Navigation and content
on university homepages

Research study by
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Summary of findings

The home page is the most visible online representation of a university's style, activities and reputation. We studied the home pages of 68 universities in Australia, Canada, the United States of America, south-east Asia and Europe, looking for emerging industry standards and opportunities for improving our home page's quality and usability.

Key audiences

Judged by the types of content on their home pages, most universities have the same key audience groups:

- Prospective (or future) students
- Current students
- Current staff
- Prospective employees
- Alumni
- Businesses that employ university graduates or could benefit from a consultancy or staff training relationship with the university
- People living in the town or suburbs adjacent to a university campus
- Journalists in the mainstream news media

Few universities target web content directly at staff of government departments or agencies.

Information architecture of a university home page

Current industry standard

Multiple navigation paths into the broader web site:

- Group static links into audience and topic categories; label the groups "For" and "About"
- Where appropriate, provide two or more links from the home page to a key content page; these links should have different titles
- Visually emphasise links to key content
- Allow users to choose between using a search engine or browsing a site map or index/directory

News and events headlines, updated at least weekly, and a link to a "News and Events" subsite.

In the "For" list, provide links to information for at least five audiences:

- Current students
- Prospective (or future) students
- Current staff
- Prospective employees
- Alumni
In the "About" list, provide links to at least four subsites:

- Research activities and services
- Course descriptions
- Description of the university
- Teaching and learning (pedagogical style and quality)
- News and events (if not linked from another section of the home page)

Elsewhere on the page, provide links to:

- Library
- Search
- Contact details, staff directory
- Site index, sitemap

Designate a space in the layout for advertising special events or services, preferably with a small clickable graphic. Update the promotional item regularly.

Help prospective students and other 'comparison shoppers' find their way around more easily by using common link titles for core content. See Link titles for more examples.

**Beyond the norm: adding value to a home page**

Clearly indicate when the page was last updated with new content.

Avoid jargon and vague link titles. Use clear, specific link titles that indicate what users should expect to see when they click.

Keep the focus on external audiences. Move intranet content to subsidiary pages: don't use the home page as a bookmarks file for students and staff.

Don't assume people already know who you are, where you are and what you do. Put a positioning statement on the home page: goals, values, motto, marketing tagline.

Every pixel is precious: use images to support your key promotional messages, not merely as decoration. Publish a relevant photo with the headline of a current media release or news story.

**Recommendations for the University of Melbourne**

Should we adopt the industry standard, using link titles and information architecture models that are already known and understood by web users? Alternatively, we could elect to try a different IA model (a newspaper metaphor, for example, or a myYahoo-style portal) and attempt to distinguish ourselves from other universities. There is a risk in individualism that we would compromise the usability of our site.

Add the Group of Eight logo to the home page, and link it to the Group of Eight web site. This will bring us into line with the majority of other Group of Eight members' sites.

Ask stakeholders for details about the key marketing messages and themes the University wishes to convey. Based on these messages and themes, review the design and content of the home page. Decide whether to emphasise factual content or emotional impact. Use images to convey specific marketing messages instead of serving mainly decorative purposes.
Consider including a graphic advertisement on the home page, promoting university-wide events such as Discovery Day and Orientation or spotlighting special campus events such as a research expo or a Red Cross blood drive. The graphic should be small, eye-catching, accompanied by explanatory text and linked to a relevant web page. It should change at least weekly.

Consider placing on the home page a short version of the positioning statement from "The Melbourne Agenda". Particularly for an international audience, this would help distinguish us from other Australian universities.

Clearly identify and understand the audiences for research-related information and promotions. Review presentation of research information on the web so that it is more targeted and less generalised.

Review link titles on the home page. Where appropriate for our audiences and content, use common words and phrases from the lists in this report.

In planning any changes to link titles or organisation of content on the home page, test all proposed solutions with real web users who represent the University's key audiences. Use the lists and examples provided in this report to conduct card-sorting and other user-testing activities.

Conduct user-testing to determine whether arranging home-page content into "For" and "About" sections would improve the site's usability for current students and staff (these two groups are the most numerous users of the web site).
**Goal of this study**

Identify current practice for the link titles and organisation of content on university home pages.

**Method**

1. Identify 68 home pages to be reviewed and analysed:
   - All Australian institutions, as defined by the federal Department of Education, Science and Training
   - Universitas 21 members
   - Ivy League colleges

2. Create a checklist of characteristics (see Attachment C: Checklist). The checklist is based on the one used for the 2002 "Best Foot Forward" benchmarking project.

3. Complete a checklist for each home page.

4. Note any additional features of interest to Web Centre. Identify examples of good and poor practice.

5. Collate results and analyse.

6. Write a report summarising findings.

7. Distribute draft report for peer review.

8. Revise report (if required) and release.

The study was conducted in July and August 2004 by Claire Spencer and Margaret L Ruwoldt.

**Results and analysis**

**Freshness of content**

Usability studies over several years have indicated that web users consider the 'freshness' of content when judging whether a site is credible and trustworthy.

Each week most universities would have opportunity to publicise at least one or two of the following:

- Social, sporting or arts activities on campus
- A lecture, conference or seminar that's open to the public
- Academic or student visitors
- Media releases about research or teaching at the university
- Academic experts quoted in external media
- News of interest to current staff or students
This kind of promotional information is ideal as 'fresh' content for a university's home page. It can often be automatically served from databases, reducing the need for a webmaster to manually update the home page.

We looked for dates, keywords ("Today's events on campus") and media-release headlines as indicators of content freshness on the 68 home pages.

Almost two-thirds of universities had updated their web pages during the week we collected screenshots for this study.

<table>
<thead>
<tr>
<th>NEW CONTENT ADDED</th>
<th>NUMBER OF UNIVERSITIES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Today</td>
<td>11</td>
</tr>
<tr>
<td>This week</td>
<td>33</td>
</tr>
<tr>
<td>This month</td>
<td>13</td>
</tr>
<tr>
<td>Unknown</td>
<td>11</td>
</tr>
</tbody>
</table>

**Organisation of content**

Almost all universities provide multiple navigation pathways into their web sites. They usually achieve this two or more of the following ways:

- Visually emphasising links to key content
- Providing two or more links from the home page to a key content page; the links typically have different titles and are displayed under different subheadings or in different sections of the home page
- Allowing users to choose between using a search engine or browsing a site map or index/directory
- Highlighting topical or timely links in advertisement-style graphics
- Using the "For" and "About" groupings of links, or using other subheadings for groups of semantically-related links

Most universities offer a search box on their home page, and 40 allow advanced or targeted searching from the home page.

Forty-nine universities group links under the subheadings "For" or "Information for". The links under these headings are named for different web audiences: prospective students, media, visitors et cetera.

Fifty-five universities group links under the subheadings "About" or "Information about". The links under these headings are named for different topics: the university, research, courses and so on.

More than half the universities use both "For" and "About" groupings. Most of these universities label the groups of links with subheadings.

Some homepages have no subheadings, instead showing semantic relationships visually by setting groups of links apart from each other. This could degrade a page's usability and accessibility: users of screen-reader devices and text-only browsers could find the content confusing or disorganised.
Branding and advertising

Content emphasis

The style or emphasis of a home page's content can be used to convey marketing themes about the institution. For example, photos of people of various races engaged in social activities, with text links to clubs and sports team pages, would indicate the university considers its cosmopolitan campus lifestyle an important selling point in recruiting new students.

Of the 68 home pages we looked at, 39 emphasise factual, statistical information on their homepages. Twenty-seven emphasise lifestyle and the atmosphere of their campuses, and the remaining two were evenly balanced.

A home page's style should be based on the university's communication and marketing plans, and any final decisions about how to convey a marketing theme or message should rest on testing designs and content with actual web users.

Use of images

Forty-eight of the surveyed home pages use images primarily as visual decoration; only 24 pages use images to convey specific information or relate directly to text content on the home page. (This excludes graphic advertisements, which are addressed below.)

Using images as decoration increases the size of a web page and its download time, without necessarily enhancing the page's usability or accessibility.

Using images to convey specific information, or as illustration for text content, can add meaning and clarity to a web page, and can effectively convey key marketing themes or messages.

