# Visitor profiling for, and promotion of the biological and earth sciences museums, Macquarie University

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#### Abstract

In 2007 Macquarie University undertook a significant restructure. It was anticipated that this would impact on the viability of the programs and resources of campus museums. The changes to university management practices involved possible cessation of centralized funding contributions to museum management. The biological and earth sciences museums, along with the other museums on campus, felt compelled to demonstrate a capacity for independent operation in case justifying their financial position became a key criteria for survival. A research project was designed and undertaken to identify and highlight the services of the biological and earth sciences museums at Macquarie University in order to increase their audience base.

The results of this research have lead to the identification of distinct potential audiences and the formation of new promotional strategies within the Faculty of Science.

#### Introduction

Macquarie University is a medium sized tertiary education institution in the suburban north-west of Sydney. A recent change in leadership at the university has prompted a significant restructure of academic departments and review of the curriculum. As a result of this, two former academic divisions namely, environmental and life sciences and information and communications sciences, were merged to form a new Faculty of Science. Material collections within the new faculty were all derived from the former division of environmental and life sciences. These consist of the Biological Sciences Museum, the Earth Sciences Museum and the Downing Herbarium. The herbarium is essentially a reference collection that supports research and teaching, there is no facility for exhibition and little consideration regarding community engagement. This paper therefore focuses on the two natural history collections with exhibition spaces.

The funding model for different university services was under scrutiny as part of the restructure. Prior to this, the university's museums and collections, while grounded within different administrative structures related to their academic discipline, received some level of centralized financial contribution in recognition of the role these museums played beyond their academic discipline. There was concern among museum staff that this centralized support may be withdrawn, and a number of strategic initiatives were devised. The one described in this paper involved audience profiling research for the two museums by a museum studies masters student (Halliwell).

A user-needs analysis was undertaken to identify relevant audience groups for both museums that would provide the most benefit to them in the long term. Another user-needs analysis was undertaken with the identified groups to determine the types of promotional material that would encourage those visitors to the museums. A series of relevant promotional material was then developed.

The biological and earth sciences museums at Macquarie University are two very different types of museums. Both offer hands-on educational activities for visitors, but have different physical and operational principles. At the time of this research, the Biological Sciences Museum was organized in a conventional layout, with its collection exhibited in display cabinets within a centralized location. This has the advantage of a set location for education programs. The Earth Sciences Museum, on the other hand, comprises of a series of display cabinets lining the building's corridors with some displays

centered in a high traffic building foyer. In this case, education programs need to be conducted in general purpose teaching rooms within the building.

One of the greatest challenges for small museums is to produce dynamic and innovative programs that will attract regular paying visitors, while working within the confines of a limited budget (HOOPER-GREENHILL 2001). Running a university museum has added challenges; the general public are often unaware of their existence, resources can be limited, and the museum can, in some instances, be hindered by the department they are associated with (SOLINGER 1990). The general decline in financial support for university museums of natural history over the last few decades has been well documented (HUTTERER 2005) despite many arguments forwarded on the role they can play beyond the academy (SCHMIDLY 2001).

# Contextualizing different audiences

The audience base of a university museum often consists of university students utilizing the resources of the museum for research purposes at no cost, or where there is a strong education program, the museum may maintain regular school bookings for a small profit. Both of these visitor groups can be problematic for a university museum. While the university student is an essential visitor, aside from the percentage of enrolment fees the department receives, unless utilized effectively the student provides little or no direct financial support to the museum. The benefits of school groups, on the other hand, can only be realized if there is a strong marketing program associated with the museums education programs, otherwise the presence of school bookings may be minimal.

The multi-disciplinary nature of university museums is often cited as a defining characteristic (MURPHY 2003) in comparison with other museums. The multi-audience expectations imposed on university museums receives less attention, with some authors seeing the internal audience as critical. Ashby (2009) characterizes this audience as the most local and the primary client group for university museum activities outside of formal education programs. Similarly, Heruc (2009) documented strategically developed public programs designed specifically for internal audiences.

Striking a balance between internal (staff and student) and external (community groups) is critical and often dependant on a broader institutional vision on the use of material collections in a university context. Horder (2004) explored this balance in the context of a shift away from formal education towards an age of personal learning at every stage of life. Bianco (2009) has argued that dividing programs between these two different stakeholder groups can often lead to an unnecessary duplication of staff effort.

## Macquarie University's two museums

The biological and earth sciences museums at Macquarie University provide successful public programs and both are proactively involved in contributing to on campus and community activities. At the time of this research Macquarie University was undergoing departmental restructuring and it was anticipated that the restructure would impact on the viability of the museums' programs and resources. A challenge for the two museums was to highlight their strategic importance within the university, while demonstrating their ability to be self sustaining. Successfully identifying key stakeholders and developing tailored promotional material for those audiences would therefore increase the viability of the two museums.

