# What If Academics Interacted As Much As Students?

A review of academic workplace design September, 2016







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Creative Industries Precinct, Stage 2 Queensland University of Technology, Brisbane, Australia. Photography by Peter Bennetts

# INTRODUCTION

### **Change is hard**

The academic workplace is changing, and the issues associated with that change are experienced by academics and design consultants alike.

The challenges for academics of noise, confidentiality, security and status sit uncomfortably beside the desires of senior management for more collaborative, collegiate and space efficient workplaces. It is a long-standing and often contentious debate.

In 2014, Hassell undertook a literature review to explore that debate. The review confirmed that there are conflicting opinions and evidence about the benefits of more open work settings, but it also made an important observation:

"Design that provides a range of spaces for individual focus, informal communication and collaboration is more likely to provide an effective and satisfying workplace than one that doggedly adheres to an office based or open plan layout. The combination of spaces should reflect the desired outcomes of the various stakeholders: clients, project manager, and end user."

In 2016, HASSELL decided to test our own designs against that statement.

We asked our clients:

- → What drives change in academic workplace design?
- $\rightarrow$  Why is there resistance to that change?
- → What can designers and clients do to make the transition to a new workplace smoother and more successful?

Interviews with project stakeholders and analyses of the typical floor plans of seven recently designed academic workplaces uncovered a consistent pattern in the motivations and challenges faced by those trying to bring about change, but not in the responses to those problems. Most importantly, the research challenges a common misconception - that more open workplaces are simply about saving space.

Our case studies show that space efficiency is not necessarily the main objective of academic workplace change, and only sometimes the end result.

The new approach represents a re-distribution of space to encourage a more interactive and engaging place for all.

## **Three lessons**

From these projects come three important lessons for Hassell and our clients about how to successfully drive change in the academic workplace:

- → Communicate how space prioritisation will benefit staff
- → Try before you buy: let staff experience what the new workplace will be like
- → Provide privacy and confidentiality in the new workplace



"Certain things, they should stay the way they are. You ought to be able to stick them in one of those big glass cases and just leave them alone."

J.D. Salinger, The Catcher In the Rye



1. The Science Place, James Cook University, Townsville, Australia . Photography by Andrew Rankin

2. Deakin Prime, Deakin University, Melbourne, Australia. Photography by Peter Bennetts

# WORKPLACE Change

**Drivers, Appetite and Satisfaction** 

Many academics resist change because their management's desire for new ways of working appears to devalue the academics' current work and workstyles. The need for change is not based on academic research and teaching becoming less relevant, rather because it is *more* important than ever in solving the world's increasingly complex problems.

### Breaking down barriers between academia and industry

Universities are beginning to view their relationship to industry and the wider community in a more inclusive and expansive way.

Industry partners and philanthropic engagement focused on rapid crossdisciplinary collaboration are not only paths to more funding.

They represent an opportunity to make research and teaching more productive, more applicable to specific problems, and more varied and rewarding as a career.

## Global workers, mobile talent

In addition to the opportunities for greater influence in (and funding from) industry, the alignment of faculties with strategic business foresight helps universities to maintain currency in the international education and research market.

The fiercely competitive global labour market now seeks graduates with research and job skills that go beyond traditional discipline boundaries. And graduates now expect to progress into workplaces with choice, control, wellbeing, and flexibility built in.

# Culture change and supportive spaces

To achieve this transformation, a significant culture change is required in academia that emphasises a broader set of skills, supported by holistic change management processes.

Cultural change is most likely to succeed if it is accompanied by the provision of a spectrum of space typologies that allow academics to continue the slow deep thinking they have always engaged in, while supporting the development of new skills with an external focus.





## "I run into people every day now that I would have seen maybe once a year."

Greg Jenkins, Head of Studies, Creative Industries Faculty, QUT

Creative industries Precincts Stage 2, Queensland University of Technology, Brisbane Australia. Photography by Peter Bennetts

# **Clients looking for change**

Over recent years, Hassell has provided academic workplaces for a number of higher education clients around Australia that are seeking new ways of working.

This study examines the drivers of change for those projects, the appetite for change from the various stakeholders, and the satisfaction or otherwise of our clients with both the process and the built outcome (where complete).

- → Global Change Institute (GCI) The University of Queensland
- → Advanced Engineering Building (AEB) The University of Queensland
- → Electrical Engineering Building (EEB) University of New South Wales
- → Melbourne School of Engineering (MSE) The University of Melbourne

- → Creative Industries Precinct Stage 2 (QUT CIP2), Queensland University of Technology
- → Flinders at Tonsley, School of Computer Science, Engineering and Mathematics (Tonsley) Flinders University
- → College of Arts and Social Sciences (CASS) Australian National University

Each of those clients brought with them a unique set of circumstances that influenced the design of their workplace: from the small institute to the very large faculty, from traditional, individually focussed research to interactive learning, from creative arts to electrical engineering.