Featured items or promotions (advertisements)

Excluding news and events listings (which are addressed in the Content types section of this report) almost half the surveyed home pages have some sort of featured item or advertisement:

- 21 pages have graphic advertisements for university events, facilities or services
- 10 pages have text advertisements or promotional items

The graphic advertisements are typically used for externally-focused or student-specific promotions. The graphics are usually small, though two universities have large 'feature' photos of graduates with links to profiles of those alumni.

Advertisements relevant mainly to staff of the university tend to be text-only.

The University of Michigan visually separates externally-focused news and advertising/marketing elements from the more internally-focused items listed under "Michigan Focus".
Position statement on home page

Most universities seem to assume web users have some prior knowledge about the institution's history, strategic directions or marketing themes.

Fifteen home pages display a brief positioning statement about the university's mission.

Only one home page specifically mentions the university's history; another has a 'featured item' link to a subsite about the institution's centenary.

Profile of research activities

Changes to government funding of research, public perceptions of universities and increasing pressure to commercialise the products of research mean that most universities are keen to promote their R&D activities. This is reflected in university home pages.

Many home pages have links aimed at particular audiences, including postgraduate research students. These links are discussed in "For" links.

In general, though, research promotion is generalised and not clearly aimed at a specific audience or market segment. Forty-seven of the 68 home pages have a "Research" link. Some go further, with a group of research-related links gathered together under a "Research" subheading.
Other universities combine the word "research" with another keyword or phrase, producing link titles like:

<table>
<thead>
<tr>
<th>Research &amp; centers</th>
<th>Research @ [name of university]</th>
</tr>
</thead>
<tbody>
<tr>
<td>Research &amp; commercialisation</td>
<td>Research activities</td>
</tr>
<tr>
<td>Research &amp; consultancy</td>
<td>Research areas</td>
</tr>
<tr>
<td>Research &amp; development</td>
<td>Research degrees</td>
</tr>
<tr>
<td>Research &amp; industry partners</td>
<td>Research Fellow Investment</td>
</tr>
<tr>
<td>Research &amp; innovation</td>
<td></td>
</tr>
</tbody>
</table>

News headlines on home pages often include one or two research-related stories, which helps raise the public profile of research activities at the institution.

Other research-related link titles include:

<table>
<thead>
<tr>
<th>Business</th>
<th>Commercial project</th>
</tr>
</thead>
<tbody>
<tr>
<td>Business &amp; community</td>
<td>Commercial services</td>
</tr>
<tr>
<td>Business &amp; community links</td>
<td>Corporate connections</td>
</tr>
<tr>
<td>Business &amp; government</td>
<td>Doing business with [name of university]</td>
</tr>
<tr>
<td>Business &amp; industry</td>
<td>Industrial liaison</td>
</tr>
<tr>
<td>Business &amp; services</td>
<td>Industry &amp; employers</td>
</tr>
<tr>
<td>Business opportunities</td>
<td>Industry collaboration</td>
</tr>
<tr>
<td>Business/community</td>
<td>Industry liaison</td>
</tr>
<tr>
<td>Consulting services</td>
<td>Industry/employers</td>
</tr>
</tbody>
</table>

**Link titles**

**Most-used link titles**

The 68 surveyed home pages use a total of 1380 links to provide navigation into their underlying web sites.

The chart below shows the link titles used 10 or more times across all 68 home pages.
Almost half (44.42 per cent) of all links on the 68 home pages have unique titles: that is, the link titles are not repeated on a single page or on another university's page. This suggests a large degree of localisation in web content: universities tailor their navigation links to suit their own particular jargon and local audiences.

To get a better understanding of these unique link titles, and whether there were in fact any commonalities between them, we analysed the types of information and services they represent. See Content types for this analysis.

### Link titles: frequency of use on 68 home pages

<table>
<thead>
<tr>
<th>NUMBER OF UNIQUE LINK TITLES</th>
<th>OCCURRENCES PER LINK (FREQUENCY BAND)</th>
<th>TOTAL LINKS IN THIS FREQUENCY BAND</th>
<th>% OF TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>21</td>
<td>10-47</td>
<td>411</td>
<td>30%</td>
</tr>
<tr>
<td>21</td>
<td>5-9</td>
<td>140</td>
<td>10%</td>
</tr>
<tr>
<td>86</td>
<td>2-4</td>
<td>216</td>
<td>16%</td>
</tr>
<tr>
<td>613</td>
<td>1</td>
<td>613</td>
<td>44%</td>
</tr>
</tbody>
</table>

**741**                          |                                          | **1380**                           | **100%**   |

Thirty per cent of all link titles are used 10 or more times across the 68 home pages. Sometimes the link title is duplicated on a single page; mostly the replication is across different pages.

Many prospective students and staff visit more than one university web site when choosing where to apply. Using some or all of these common link titles on a university
home page, and elsewhere on the top levels of the site, should help these users find their way around more easily. Of course, the final choice of link titles should always be based on usability testing with real users who represent the geographic and cultural location of the individual university.

### Link titles used 10 or more times on 68 home pages

<table>
<thead>
<tr>
<th>LINK TITLE</th>
<th>OCCURRENCES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Research</td>
<td>47</td>
</tr>
<tr>
<td>Current students</td>
<td>36</td>
</tr>
<tr>
<td>Alumni</td>
<td>33</td>
</tr>
<tr>
<td>Library</td>
<td>33</td>
</tr>
<tr>
<td>Prospective students</td>
<td>28</td>
</tr>
<tr>
<td>Staff</td>
<td>27</td>
</tr>
<tr>
<td>Search</td>
<td>26</td>
</tr>
<tr>
<td>International students</td>
<td>20</td>
</tr>
<tr>
<td>Visitors</td>
<td>17</td>
</tr>
<tr>
<td>About [name of university]</td>
<td>16</td>
</tr>
<tr>
<td>News &amp; events</td>
<td>16</td>
</tr>
<tr>
<td>Contact us</td>
<td>13</td>
</tr>
<tr>
<td>Teaching &amp; learning</td>
<td>13</td>
</tr>
<tr>
<td>Future students</td>
<td>12</td>
</tr>
<tr>
<td>[name of university]</td>
<td>11</td>
</tr>
<tr>
<td>Contact</td>
<td>11</td>
</tr>
<tr>
<td>Quick links</td>
<td>11</td>
</tr>
<tr>
<td>Sitemap</td>
<td>11</td>
</tr>
<tr>
<td>Campuses</td>
<td>10</td>
</tr>
<tr>
<td>Faculties</td>
<td>10</td>
</tr>
<tr>
<td>The university</td>
<td>10</td>
</tr>
</tbody>
</table>
### Link titles used 5-9 times each:

<table>
<thead>
<tr>
<th>Link titles</th>
<th>Link titles</th>
</tr>
</thead>
<tbody>
<tr>
<td>Administration</td>
<td>Directories</td>
</tr>
<tr>
<td>Libraries</td>
<td>Events</td>
</tr>
<tr>
<td>Media</td>
<td>Faculty &amp; staff</td>
</tr>
<tr>
<td>Help</td>
<td>Group of 8 (logo)</td>
</tr>
<tr>
<td>Jobs at [name of university]</td>
<td>International</td>
</tr>
<tr>
<td>Students</td>
<td>Staff directory</td>
</tr>
<tr>
<td>Contacts</td>
<td>A-Z index</td>
</tr>
<tr>
<td>Courses</td>
<td>Current staff</td>
</tr>
<tr>
<td>Giving to [name of university]</td>
<td>Maps</td>
</tr>
<tr>
<td>my [name of university or computer system]</td>
<td>News</td>
</tr>
<tr>
<td></td>
<td>Webmail</td>
</tr>
</tbody>
</table>