While the museums already had established education programs, the purpose of this study was to examine the types of people that visited the two museums and identify ways of widening the museums' audience base. The Biological Sciences Museum attracted occasional school groups, including groups who were offered specific educational programs (SIMPSON 2005), university students,

researchers and members from the general public however the practices for enticing new or recurring visitors into the museum did not attract regular bookings.

The Earth Sciences Museum had education programs available to schools (SIMPSON ET AL. 2000) and the community however the marketing of the programs were not extensive and, like the Biological Sciences Museum, there were no formal procedures in place to attract regular bookings.

The purpose of this project was to highlight the services of the two museums to increase their audience base. Three audiences were identified as important for the development of the two museums in question: university students, school groups and community groups. The method chosen to highlight the museum's services consisted of a series of promotional material designed to raise public awareness of the programs and resources available at Macquarie's science museums. The design and production of promotional material for the two museums consisted of a multi-layered approach targeted at the three identified audience groups. It was intended that this material will be trialed on different audiences to measure effectiveness and inform future promotional activities.

Beginning in 1967, the biology museum's collection was developed from teaching material used by the Department of Biological Sciences. In successive years the collection benefited from generous donations from museum supporters and the addition of specimens collected from field trips. In 1993 the museum was redeveloped to conform to international conservation standards in object displays.

The museum housed static and live animal exhibits located throughout the biology buildings. Open Monday to Friday from 9 am to 5 pm, the central display is exhibited in a room within building E8B. The static displays included "taxidermy, spirit (wet) specimens, fossils, corals, plastic embedded specimens, shells, Aboriginal artifacts, pinned insects, castes of dinosaur fossils and footprints and a series of human fetuses"<sup>1</sup>. The live displays consisted of Australian fauna, including "pythons, lizards, frogs, ants, stick and leaf insects, freshwater fish and freshwater crustaceans"<sup>2</sup>.

The biology museum was managed by a curator from the Department of Biology along with the university museum officer. The museum was also supported by volunteers, consultants and advisors who were assisted on occasion by students, work experience students and interns.

Many different academic areas within Macquarie University utilized the museum's resources. The museum also received organized group bookings and visits from individuals, both from within the university and outside. School groups also made bookings throughout the year. However there was no formal structure in place to maintain regular bookings.

The biology museum was promoted via a pamphlet, mentioned in the *Macquarie Experience* booklet developed by the university's marketing unit, and has been featured in local newsprint, film documentaries, and news and current affairs programs on the ABC and SBS. PhD students have also published research on specimens analyzed from the museum. Many of the exhibitions and events organized are promoted through the University's *Culture on Campus* newsletter and the museum and its education programs are promoted through the Science Education News journal (a journal of the New South Wales Science Teachers Association).

The museum has a strong sense of identity and purpose. Its website, although outdated, includes information on the museum's mission statement, its history and collection, as well as its programs and services. The website was maintained by the Department of Biological Sciences however it was last

<sup>&</sup>lt;sup>1</sup> Macquarie University Museums and Collections, Study on the value of museums and collections at Macquarie University: Data Collection, compiled by members of the MUMAC Committee (2007).
<sup>2</sup> Ibid.

updated in 2002, and referred to programs that are no longer available.<sup>3</sup> There is also evidence that the website was designed with the purpose of providing information on the museum's strategic plan and corporate structure. One of the museum's main objectives is to provide dynamic and innovative services while acting as an interface between the University and the public. On many levels, the museum achieves this goal. The museum provides original displays and inspired programs, with a distinctly object-centered focus. Links between exhibition content and scientific principles are described elsewhere (PEARCE & SIMPSON 2010).

Located in building E5A, the Earth Sciences Museum is arranged on a much smaller scale than the Biological Sciences Museum. The collection was also established from teaching material for the division of environmental and life sciences, consists of mineral and rock specimens, fossils, such as gastropods, bryozoans and brachiopods, corals and sponges. The collection is housed in cabinets throughout the earth sciences building. The collection, although impressive, has not benefited from the level of funding or supply of motivated helpers as the biology museum has.

The museum does not have a curator and there is no formal volunteer program in place, however, staff and students from the museum studies program have assisted in the design, maintenance and development of the displays. In recent years this has included thematic exhibitions entitled *Extinctions* are Forever, The Cambrian Explosion and Beyond the Smelter. The museum is maintained with a small budget from the environmental and life sciences division, and has twice received a small amount of funding from grants.<sup>4</sup>

Unlike the Biological Sciences Museum, the Earth Sciences Museum does not charge for group visits. Visitors are free to wander the halls, viewing the displays. One of the museum's strengths is that the displays are located outside busy thoroughfares and outside classrooms. The location of the displays suggests that, were the displays to be marketed correctly, word of mouth communication could prove an invaluable method for informally promoting the museum. Students often congregate in displays areas prior to or after classes in the general purpose teaching rooms and it is difficult to ascertain the impact of the exhibits in this situation. To combat this, it may be necessary to accompany each display with promotional material.

