of library materials. Additionally, RFID technology provides our students with a model of cutting-edge technology used in their day-to-day environment, a learning tool in itself.”

Envisionware press release October 2008 http://www.envisionware.com/press_hale_school

So back to the beginning. Childbirth, RFID and Eurovision.

It has been an adventure, and will continue to be so. RFID applications in libraries will continue to expand, more libraries will use them. Like childbirth the journey does not stop with the new baby, but goes on developing and growing; not always in the direction originally planned or expected but growing never the less. Our new baby, the Forrest Library, will flourish: is flourishing. The staff is learning to work with our new technology, we are proud of it; students

³ <http://www.envisionware.com/en/rfid> for all technical information and specifications

are enjoying using the new technology and we are all enjoying our new library. Not all technology is good; it is what you do with the technology that can be good.

Thank You

Bibliography

Butters, Alan. (2006) *Radio Frequency Identification (RFID): an introduction for Library Professionals*, Sybis

<http://www.envisionware.com/en/specs-tags>

McCallum, I. (2001) Retrieved from

<http://conferences.alia.org.au/libtec2001/papers/mccallum.html>

Wake, R. (2008) Retrieved from http://www.envisionware.com/press_hale_school

www.3M.com/libraries

<http://news.cnet.com/2010-1069-980325.html>