### Link titles used 2-4 times each:

<table>
<thead>
<tr>
<th>Link titles</th>
<th>Link titles</th>
</tr>
</thead>
<tbody>
<tr>
<td>About the university</td>
<td>Jobs</td>
</tr>
<tr>
<td>About this site</td>
<td>Learning &amp; teaching</td>
</tr>
<tr>
<td>Academic programs</td>
<td>Login</td>
</tr>
<tr>
<td>Academics</td>
<td>Medical center</td>
</tr>
<tr>
<td>Academics &amp; research</td>
<td>New students</td>
</tr>
<tr>
<td>Admission</td>
<td>News and events</td>
</tr>
<tr>
<td>Admissions</td>
<td>Orientation</td>
</tr>
<tr>
<td>Admissions &amp; financial aid</td>
<td>Partnerships</td>
</tr>
<tr>
<td>All about the university</td>
<td>People &amp; contacts</td>
</tr>
<tr>
<td>Alumni &amp; friends</td>
<td>People/web search</td>
</tr>
<tr>
<td>Athletics</td>
<td>Postgraduate students</td>
</tr>
<tr>
<td>A-Z directory</td>
<td>Postgraduate study</td>
</tr>
<tr>
<td>Business &amp; community</td>
<td>President's welcome</td>
</tr>
<tr>
<td>Business &amp; industry</td>
<td>Programs &amp; courses</td>
</tr>
<tr>
<td>Campus life</td>
<td>Prospective</td>
</tr>
<tr>
<td>Campus maps</td>
<td>Prospective staff</td>
</tr>
<tr>
<td>Campuses &amp; maps</td>
<td>Publications</td>
</tr>
<tr>
<td>Community</td>
<td>Quick links (drop-down menu)</td>
</tr>
<tr>
<td>Consulting services</td>
<td>Quickfind</td>
</tr>
<tr>
<td>Contact [name of university]</td>
<td>Research &amp; consultancy</td>
</tr>
<tr>
<td>Corporate connections</td>
<td>Research &amp; development</td>
</tr>
<tr>
<td>Departments</td>
<td>Research &amp; industry partners</td>
</tr>
<tr>
<td>Development application</td>
<td>Research @ [name of university]</td>
</tr>
<tr>
<td>Education</td>
<td>Schools</td>
</tr>
</tbody>
</table>
Another 613 link titles are used once only, on a single web page, and not repeated anywhere in the sample.

"For" links

Among the 49 universities that have a set of audience-oriented links labelled "For," there are clearly some common audiences.

The pie chart below indicates the most commonly-used link titles in this section of university home pages. This chart applies only to the 49 universities that have a "For" section on their home pages.
"For" links

Current students 15%
Prospective students 12%
Staff 11%
Alumni 10%
International students 9%
Future students 5%
Visitors 8%
Other <10 occurrences 30%

<table>
<thead>
<tr>
<th>LINK TITLES IN A &quot;FOR&quot; SECTION</th>
<th>OCCURRENCES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Current students</td>
<td>30</td>
</tr>
<tr>
<td>Prospective students</td>
<td>25</td>
</tr>
<tr>
<td>Staff</td>
<td>23</td>
</tr>
<tr>
<td>Alumni</td>
<td>21</td>
</tr>
<tr>
<td>International students</td>
<td>18</td>
</tr>
<tr>
<td>Visitors</td>
<td>17</td>
</tr>
<tr>
<td>Future students</td>
<td>10</td>
</tr>
<tr>
<td>Other</td>
<td>60</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>204</strong></td>
</tr>
</tbody>
</table>
Link titles with fewer than 10 occurrences in a "For" section are:

- Academics
- Alumni & friends
- Business & community
- Business & industry
- Community
- Current staff
- Faculty & staff
- For alumni
- For prospective students
- For staff
- Graduates/productions
- Media
- New students
- Postgraduate students
- Prospective
- Prospective staff
- Research
- Research & industry partners
- Students

**About" links**

The pie chart below identifies the most commonly-used link titles in the "About" section of 55 university home pages.
<table>
<thead>
<tr>
<th>LINK TITLES IN AN &quot;ABOUT&quot; SECTION</th>
<th>OCCURRENCES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Research</td>
<td>33</td>
</tr>
<tr>
<td>News &amp; events</td>
<td>12</td>
</tr>
<tr>
<td>[name of university]</td>
<td>11</td>
</tr>
<tr>
<td>Library</td>
<td>11</td>
</tr>
<tr>
<td>About [name of university]</td>
<td>10</td>
</tr>
<tr>
<td>Teaching &amp; learning</td>
<td>10</td>
</tr>
<tr>
<td>The university</td>
<td>10</td>
</tr>
<tr>
<td>Other &lt;10 occurrences</td>
<td>97</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>222</strong></td>
</tr>
</tbody>
</table>

Link titles with fewer than 10 occurrences in an "About" section are:

- About the university
- Academic programs
- Academics & research
- Administration
- Admission
- Admissions
- Admissions & financial aid
- Alumni
- Athletics
- Campus life
- Campuses
- Campuses & maps
- Contact us
- Courses
- Employment
- Faculties
- Faculties & departments
- Faculties & divisions
- Giving to [name of university]
- Health/medical center
- International
- Jobs
- Jobs at [name of university]
- Learning & teaching
- Libraries
- Medical center
- News
- People/web search
- Programs & courses
- Research & consultancy
- Research & development
- Research @ [name of university]
- Schools
- Search
- Services
- Services & facilities
- Student life
- Student services
- Studying at [name of university]
- Teaching
- The uni

Navigation and content on university home pages

Web Centre
The University of Melbourne
Other common link titles

All the surveyed home pages have some links that do not appear in either a "For" or an "About" section. The most common 'other' link titles are indicated below.

Other link titles that appear fewer than 10 times each, and not in a "For" or "About" section, are:

- About [name of university]
- About this site
- Administration
- All about the university
- Alumni
- A-Z directory
- A-Z index
- Campus maps
- Campuses
- Community
- Consulting services
- Contact [name of university]
- Contacts
- Corporate connections
- Current students
- Departments
- Intranet
- Jobs
- Jobs at [name of university]
- Libraries
- Login
- Maps
- Media
- my [name of uni or computer system]
- News
- News & events
- News and events
- Orientation
- Partnerships
- People & contacts
- Postgraduate study
- President's welcome
Content types

Many universities have their own jargon, and the use of language varies from city to city and country to country. This means a simple count of identical link titles may hide some common features of university web sites, because (for example) each university gives its own name to its online learning system or staff intranet.

To better understand the common types of content and services linked from university home pages, we categorised each of the 1380 link titles and looked for themes and similarities within those categories.

News and events

Nineteen home pages have a link titled "News and Events" or "News & Events". This equates to 4 per cent of all links examined in this study.
Examples of 'events' links:

- Ask Me day
- Conferences, seminars
- Conferences/events
- Corporate events
- Dates of semesters
- Events
- Events calendar
- Important dates
- International Week
- NUS centennial
- Open Day
- Open day 8 September
- Principal dates
- Semester dates
- Things to do/UVA news
- Today @ Columbia

Examples of 'news' links:

- 2005 higher education reforms – latest information
- 2005 higher education reforms for students and staff
- Announcement
- Bulletins
- Columbia news
- ECU Update magazine
- Latest news
- Latest university briefing
- More ECU news
- News
- News & events
- News and events
- News centre
- News review
- News, events & notices
- Newsletter
- Noticeboard
- UQ news

As well as a link to a secondary web site, news stories and events information are provided on home pages in various ways. Examples are summarised in the table below.

<table>
<thead>
<tr>
<th>TYPE OF CONTENT ON HOME PAGE</th>
<th>NUMBER OF SITES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Link to news, events or &quot;news and events&quot; site</td>
<td>49</td>
</tr>
<tr>
<td>News headline/s</td>
<td>47</td>
</tr>
<tr>
<td>Events headline/s</td>
<td>20</td>
</tr>
<tr>
<td>&quot;For&quot; link for media or journalists</td>
<td>14</td>
</tr>
<tr>
<td>News photo</td>
<td>12</td>
</tr>
<tr>
<td>Link to university magazine or newspaper</td>
<td>5</td>
</tr>
<tr>
<td>Directory of experts</td>
<td>3</td>
</tr>
<tr>
<td>Events photo</td>
<td>2</td>
</tr>
</tbody>
</table>
Other content types

To get a better understanding of the types of information linked from university home pages, we categorised the 1380 link titles into groups of related topics.

The categories are summarised below. Attachment D lists examples of links in each category.

DIRECTORY CATEGORY

Description: Directories, site maps, lists and search engines that help users find their way around a web site or make contact with the university.

Number of links: 249

Comment: Directories, site maps and search engines are normally used as adjuncts to the main navigation of a web site. The number of links in this category indicates that universities are having difficulty making their sites easily navigable, and feel a need to supplement their "for" and "about" navigation with other pathways into the site.

INTRANET CATEGORY

Description: Portals, learning management systems and other content clearly intended for current staff or students.

Number of links: 113

Comment: At most Australian universities, the majority of web and network traffic is likely to come from current students and staff.

This is a large, internal audience with information needs that are very different from the needs of external users of a university's home page.