And each design reflects the cultural and pragmatic differences that these models of teaching, learning and research brought to bear on the built environment.

# Change is an iterative process

Change is difficult, particularly in a profession as steeped in tradition as academia. It is also inevitable, in light of growing student numbers and learning expectations, changing technologies, pedagogies and funding models.

An impending shift in academic workforce demographics is one factor in the new approach to university buildings and workplaces, which are designed with a lifespan of 30 years or more. In 2010, a full 56 per cent of the academic workforce was part of the baby boomer generation.<sup>1</sup>

The retirement of this cohort will create a staggering recruitment task for universities in the coming years, and increase pressure to attract staff. New staff will bring with them different skills and attitudes to the workplace.

For example, younger workers with experience in more informal and technology-rich spaces (that are now common in student areas on campus) are likely to adopt the new approach of more open academic workplaces more readily than those currently using them.

Change in academic workplace design will come over time. It is just a question of how quickly universities choose to make it happen.

The projects in this research have taken on change over various time scales – QUT CIP2 leapt at it with a change of space policy applied to a whole new building, while at MSE the change will gradually occur over several years in pilot refurbishments and eventually new buildings. Our client at AEB said that the idea of moving to completely open workspace was a step too far, despite the adoption of the "learning on display" concept in teaching areas that included visual access via glazing and adjacencies to circulation spaces.

But the client acknowledged that because so much work is now electronic, academic work practices are inevitably changing. It is hoped that open work settings will not be resisted as strenuously for the next building project at the University.

## What you can see, you can measure

At Tonsley, open workspaces have made space under-utilisation very visible. This is important in helping staff to understand the reasons for moving to their new workplace model – that is, the change to more open space is a self-reinforcing process. The more staff see empty desks, the deeper their understanding of space utilisation issues.

During the Tonsley design process, the inclusion of hot desks for some staff was rejected by project decision makers.

Since the building opened, increases in the number of post graduate and sessional staff (who are often away from their desks) has placed pressure on the allocation of individual space and has laid bare the inefficiency of empty desks.

In response, departmental staff are now considering the inclusion of hot desking to accommodate those that can, and do, undertake work in a range of settings, including beyond the university campus.

### **Change management**

Four of the case studies in this report are now constructed, and happily occupied according to the client representatives. The remaining three are continuing with their process of change as the projects progress through design and construction.

Some universities employed external change agents to help manage the transition to their new space, while others managed the process internally via the Project Control Group and team champions.

The scope of the processes also varied. Some focused on communicating to staff the form and function of the new space, while others emphasised policies of procurement, deliveries, technology and relocation, or behavioural change of occupants.

Whichever approach was taken, the task was underestimated (or anticipated but limited by funding) and required more resources than were originally allocated.

While most suggested that the process was successful enough to ensure that no major disruption occurred, a number of clients noted a dedicated change management team was necessary from project inception through design to evaluation and fine tuning after occupation to ensure the best result.

Engagement and education of staff along the way was considered crucial, whether by newsletters, meetings, workshops, surveys or workplace tours. Ideally this is closely aligned with the design process.

### Symbolism and pragmatism in change

Hassell interviewed senior academics and university facilities management about their workplace projects. We asked a series of open ended questions about the drivers and appetite for change in their organisation, and satisfaction with the change when it was made.

The issues identified by our clients fall into three broad categories:



# Spatial experience

Comfortable and attractive workplaces are not just good for morale. Access to light, views, high ceilings and other design features can positively affect employee performance.<sup>3</sup>

A well designed workspace can also help to attract and retain staff. Hassell research<sup>4</sup> into the value of workplace design for staff retention found that workplace aesthetics had a greater influence on job attractiveness than workspace allocations (offices vs. open plan vs. activity based working).

Appealing facilities consistently doubled the likelihood of a candidate choosing an employer.

# Symbols and workplace culture

A greater focus on collaborative work with other colleagues, students, alumni, and external organisations is enabling (or forcing, depending on your point of view) academics to move from inwardly focused individual research to co-operative and applied research.

Similarly, methods of teaching and communicating with students are changing quickly, and radically.

The physical workplace can be both a symbol of this (in transparency of purpose and openness to external parties), and a functional agent for change in work practices that align with shifting research and teaching activities.



# Pragmatic operations

At the same time, funding and space pressures on campus are forcing universities to increase space utilisation rates. With typical academic offices occupied for around only thirty per cent of a working day,<sup>2</sup> and student enrolments burgeoning, universities must find smarter, more efficient ways of accommodating staff, minimising empty desks, and enabling flexibility to change.