While there is a brochure about the adjacent Earth Sciences Garden, an external area designed along palaeobiogeographic principles, there is currently no advertising brochure specifically for the Earth Sciences Museum. Information on the Earth Sciences Museum is delivered in brochures for Macquarie University Museums and Collections (MUMAC) and the Science Education News journal.

Due to the limited funding available for the promotion of this collection, the museum does not have its own web portal. Instead, information on the museum's programs is available through the Macquarie University Centre for Ecostratigraphy & Palaeobiology (MUCEP) website.

The two museums were in need of formal procedures for highlighting their services. There were several approaches available for the promotion of the two museums. After completing a user needs analysis for the three audience groups, it was determined that the design and production of multi-layered promotional material for the three audience groups would generate the desired outcome.

After researching user needs and informally conducting discussions with university staff, university students and high school teachers, it become apparent that the audiences who would provide the

<sup>&</sup>lt;sup>3</sup> The Macquarie Experience Program, Public Relations and Marketing Unit. (2007) <a href="www.futurestudent.mq.edu.au/">www.futurestudent.mq.edu.au/</a> <a href="www.futures

<sup>&</sup>lt;sup>4</sup> Grants were received from the Vice-Chancellors discretionary fund in 2002 and 2003. Macquarie University Museums and Collections, Study on the value of museums and collections at Macquarie University: Data Collection, compiled by members of the MUMAC Committee (2007).

most long-term benefit to the two museums in question fall into three broad categories: university students, school groups and community groups.

## **Group 1: University students**

This audience is particularly valuable for the two museums in question. Firstly, they often have the time, energy and interest to provide a wealth of volunteer services. Students enrolled in courses through the former division of environmental life sciences come into contact with the museums through their studies and are inclined to use the museums' collections for research purposes. There is currently a student group associated with the Biological Sciences Museum, the Macquarie University Biological Sciences Society (MUBS). There is also a geological equivalent (Macquarie University Geological Sciences – MUGS), but this latter group is disconnected from the exhibits and, unlike the biology group, is not a source of volunteers. This is possibly partially due to the distributed nature of exhibits in the Earth Sciences Museum.

The practice of promoting the presence of student volunteers in a museum environment presents multiple benefits, not only for the student, but for the department as well. When deciding on a program of study, students will often choose a course where there is a practical element. Promoting the benefits of volunteering in the biological or earth sciences museums would potentially encourage more students to enroll in respective science courses, ultimately providing a financial benefit for the museums.

One of the projects outcomes will be to design a program of events that will entice Macquarie's students, and students of other universities in the Sydney area, to become involved with the two museums. The program can feature events such as film nights, guest lectures, theme evenings and exhibitions.

Promoting this program will take the form of posters and an updated biology website, with A2 posters being placed around Macquarie and other Sydney universities. The program of events will be designed to minimize the impact of extra workload on university staff. It is anticipated that both student Associations will assist in the running of the program.

#### **Group 2: School groups**

School groups are an important and necessary audience for two reasons. The museums' collections can easily be tailored to suit syllabus requirements and the schools, in return, can provide a ready supply of income for the museums. As mentioned previously, there was at the time no formal strategy for attracting school groups to the museums.

The study suggested two advertising media used to attract school groups to the biological and earth sciences museums:

- Teachers from the local district to receive an information booklet promoting the collections, education programs, exhibitions and resources of the two museums;
- A web portal will be designed to expand on the information provided in the booklet.

The purpose of designing a web portal was to provide an information resource that highlights the museums' collections and their relevance to the NSW school syllabus. The portal could, for example, draw attention to local native flora and fauna, contain fact sheets on themes relevant to the NSW science, Aboriginal studies, art and geography syllabuses, and provide completed risk assessment reports to make it easier for teachers to bring students to the museums on excursions. It would also be possible to provide access to an online booking system.

The most likely candidates for maintaining the website will be academic or general staff, or volunteers. In either case, these are people who can be considered time poor. For this reason it is essential that the website design is such that requires minimal maintenance and can be updated by those who may have limited knowledge of web design.

There are a number of other educational ventures in the district that have already developed strong links with a variety of community groups. The *Field of Mars* Educational Centre provides remarkable syllabus-based environmental and natural history education programs to school groups. The programs are hands-on and allow the students to grasp a thorough understanding of the subject matter. It would be advantageous for Macquarie's biology and earth sciences museums to develop a partnership with this centre.