The size of these internal audiences, and their regular use of enterprise systems (HR, finance, online learning, email) warrants separating 'their' web content and services from the public web site.

Instead of providing individual links from the home page to enterprise systems, a single intranet site could be linked from the home page. The intranet site could serve both students and staff, as many of their information needs are similar. If more sophisticated technology is available, people could login to receive more targeted information (with a content management system) or a personalised home page (with portal technology).

ABOUT CATEGORY

Description: Corporate information describing or introducing the university.

Number of links: 103

Comment: Clearly an important element in a web site intended as the public face of a university.
COURSES CATEGORY

**Description**: Lists of courses and academic disciplines, introductory pages about studying at the institution, handbooks, graduate outcomes and levels of study.

**Number of links**: 84

**Comment**: Different from the Directory category, because course information for a university is an analogue of the catalogue for a bookshop or department store.

Course descriptions are of interest to three main audiences: prospective students, current students, and course coordinators. Another small, but significant, group of users is the staff who produce printed course brochures, handbooks and marketing material.

CAMPUSSES CATEGORY

**Description**: Travelling to the campus, wayfinding on campus, student accommodation, services and facilities available on campus, descriptions of campuses, webcams and virtual tours.

**Number of links**: 81

**Comment**: Generally done badly, with a lack of clarity about users' information needs and few standard ways of presenting maps, addresses, promotional images, transport details and other wayfinding information.

STUDENTS PROSPECTIVE CATEGORY

**Description**: Information about applying to study at the university.

**Number of links**: 73

**Comment**: Prospective students increasingly use the web to investigate their study options before applying to a particular university. Recognising this audience's importance, most university home pages have at least one clearly-labelled link to marketing/student recruitment information.

Other information and services of interest to this audience group could include Research, Campuses, Courses and Services. Any subsidiary pages under the "Prospective students" link should be cross-linked to these other site areas.

There is an emerging trend towards calling this audience "Future students", perhaps recognising that—in these days of TAFE programs, full-fee higher education places and fee-for-service single subjects—it is possible to study at a university without following traditional entry paths and selection processes. Where universities once selected students solely on the basis of academic results, increasingly it's becoming possible for a student to select a university on the basis of personal preference and an ability to pay tuition fees.
RESEARCH CATEGORY

**Description**: Research activities, commercialisation of research, consultancy services, fields of research expertise, research degrees and initiatives intended to increase the profile of the university's research.

**Number of links**: 73

**Comment**: Because we used Universitas 21 and Ivy League universities as the international component of this study, the sample is somewhat biased towards 'research-intensive' universities.

In Australia, changes to government funding and increased privatisation of research have stimulated universities to present more research-related information on their web sites. Many universities offer research-based consultancy services as income-generating activities. As well, some universities are concerned about promoting science and technology as career paths for young people.

Consequently a significant number of Australian universities have at least a "Research" link on their home page. There appears to be no clear 'good practice' standard for the type and focus of research information provided; this may emerge over time.

COMMUNITY CATEGORY

**Description**: Sport, social and arts activities, community development, services for businesses, donating to the university, information aimed at the university's local community.

**Number of links**: 69

**Comment**: While universities sometimes make gestures of goodwill towards their geographically local communities, in general the institution exists to serve its internal community: its students and staff.

Nevertheless, some university facilities and activities are available to the general public. This is particularly so in the USA where student sports teams draw large crowds to their matches and some institutions (Yale, for example) have invested heavily in developing business and social infrastructure in their local area.

In Australia, some universities invite donations and bequests from the public; this follows a well-established American model of seeking philanthropic support from alumni and businesspeople.

ALUMNI CATEGORY

**Description**: Information for graduates of the university.

**Number of links**: 59

**Comment**: Half the links in this category are to "Alumni", with no indication about what kind of information or services the web user should expect to find.

The other universities seem to regard their alumni as potential sources of financial donations or political support, as employers of students and other alumni, or as the parents of current or future students.
NEWS CATEGORY

**Description**: News releases, newsletters and magazines, lists of experts available for media comment, and other information for journalists and editors.

**Number of links**: 59

**Comment**: Many universities combine their Events and News content into a single subsite, publicised with headlines and other links from the home page. Together the News and Events categories are represented on all but two or three of the 68 home pages.

A few universities have heeded the advice of the Nielsen Norman Group\(^1\) and provide home-page links to help journalists find experts and information quickly. McGill University goes a step further, using a newspaper metaphor for the structure and content of its home page.

LINKS CATEGORY

**Description**: Consortiums, spin-off companies, research and business units with their own recognised name, and information about the university's links with external businesses.

**Number of links**: 57

**Comment**: Linking to external sites can enhance an organisation's credibility on the web: it demonstrates confidence, business alliances and (sometimes) a sound reputation in the off-line world.

Some navigation links in this category should probably be in the Directory category. They are categorised as Links because are presented in ways that do not make clear their purpose or relationship to the university: they convey the impression that the company or centre is an independent organisation, rather than a wholly-owned subsidiary of the university. This sort of ambiguity could raise doubts in the web user's mind about the validity of other, genuinely outward-looking relationships.

LIBRARY CATEGORY

**Description**: University libraries.

**Number of links**: 53

**Comment**: The library is obviously an important online resource for students and staff: three-quarters of the surveyed home pages have a link to the university library. Even universities with fully-fledged student and staff portals (Monash and Deakin, for example) have a "Library" link on their home pages.

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\(^1\) Kara Pernice Coyne and Jakob Nielsen (2001) "Designing Websites to Maximize Press Relations". Nielsen Norman Group, Fremont, California, USA.
EMPLOYMENT CATEGORY

**Description**: Job vacancies, promotional material aimed at prospective employees, and career development information for current staff.

**Number of links**: 51

**Comment**: Over the next 5-10 years, Australian universities are expected to face a shortage of qualified academic and specialist general staff. Recruitment of excellent early-career staff is therefore becoming a strategic priority, and it's important that a public web site should provide sufficient, appropriate information to attract top-quality job applicants.

As well, universities need to provide career development, regular communication and other services for their current staff. This could be achieved with a well-designed university-wide intranet site, particularly if portal or content management technology is available to manage and customise the interface for individuals and departments.

STUDENTS CURRENT CATEGORY

**Description**: Intranet pages for enrolled students. Exam and subject timetables.

**Number of links**: 42

**Comment**: This is a large, internal audience with information needs that are very different from the needs of external users of a university's home page.

The size of a university's student body, and students' regular use of enterprise systems (online learning, email) warrants separating 'their' web content and services from the public web site.

This could be achieved with a well-designed intranet site, particularly if portal or content management technology is available to manage and customise the interface.

SERVICES CATEGORY

**Description**: Support services for students and staff, shops, medical and dental clinics on campus, and e-commerce facilities.

**Number of links**: 36

**Comment**: Links in this category can have a dual purpose: they provide easy access to services for current students and staff; and they help to market the university as a desirable place to live, study and work.

MANAGEMENT CATEGORY

**Description**: Strategic plans, organisational structure and governance, budget and policy information.

**Number of links**: 30

**Comment**: A central principle of customer service, customer relationship and user-centred design practices is that the organisational structure and bureaucracy should not interfere with a customer's experience of an organisation. The presence of
Management content on a public home page usually indicates the organisation is more interested in its bureaucracy than in its people.

QUALITY CATEGORY

**Description**: The university's approach to teaching students.

**Number of links**: 24

**Comment**: A "teaching and learning" link is a common feature of Australian university home pages. For a web user unfamiliar with the phrase, this may be a vague and confusing link title. T&L content for staff could usefully be moved into an intranet site. Information for public consumption (marketing or peer review, for example) should be clearly labelled, avoiding jargon.

Though the Australian Universities Quality Agency has audited and reported on several universities over the last two years, few home pages have prominent links to quality-assurance documentation or AUQA reports.

STUDENTS INTERNATIONAL CATEGORY

**Description**: Information specifically for international students.

**Number of links**: 24

**Comment**: Some recent studies of student perceptions have found that international students prefer to be treated as part of the mainstream student population, rather than being identified as a separate special-interest minority group. However, there remain a range of services and information needs (visas, for example) that are unique to international students.

See also the International category, below.

EVENTS CATEGORY

**Description**: Specific campus-based events and to calendars of dates and events. Links to combined news-and-events subsites are counted in the News category above.

**Number of links**: 22

**Comment**: As well as being of interest to students, staff and the local community, a list of current and forthcoming events can bolster a university's reputation. Public lectures and forums, arts and cultural activities all contribute to perceptions of the university as exciting, vibrant and intellectually stimulating.

See also the News category, above.

WEB INFORMATION CATEGORY

**Description**: Help and FAQ pages, metadata about the university's web site, and mechanisms for commenting about the web site.

**Number of links**: 20

**Comment**: Like the Directory category, above, this category is primarily concerned with helping web users find their way around the site.
STUDENTS CATEGORY

**Description**: Student-related links that do not differentiate between prospective and current students, or levels of study.

**Number of links**: 16

**Comment**: Visual grouping in a page layout may help to clarify the purpose and likely audience for these links. However, more explanatory link titles would be more helpful and accessible.

INTERNATIONAL CATEGORY

**Description**: Non-specific "International" links, plus links to information about the university's overseas connections or efforts to internationalise its curriculum. See also the International Students category, above.

**Number of links**: 15

**Comment**: While being seen as "international" is presumably a positive, it's clear that universities have widely different interpretations of what "international" actually means. Any such links on a home page should clearly state what sort of "international" information they lead to.

STUDENTS NEW CATEGORY

**Description**: Information specifically for students commencing their first year of study.

**Number of links**: 10

**Comment**: North American universities, in particular, have a tradition of providing programs to help new students adjust to the university environment. This is an emerging trend at Australian universities, particularly as concern increases about student attrition rates and the related government funding issues.

OTHER CATEGORY

**Description**: University-specific jargon or miscellaneous content that appears only once, on a single university site.

**Number of links**: 17

**Comment**: Not analysed.

**Design processes**

Excepting the analysis of image content (see Use of images), in this review we did not examine design and layout of university home pages.

To do the content and structural analysis for this study, we stuck printed copies of all the home pages onto a blank wall opposite the meeting room and staff kitchen. We learned three things from this wall.

First, Web Centre staff and visitors walk past this wall regularly, and many people commented on the visual impact of the display—a useful reminder that a graphic display
can be a powerful tool for presenting data and explaining the nature of information architecture.

Second, the wall encouraged conversation and collaboration. Passers-by often paused to talk about something that caught their eye. Good for building relationships, and good for working out ideas that could contribute to any future design review by the Web Centre.

Third, on seeing all the pages together, we realised a large proportion of universities use blue as the dominant color on their home pages, and that a horizontal band of blue is a common design feature.
Attachment A: Background

In 2002 the Web Centre published "Best Foot Forward", a report identifying current good practice in university web sites. The study analysed the home pages of more than 40 universities in Australia, New Zealand, North America, Europe and Asia. It examined factors such as:

- Design
- Functionality
- Usability
- Content
- Navigation models

The results of the "Best Foot Forward" study were used during a 2002 redevelopment of the University of Melbourne's central web site.

In 2004 the Web Centre is again reviewing the University's central web site. Rather than undertaking a single, large-scale study of current practice in university web sites, we are looking at specific subsets of the "Best Foot Forward" topics.

In the first half of 2004, we reviewed the 'technical' aspects of university home pages: the ratio of visible text content to total page size, number of links, number of images, coding validation and grammars, and basic accessibility indicators. The result of that study was a 'homepage scorecard' comparing the University of Melbourne's performance with that of peer universities.

Another 2004 study identified current good practice in the presentation of corporate publications on university web sites.

Goals of this study

This is a desktop research and benchmarking project to identify current good practice for the content and navigation on a university's home page.

Specifically, we want to identify:

- Whether universities emphasise factual or qualitative information
- How often home-page content is updated
- How links are organised to provide pathways into the web site
- Whether images are used primarily as decoration, or whether they are directly related to text content
- The kinds of promotional content commonly appearing on university home pages

The outcome of this project is a written report.
# Attachment B: List of universities

## Australia

<table>
<thead>
<tr>
<th>University</th>
<th>Website</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adelaide University</td>
<td><a href="http://www.adelaide.edu.au/">http://www.adelaide.edu.au/</a></td>
</tr>
<tr>
<td>Australian Catholic University</td>
<td><a href="http://www.acu.edu.au/">http://www.acu.edu.au/</a></td>
</tr>
<tr>
<td>Australian Film Television and Radio School</td>
<td><a href="http://www.afrs.edu.au/">http://www.afrs.edu.au/</a></td>
</tr>
<tr>
<td>Australian Maritime College</td>
<td><a href="http://www.amc.edu.au/">http://www.amc.edu.au/</a></td>
</tr>
<tr>
<td>Australian National University</td>
<td><a href="http://www.anu.edu.au/">http://www.anu.edu.au/</a></td>
</tr>
<tr>
<td>Avondale College</td>
<td><a href="http://www.avondale.edu.au/">http://www.avondale.edu.au/</a></td>
</tr>
<tr>
<td>Ballarat University</td>
<td><a href="http://www.ballarat.edu.au/">http://www.ballarat.edu.au/</a></td>
</tr>
<tr>
<td>Bond University</td>
<td><a href="http://www.bond.edu.au/">http://www.bond.edu.au/</a></td>
</tr>
<tr>
<td>Central Queensland University</td>
<td><a href="http://www.cqu.edu.au/">http://www.cqu.edu.au/</a></td>
</tr>
<tr>
<td>Charles Darwin University</td>
<td><a href="http://www.cdu.edu.au/">http://www.cdu.edu.au/</a></td>
</tr>
<tr>
<td>Charles Sturt University</td>
<td><a href="http://www.csu.edu.au/">http://www.csu.edu.au/</a></td>
</tr>
<tr>
<td>Curtin University</td>
<td><a href="http://www.curtin.edu.au/">http://www.curtin.edu.au/</a></td>
</tr>
<tr>
<td>Deakin University</td>
<td><a href="http://www.deakin.edu.au/">http://www.deakin.edu.au/</a></td>
</tr>
<tr>
<td>Edith Cowan University</td>
<td><a href="http://www.cowan.edu.au/">http://www.cowan.edu.au/</a></td>
</tr>
<tr>
<td>Flinders University</td>
<td><a href="http://www.flinders.edu.au/">http://www.flinders.edu.au/</a></td>
</tr>
<tr>
<td>Griffith University</td>
<td><a href="http://www.gu.edu.au/">http://www.gu.edu.au/</a></td>
</tr>
<tr>
<td>James Cook University</td>
<td><a href="http://www.jcu.edu.au/">http://www.jcu.edu.au/</a></td>
</tr>
<tr>
<td>La Trobe University</td>
<td><a href="http://www.latrobe.edu.au/">http://www.latrobe.edu.au/</a></td>
</tr>
<tr>
<td>Macquarie University</td>
<td><a href="http://www.mq.edu.au/">http://www.mq.edu.au/</a></td>
</tr>
<tr>
<td>Murdoch University</td>
<td><a href="http://www.murdoch.edu.au/">http://www.murdoch.edu.au/</a></td>
</tr>
<tr>
<td>Newcastle University</td>
<td><a href="http://www.newcastle.edu.au/">http://www.newcastle.edu.au/</a></td>
</tr>
<tr>
<td>Notre Dame Australia</td>
<td><a href="http://www.nd.edu.au/">http://www.nd.edu.au/</a></td>
</tr>
<tr>
<td>Queensland University of Technology</td>
<td><a href="http://www.qut.edu.au/">http://www.qut.edu.au/</a></td>
</tr>
<tr>
<td>RMIT University</td>
<td><a href="http://www.rmit.edu.au/">http://www.rmit.edu.au/</a></td>
</tr>
<tr>
<td>Southern Cross University</td>
<td><a href="http://www.scu.edu.au/">http://www.scu.edu.au/</a></td>
</tr>
<tr>
<td>Swinburne University of Technology</td>
<td><a href="http://www.swinburne.edu.au/">http://www.swinburne.edu.au/</a></td>
</tr>
<tr>
<td>University of Canberra</td>
<td><a href="http://www.canberra.edu.au/">http://www.canberra.edu.au/</a></td>
</tr>
<tr>
<td>University of Melbourne</td>
<td><a href="http://www.unimelb.edu.au/">http://www.unimelb.edu.au/</a></td>
</tr>
<tr>
<td>University of New England</td>
<td><a href="http://www.une.edu.au/">http://www.une.edu.au/</a></td>
</tr>
<tr>
<td>University of Queensland</td>
<td><a href="http://www.uq.edu.au/">http://www.uq.edu.au/</a></td>
</tr>
<tr>
<td>University of South Australia</td>
<td><a href="http://www.unisa.edu.au/">http://www.unisa.edu.au/</a></td>
</tr>
<tr>
<td>University of Southern Queensland</td>
<td><a href="http://www.usq.edu.au/">http://www.usq.edu.au/</a></td>
</tr>
</tbody>
</table>
University of Sydney  http://www.usyd.edu.au/
University of Tasmania  http://www.utas.edu.au/
University of Technology, Sydney  http://www.uts.edu.au/
University of the Sunshine Coast  http://www.usc.edu.au/
University of Western Australia  http://www.unsw.edu.au/
University of Western Australia  http://www.uwa.edu.au/
University of Western Sydney  http://www.uws.edu.au/
University of Wollongong  http://www.uow.edu.au/
Victoria University of Technology  http://www.vu.edu.au/