## **Group 3: Community groups**

Attempting to design marketing material for an audience as incalculably and indeterminately construed as 'community groups' would be imprudent. For the purposes of this project, three community groups were identified as relevant audiences and would receive targeted advertising about the museums' services: Probus, Macquarie University Alumni Association, local bush care groups. These groups have been selected because of their proactive interest in local affairs and willingness to volunteer time and effort. If marketed correctly, the biological and earth sciences museums could become a beacon for promoting issues on local geology, flora and fauna, conservation and fossil history. A tri-fold brochure was designed to assist in promotion of the two museums. With the assistance of Macquarie's museums officer, or other relevant speakers, a series of lectures could also be presented to these audiences.

The Macquarie University Alumni Association has already proven to be a valuable supporter of the university's museums. In May 2007, the museums ran sell out tours with the tagline *Rediscover Macquarie's Hidden Treasures* (SIMPSON 2007). Targeting this group would prove to be immensely significant, as members of the alumni are loyal to the university and interested in its many programs and services. Within the alumni ranks are many influential and proactive individuals who may potentially provide future sponsorship for the museums.

#### **Promotional material**

The promotional material developed as part of this research project consisted of three media platforms:

- 1. Paper-based promotional material, such as posters, tri-fold brochures and information booklets
- 2. Website
- 3. Public programs

#### University students

The advertising program targeted towards university students took the form of a program of events specifically designed to entice this audience group into the Biological Science Museum. The program featured events such as film nights, guest lectures, trivia evenings and exhibitions. Held on a week night, the weekly program opened to the public and students were encouraged to bring guests. The program was accompanied by two styles of A2 posters to be placed around Macquarie and other Sydney universities.

The theme of the weekly program focused on the concept of *evolution*. Two posters were designed to highlight the program's theme. The first poster was styled like a 1950s science fiction movie poster.



Fig. 1 - Promotional material for university students - poster *Mutant X* and poster *Planet Evolution* 

Consisting primarily of black, grey and red colors, the main focus of the poster is a mutant creation forewarning the future of mankind.

The second poster plays on the theme of the Planet Hollywood restaurants, with the heading of *Planet Evolution*. The poster features martini glasses and promoted VIP passes to the evolution of the planet. Both poster designs play on the theme of cult identity and were chosen to appeal to student humor. It was originally intended to trial these posters on the target group, this did not occur due to subsequent developments at Macquarie in the Faculty of Science (see below).

#### School groups

Two forms of advertising media will be used to attract school groups to the biological and earth sciences museums; an information brochure and an updated website. An information booklet promoting the collections, education programs, exhibitions and resources of the two museums was to be circulated to local schools, and an updated web portal will be designed to expand on the information provided in the booklet.

The booklet consists of eight pages and highlights the programs and services available at Macquarie's two science museums and feature objects from the two collections. The purpose of the booklet is also to highlight the significance and relevance of the two museums for the NSW school syllabus.

The purpose of designing the web portal was to provide a widely accessible information resource to highlight the museums' collections and their relevance to the NSW syllabus. The website included the museum facility reports and risk assessment reports, to make visiting the museums easier for school groups.



Fig. 2 - Cover of information booklet for schools

#### Community groups

The community groups targeted included members of Probus, local bush care groups and Macquarie University's alumni. A tri-fold brochure was designed to assist in promotion of the two museums for these audiences. The brochure offers basic information on the biological and earth sciences museums with the purpose of encouraging interest in the programs that the museums offer. The brochure highlights the flexibility of the programs and the availability of both group and individual tours.

Greens, blues, reds and yellows have been used to portray the vibrancy of the museums' collections. Images of visitors experiencing the museums' dynamic displays and hands-on programs have been placed throughout the brochure to highlight the museums' many interactive elements.

#### **Outcomes**

The restructuring of departments and funding guidelines within the university highlighted the importance of promoting the cultural value of the Biological and Earth Science museums. The university environment meant that it was necessary to think more laterally about the best way of promoting these two museums. Creating an advertising program based on a multi-media layered



Fig. 3 - Brochure for community groups

platform assisted in reaching the different communication styles mostly utilized by the three chosen audience groups. As funding and resources were likely to be limited, the success of the project lay with accurately targeting the chosen audience groups. Although there are certain difficulties facing these two museums, it was envisaged that their futures were bright and would continue to provide dynamic and innovative public programs.

All of the material developed in this study has to, as yet been used for promotional purposes. The Biological Sciences Department undertook a substantial refurbishment of its teaching laboratory spaces in 2009, this enabled the development of a whole new series of integrated exhibition spaces. The original museum remains. This study has prompted the formation of a Biology Museum Advisory Group to investigate the future promotion of the museum based on the information developed in this study. Current thinking is favoring web-based developments over the other strategies outlined above. The Earth Sciences Museum is still essentially operating as a space for the development of museum studies exhibition concepts. In 2010, the Faculty of Science received a federal government grant for the refurbishment of the entire E5A building and the future of exhibition areas in this building is still under discussion.

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