Ivy League universities
Brown University  http://www.brown.edu/
Columbia University  http://www.columbia.edu/
Cornell University  http://www.cornell.edu/
Dartmouth College  http://www.dartmouth.edu/
Harvard University  http://www.harvard.edu/
Princeton University  http://www.princeton.edu/
University of Pennsylvania  http://www.upenn.edu/
Yale University  http://www.yale.edu/

Universitas21 Canada and USA
McGill University  http://www.mcgill.ca/
Simon Fraser University  http://www.sfu.ca/
University of British Columbia  http://www.ubc.ca/
University of Michigan  http://www.umich.edu/
University of Virginia  http://www.virginia.edu/

Universitas 21 Europe
Lunds University  http://www.lu.se/
Birmingham University  http://www.bham.ac.uk/
Edinburgh University  http://www.ed.ac.uk/
Glasgow University  http://www.gla.ac.uk/
Nottingham University  http://www.nott.ac.uk/
University of Freiburg  http://www.uni-freiburg.de/

Universitas21 Asia Pacific
Auckland University  http://www.auckland.ac.nz/
Fudan University  http://202.120.224.5/
Hong Kong University  http://www.hku.hk/
Peking University  http://www.pku.edu.cn/
National University of Singapore  http://www.nus.edu.sg/
Attachment C: Checklist

Content emphasis
☐ Factual, statistical
☐ Lifestyle, atmosphere

New content added
☐ Today
☐ This week
☐ This month

Organisation
☐ Audience links (For...)
☐ Topic links (About...)
☐ Research has high visibility
☐ Entry to site is flexible, several pathways
☐ Customised searching from home page

Use of images
☐ Decorative
☐ Related to text content

University:___________________

Positioning statement
☐ History of institution
☐ Mission, role

News
☐ Headlines
☐ Photo
☐ Full story
☐ Link to news site
☐ "For media" link
☐ Link to magazine or newspaper
☐ Directory of experts

Events
☐ Headlines
☐ Photo
☐ Full description
☐ Link to events site

Featured items or promotions (ads)
☐ Text
☐ Graphic
☐ None

"For..." links

"About.." links

Other visible links
**Attachment D: Examples of links, listed by category**

<table>
<thead>
<tr>
<th>DIRECTORY CATEGORY</th>
</tr>
</thead>
<tbody>
<tr>
<td>In the Directory category we placed links to directories, site maps, lists and search engines that help users find their way around a web site or make contact with the university.</td>
</tr>
<tr>
<td>Examples of links in this category:</td>
</tr>
<tr>
<td>A to Z</td>
</tr>
<tr>
<td>About this site</td>
</tr>
<tr>
<td>Academic &amp; administrative elements</td>
</tr>
<tr>
<td>Academic units</td>
</tr>
<tr>
<td>Administrative centres</td>
</tr>
<tr>
<td>Advanced search</td>
</tr>
<tr>
<td>All academic departments</td>
</tr>
<tr>
<td>A-Z directory</td>
</tr>
<tr>
<td>A-Z index</td>
</tr>
<tr>
<td>A-Z listing</td>
</tr>
<tr>
<td>A-Z search</td>
</tr>
<tr>
<td>Centres &amp; schools</td>
</tr>
<tr>
<td>Colleges and schools</td>
</tr>
<tr>
<td>Colleges, schools &amp; centres</td>
</tr>
<tr>
<td>Connect here</td>
</tr>
<tr>
<td>Contact</td>
</tr>
<tr>
<td>Contact [name of university]</td>
</tr>
<tr>
<td>Contact information</td>
</tr>
<tr>
<td>Contact us</td>
</tr>
<tr>
<td>Contacts</td>
</tr>
<tr>
<td>Departments</td>
</tr>
<tr>
<td>Desk references</td>
</tr>
<tr>
<td>Direct links</td>
</tr>
<tr>
<td>Directories</td>
</tr>
<tr>
<td>Directories &amp; links</td>
</tr>
<tr>
<td>Directory</td>
</tr>
<tr>
<td>Directory of staff</td>
</tr>
<tr>
<td>Divisions</td>
</tr>
<tr>
<td>Divisions &amp; departments</td>
</tr>
<tr>
<td>Divisions &amp; schools</td>
</tr>
<tr>
<td>Divisions, schools &amp; centres</td>
</tr>
<tr>
<td>Divisions, schools &amp; units</td>
</tr>
<tr>
<td>Email</td>
</tr>
<tr>
<td>Email addresses, fax and phone numbers</td>
</tr>
<tr>
<td>DIRECTORY CATEGORY</td>
</tr>
<tr>
<td>-------------------</td>
</tr>
<tr>
<td>Emergency info</td>
</tr>
<tr>
<td>Enquire online</td>
</tr>
<tr>
<td>Fac &amp; dept</td>
</tr>
<tr>
<td>Faculties</td>
</tr>
<tr>
<td>Faculties &amp; academics</td>
</tr>
<tr>
<td>Faculties &amp; admin units</td>
</tr>
<tr>
<td>Faculties &amp; administration</td>
</tr>
<tr>
<td>Faculties &amp; departments</td>
</tr>
<tr>
<td>Faculties &amp; divisions</td>
</tr>
<tr>
<td>Faculties &amp; schools</td>
</tr>
<tr>
<td>Faculties, schools, divisions &amp; organisations</td>
</tr>
<tr>
<td>Faculty &amp; staff</td>
</tr>
<tr>
<td>Featured links</td>
</tr>
<tr>
<td>Feedback and enquiries</td>
</tr>
<tr>
<td>Index</td>
</tr>
<tr>
<td>Index &amp; search</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>INTRANET CATEGORY</th>
</tr>
</thead>
</table>

In the Intranet category we placed links to portals, learning management systems and other content clearly intended for current staff or students of the university.

Examples of links in this category:

- Access UVA
- Brown intranet
- Cecil learning management system
- Computer accounts
- Corporate site
- Current staff
- Current staff & students
- Current students/Penn Portal
- Document library
- Documents
- Documents & policies
- eCornell
- E-learning
- E-mail & computing
- eNABle
- For faculty & staff
- For staff
- my.monash portal
- OLT
- Online learning
- Policies
- Policies & procedures
- QUT Virtual
- Resources for staff
- SOLS (Student Online Services)
- Staff
- Staff & student email
- Staff (intranet)
- Staff eMail
- Staff newsletter
- Staff pages
- Staff webmail
- Student eMail
- Student newsletter
### INTRANET CATEGORY

<table>
<thead>
<tr>
<th>Link</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>goSFU</td>
<td>Student self service (nDeva)</td>
</tr>
<tr>
<td>Instructional toolkit</td>
<td>Students (intranet)</td>
</tr>
<tr>
<td>Internal website</td>
<td>Students/staff</td>
</tr>
<tr>
<td>Intranet</td>
<td>UNE online</td>
</tr>
<tr>
<td>ISIS</td>
<td>University policies</td>
</tr>
<tr>
<td>IT at UWA</td>
<td>University portal</td>
</tr>
<tr>
<td>IT policies</td>
<td>University webmail</td>
</tr>
<tr>
<td>Learning online (Web CT)</td>
<td>USQ Connect - staff &amp; students</td>
</tr>
<tr>
<td>Login</td>
<td>Web &amp; internet</td>
</tr>
<tr>
<td>Login to WebCT</td>
<td>Web CT</td>
</tr>
<tr>
<td>Minerva for faculty &amp; staff</td>
<td>Web-based e-mail</td>
</tr>
<tr>
<td>Minerva for students</td>
<td>Webmail</td>
</tr>
<tr>
<td>MurdochNet policy</td>
<td>WebMail direct</td>
</tr>
<tr>
<td><strong>my [name of university or computer system]</strong></td>
<td></td>
</tr>
</tbody>
</table>

### ABOUT CATEGORY

In the About category we placed corporate information describing or introducing the university.

Examples of links in this category:

<table>
<thead>
<tr>
<th>Link</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>About the university</td>
<td>From the vice-chancellor</td>
</tr>
<tr>
<td>Welcome</td>
<td>History</td>
</tr>
<tr>
<td>Explore [name of university]</td>
<td>Information</td>
</tr>
<tr>
<td>President's welcome</td>
<td>Inside [name of university]</td>
</tr>
<tr>
<td>Publications</td>
<td>President's office</td>
</tr>
<tr>
<td>Annual reports</td>
<td>[name of university]</td>
</tr>
<tr>
<td>Discover [name of university]</td>
<td>Home</td>
</tr>
<tr>
<td>Facts</td>
<td></td>
</tr>
</tbody>
</table>

### CAMPUSES CATEGORY

In the Campuses category we placed information about travelling to the campus, wayfinding on campus, student accommodation, services and facilities available on campus, descriptions of campuses, webcams and virtual tours.

Examples of links in this category:

<table>
<thead>
<tr>
<th>Link</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accommodation</td>
<td>Off-campus housing</td>
</tr>
<tr>
<td>Accommodation &amp; facilities</td>
<td>On campus</td>
</tr>
<tr>
<td>Campus map</td>
<td>Plantations</td>
</tr>
<tr>
<td>Campus maps</td>
<td>Road conditions</td>
</tr>
<tr>
<td>Campus pages</td>
<td>Roadworks around campus (PDF)</td>
</tr>
<tr>
<td>Campuses</td>
<td>Searchable campus map</td>
</tr>
</tbody>
</table>
CAMPUSES CATEGORY

- Campuses & centres
- Campuses & maps
- Crichton campus
- Getting to UOW
- Hear the chimes
- Housing
- Live view
- Living at Yale
- Locations
- Maps
- Melbourne (Bundoora)
- Melbourne (city)
- Mildura
- Mt Buller
- Shepparton
- Take the tour
- Travel & weather
- UBC Robson Square
- UC Brisbane campus
- UVA maps
- Virtual tours
- Visit Cornell
- Visit us
- Visiting Brown
- Visitor information
- Visitors
- Wayfinding at UBC
- Webcam

STUDENTS PROSPECTIVE CATEGORY

In the Students Prospective category we placed links to information about applying to study at the university.

Examples of links in this category:

- Admission
- Admission, enrolment & fees
- Admissions
- Admissions & aid
- Admissions & financial aid
- Applicants: Australian residents, international
- Apply & enrol
- Apply now
- Applying to [name of university]
- Career advisers & teachers
- Early entry
- Enrol online
- Enrolment guide
- For parents
- For prospective students
- Future students
- Graduate admission
- Graduate applications
- IELTS examinations
- Lifelong learning
- Prospective postgraduates
- Prospective students
- Prospective undergraduates
- Undergrad application
- Undergraduate admissions
COURSES CATEGORY

In the Courses category we placed links to lists of courses and academic disciplines, introductory pages about studying at the institution, handbooks, graduate outcomes and levels of study. We excluded names of specific degrees, as these usually appeared in the context of a special promotion or temporary announcement.

Examples of links in this category:

- Academic courses
- Academic programs
- Academic programs & courses
- Continuing education
- Continuing studies
- Cooperative extension
- Course areas
- Course finder
- Course information
- Course tools
- Courses
- Courses & careers
- Courses & degrees
- Courses & programs
- Courses & study
- Courses @ [name of university]
- Courses and degrees
- Courses/handbooks
- Full time courses
- Graduate qualities
- Handbook
- LSA course guide
- New apprenticeships
- New full time courses
- Online and off-campus learning
- Other course guides
- Our courses
- Postgrad & research
- Postgrad studies
- Postgraduate study
- Programs & courses
- Prospectuses
- Short course
- Students & handbook
- Studies
- Study
- Study @ [name of university]
- Study abroad students
- Study at [name of university]
- Study choices @ [name of university]
- Study in Australia
- Study options
- Study programmes
- Studyfinder
- Studying at [name of university]
- TAFE
- Undergrad studies
- Undergraduate study

RESEARCH CATEGORY

In the Research category we placed information about research activities, commercialisation of research, consultancy services, fields of research expertise, research degrees and initiatives intended to increase the profile of the university's research. Research centres and units are listed in the Directory category.

Examples of links in this category:

- Academics & research
- [name of university] research
- Research
- Research & centers
- Research @ [name of university]
- Research activities
- Research areas
- Research at [name of university]
RESEARCH CATEGORY

Research & commercialisation  Research degrees
Research & consultancy  Research Fellow Investment
Research & development  Teaching & research
Research & industry partners  Teaching & research education
Research & innovation

COMMUNITY CATEGORY

In the Community category we placed links to sport, social and arts activities, community
development, services for businesses and other information that seemed to be aimed at the
university’s local community. This category also includes information for potential donors to the
university.

Examples of links in this category:

- Arts  Industry/employers
- Athletics  International visitors
- Athletics & recreation  Life on campus
- Benefactors  Metropolis
- Campus in the city  Museums
- Campus life  National capital
- Campus services  Neighbors
- Community  Partnerships
- Community programs  Partnerships & community
- Contribution & service  Public service/outreach
- Corporate connections  State & community partnerships
- Doing business with [name of university]  Student activities
- Donations & bequests  Student life
- Donors  Support SFU
- Family & friends  Supporting Murdoch University
- Friends & visitors  Supporting UBC
- General public  The arts
- Gifts to HKU  The City of Edinburgh
- Giving to [name of university]  Town & gown
- How to give to [name of university]  University town
- Industrial liaison  UVA diversity
- Industry & employers  [name of university] and its region
- Industry collaboration  Visitors & the community
- Industry liaison  [name of university] & Newhaven
### ALUMNI CATEGORY

In the Alumni category we placed information for graduates of the university.

Examples of links in this category:

<table>
<thead>
<tr>
<th>Category</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alumni</td>
<td>Alumni, donors &amp; friends</td>
</tr>
<tr>
<td>Alumni &amp; community</td>
<td>Alumni, donors &amp; parents</td>
</tr>
<tr>
<td>Alumni &amp; donors</td>
<td>College/graduate</td>
</tr>
<tr>
<td>Alumni &amp; friends</td>
<td>For alumni</td>
</tr>
<tr>
<td>Alumni &amp; graduate students</td>
<td>For graduate students</td>
</tr>
<tr>
<td>Alumni &amp; graduates</td>
<td>Glasgow graduates</td>
</tr>
<tr>
<td>Alumni &amp; parents</td>
<td>Graduate &amp; professional</td>
</tr>
<tr>
<td>Alumni &amp; UNSW supporters</td>
<td>Graduates</td>
</tr>
<tr>
<td>Alumni (graduates)</td>
<td>Graduates/alumni</td>
</tr>
<tr>
<td>Alumni and friends</td>
<td>Graduates/productions</td>
</tr>
<tr>
<td>Alumni info</td>
<td></td>
</tr>
</tbody>
</table>

### NEWS CATEGORY

In the News category we placed links to news releases, newsletters and magazines, lists of experts available for media comment, and other information for journalists and editors.

Examples of links in this category:

<table>
<thead>
<tr>
<th>Category</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Achievements</td>
<td>More ECU news</td>
</tr>
<tr>
<td>Announcement</td>
<td>News</td>
</tr>
<tr>
<td>Bulletins</td>
<td>News &amp; events</td>
</tr>
<tr>
<td>Columbia news</td>
<td>News and events</td>
</tr>
<tr>
<td>Communication</td>
<td>News centre</td>
</tr>
<tr>
<td>ECU Update magazine</td>
<td>News review</td>
</tr>
<tr>
<td>Experience bank</td>
<td>News, events &amp; notices</td>
</tr>
<tr>
<td>Expertise</td>
<td>News/events</td>
</tr>
<tr>
<td>Find UBC experts</td>
<td>Newsletter</td>
</tr>
<tr>
<td>Latest news</td>
<td>Noticeboard</td>
</tr>
<tr>
<td>Latest university briefing</td>
<td>Press</td>
</tr>
<tr>
<td>Media</td>
<td>Public &amp; media</td>
</tr>
<tr>
<td>Media &amp; marketing</td>
<td>Services for media</td>
</tr>
<tr>
<td>Media, news &amp; events</td>
<td>UQ news</td>
</tr>
</tbody>
</table>
LINKS CATEGORY

In the Links category we placed links to consortiums, spin-off companies, research and business units with their own recognised name, and information about the university's links with external businesses.

Examples of links in this category:

- AMC Search Ltd
- Archives Hunterian Museum & Art Gallery
- Arecibo Observatory
- Associated institutions
- Bio 21
- Business
- Business & community
- Business & community links
- Business & government
- Business & industry
- Business & services
- Business and industry
- Business opportunities
- Business/community
- Commercial project
- Commercial services
- Council for the arts
- Deakin Prime
- Desert Peoples Centre
- English language centre
- English language institute
- Enterprise
- External links
- Government
- Government & business
- GraduateSchool.com
- Group of 8
- Hawthorn English Language Centres
- Heritage Repertory Theatre
- Johnson Art Museums
- Lab of Ornithology
- Links
- Melbourne Business School
- Melbourne University Private
- Monash commercial
- National institutes
- Russell Group
- Tech park
- Universitas 21
- Universitats Klinkum

LIBRARY CATEGORY

In the Library category we placed links to university libraries.

Examples of links in this category:

- Libraries
- Libraries & computing
- Libraries, museums, cultural attractions
- Libraries/collections
- Library
- Library & computing
- Library & computing services
- Library catalogue (MUSE)
- Library gateway
- Library services
- NUS Libraries
- The library
- UBC library
EMPLOYMENT CATEGORY

In the Employment category we placed links to lists of job vacancies, promotional material aimed at prospective employees, and career development information for current staff.

Examples of links in this category:

- ATAS tutors wanted
- Careers & jobs
- Contract
- Co-op employers
- Employers
- Employment
- Employment @ [name of university]
- Employment opportunities
- Future staff
- Human resources
- Job applicants
- Job opportunities
- Job postings
- Job vacancies
- Jobs
- Jobs @ [name of university]
- Jobs at [name of university]
- Jobs/careers
- Professional development
- Prospective staff
- Recruitment
- Staff employment & development
- Staff vacancies
- Student employment
- Talent recruitment
- Teaching at [name of university]
- Work with us
- Working at [name of university]

STUDENTS CURRENT CATEGORY

In the Students Current category we placed links to intranet pages for enrolled students. Typically these were generic in nature, but some home pages provided direct links to exam and subject timetables. There is little variation in link titles within this category: most home pages simply provide a link to “Current students”.

Examples of links in this category:

- Current students
- Exam schedule
- For current students
- For UVA students
- Present students
- Subject timetables
- Timetable wizard

SERVICES CATEGORY

In the Services category we placed links to support services for students and staff, shops, medical and dental clinics on campus, and e-commerce facilities. See also the Campuses, Community and Directory categories.

Examples of links in this category:

- Administrative services
- Classified ads
- Consulting services
- Dental
- Facilities @ [name of university]
- Online services
- Pay online
- Services
- Services & facilities
- Services for business
## SERVICES CATEGORY

<table>
<thead>
<tr>
<th>Health &amp; medical resources</th>
<th>Student &amp; staff support</th>
</tr>
</thead>
<tbody>
<tr>
<td>Health care</td>
<td>Student services</td>
</tr>
<tr>
<td>Health/medical center</td>
<td>Support</td>
</tr>
<tr>
<td>IST customer services</td>
<td>Support services</td>
</tr>
<tr>
<td>Medical</td>
<td>Technology support</td>
</tr>
<tr>
<td>Medical center</td>
<td>Textbooks (Uni Shop)</td>
</tr>
<tr>
<td>Merchandise</td>
<td>The Cornell store</td>
</tr>
<tr>
<td>Online payments 2004</td>
<td></td>
</tr>
</tbody>
</table>

## MANAGEMENT CATEGORY

In the Management category we placed strategic plans, organisational structure and governance, budget and policy information.

Examples of links in this category:

<table>
<thead>
<tr>
<th>Academic calendar</th>
<th>Organisational divisions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Admin &amp; governance</td>
<td>Our organisation</td>
</tr>
<tr>
<td>Admin contact</td>
<td>Planning, reporting and continuous quality improvement</td>
</tr>
<tr>
<td>Administration</td>
<td>Projects</td>
</tr>
<tr>
<td>Administration &amp; calendars</td>
<td>Quality &amp; improvement</td>
</tr>
<tr>
<td>Calendar</td>
<td>Strat vision</td>
</tr>
<tr>
<td>Calendars</td>
<td>Strategic directions</td>
</tr>
<tr>
<td>Environmental stewardship</td>
<td>Trek 2000: UBC's vision</td>
</tr>
<tr>
<td>Governance</td>
<td>[name of university] annual report</td>
</tr>
<tr>
<td>Management</td>
<td>[name of university] budget update</td>
</tr>
<tr>
<td>Organisation</td>
<td>Uni strat plan</td>
</tr>
</tbody>
</table>

## QUALITY CATEGORY

In the Quality category we placed information about the university's approach to teaching students. There is little variation in link titles; "Teaching and learning" is a common phrase.

Examples of links in this category:

<table>
<thead>
<tr>
<th>ANU education</th>
<th>Learning @ [name of university]</th>
</tr>
</thead>
<tbody>
<tr>
<td>Education</td>
<td>Learning connection</td>
</tr>
<tr>
<td>ICT for teaching &amp; learning</td>
<td>Teaching</td>
</tr>
<tr>
<td>Learning &amp; teaching</td>
<td>Teaching &amp; learning</td>
</tr>
</tbody>
</table>
**STUDENTS INTERNATIONAL CATEGORY**

In the Students International category we placed links to information specifically for international students. There is very little variation in these link titles: most simply say "International students", with no indication of whether the students are prospective or current, or their level of study (foundation/pre-university, undergraduate, postgraduate).

Examples of links in this category:

- For international students
- Immigration regulations FAQ
- International student
- International students
- International students (Chinese)

**EVENTS CATEGORY**

In the Events category we placed links to specific campus-based events and to calendars of dates and events. Many home pages have a link to a combined news and events subsite: these are counted in the News category.

Examples of links in this category:

- Ask Me day
- Conferences, seminars
- Conferences/events
- Corporate events
- Dates of semesters
- Events
- Events calendar
- Important dates
- International Week
- NUS centennial
- Open Day
- Open day 8 September
- Principal dates
- Semester dates
- Things to do/UVA news
- Today @ [name of university]
- Web spotlight

**WEB INFORMATION CATEGORY**

In the Web Information category we placed help and FAQ pages, metadata about the university’s web site, and mechanisms for commenting about the web site. See also the Directory category.

Examples of links in this category:

- Browsers
- Computing
- FAQ
- For more key sites see Help
- Help
- Help info
- Page info
- Referencing web site
- Web feedback form
- Web page feedback
STUDENTS CATEGORY

In the Students category we placed student-related links that do not differentiate between prospective and current students, or levels of study.

Examples of links in this category:

Australian & NZ students
[name of university] student academic awards
Rhodes Scholarship information seminars
Scholarships
Scholarships & funding
Student information
Students

INTERNATIONAL CATEGORY

In the International category we placed non-specific "International" links, plus links to information about the university's overseas connections or efforts to internationalise its curriculum. See also the International Students category.

Examples of links in this category:

International
International activities
International development
International links
International relations
International resources
Internationalisation
Other languages
Yale & the world

STUDENTS NEW CATEGORY

In the Students New category we placed links to information specifically for students commencing their first year of study.

Examples of links in this category:

Commencement
First year @ [name of university]
New students
New undergrad admissions process
Orientation
Student orientation
Welcome, Class of 2008

In the Students Postgraduate category there are only two link titles, "Graduate students" and "Postgraduate students". These links do not distinguish between prospective, new and current enrolment status.

In the Other category we placed links that appeared to be university-specific jargon or miscellaneous content that appears only once, on a single university site.