While the introduction of expanses of workstations has proven problematic for some workplaces, so too has the persistence of spaces with long corridors of individual offices that keep staff separated from their colleagues. A more nuanced approach that provides a combination of settings for different tasks is proving to be more suitable.

And while senior managements were concerned with efficiencies, academics were equally concerned with other pragmatic issues, of noise, confidentiality and security.

### **Drivers of change**

Workplace change was driven largely by university executive management, by way of strategic visions and space management policies.

Some clients noted that advice from the designers for more open approaches to workplace settings was heeded and embraced, once the benefits were understood and the potential challenges addressed.

# Appetite for change

The appetite for change at executive level was strong. All the universities challenged their office space standards. Some were abandoned completely, and others significantly decreased in size and quantity. While the clients expressed a desire space, some of their staff (academics, but also technical and professional) did not share that enthusiasm. Most projects experienced resistance to change, but the better outcomes resulted from strong leadership at executive level.

## Satisfaction with change

Moving to a new workplace has the potential to positively effect morale and performance,<sup>3</sup> but may also result in anxiety and resistance.<sup>5</sup> Our clients indicated a number of benefits, but notably, none had anticipated the experiential benefits of a new space in their drivers and appetite for change. The best features relate to spatial experiences, or symbolic and workplace culture benefits. Conversely, the challenges relate exclusively to pragmatic operational issues.

Our clients told us they wanted their new building to	Our clients told us their staff were worried about	Our clients told us the best feature of the new building was
Spatial experience - None identified	<ul> <li>Relinquishing a private office, bookshelves, meeting space and views</li> </ul>	<ul> <li>Natural light</li> <li>Views</li> <li>Ambience</li> <li>Openness and Transparency</li> <li>Beauty</li> </ul>
<ul> <li>Symbols and Workplace Culture</li> <li>Align with institutional goals of sustainability, industry engagement and world leadership</li> <li>Test new ideas</li> <li>Enable new pedagogies and programmes</li> <li>Connect student and staff</li> <li>Attract and retain staff</li> <li>Facilitate cultural change</li> <li>Provide equity in quality of work environments</li> </ul>	- Loss of status	<ul> <li>Sense of community</li> <li>Productivity</li> <li>Collegiality</li> <li>Communication</li> </ul>
<ul> <li>Pragmatic operations</li> <li>Provide space and cost efficiencies</li> <li>Replace obsolete buildings</li> <li>Accommodate growth</li> <li>Modularise furniture for ease of procurement</li> <li>Standardise space allocations for flexibility</li> </ul>	<ul> <li>Privacy to work without interruption or surveillance</li> <li>Confidentiality for sensitive conversations with students and colleagues</li> <li>Security of student exams and research material, and personal possessions</li> <li>Noise from telephone calls and conversations between colleagues</li> </ul>	Our clients told us the biggest challenge of their new building was - Noise from staff, students and external sources - Building systems and air conditioning operation - Adequate private space for meetings - "Always on" spaces due to student/staff interactions - Adequate technology for hot- desking

# Table 2.Drivers, Appetite and Satisfaction

# CASE STUDIES

### **Overview**

# Same problems, different solutions

Our case studies indicate a much more complex relationship between space and institutional goals than may be assumed by academics wishing to maintain their private workspaces.

Our clients asked for a broad range of design responses to essentially the same set of drivers (see Table 2). The range of workplace approaches our clients requested can be seen in Table 3, bookended by QUT CIP2 (63 per cent open workspace) and CASS (73 per cent enclosed offices).

The drivers for, and anticipated benefits of, workplace change were remarkably consistent, yet the briefed areas for enclosed and open space vary greatly.

This difference can be accounted for in the range of workplace cultures and the commitment of university management to strong space planning policies and leadership.

It is also a product of the varied nature of user groups, from creative arts to material sciences to philosophy.





Useable Floor Area/Person

\* GCI and AEB offices semi-enclosed without full acoustic separation

# Table 3.Floor Space Use Compared To Useable Floor Area

# Same area, different distribution

A common misconception from academics is that the change toward open workplaces is driven by management pressure to squeeze more people into smaller spaces. As growth in higher education continues, available space on campus is undoubtedly scarce, and space utilisation rates are under the spotlight. And because buildings contribute approximately twenty per cent of a university's operating budget<sup>6</sup> there is considerable motivation for reduced lighting, air conditioning, and other services costs that may be achieved through decreased building area.

Yet while space efficiency was identified in our interviews as one of the most common drivers of change (along with a desire for more collaborative work and alignment of the built environment with institutional goals), our case studies suggest that increased collaboration is the main driver, and on some occasions space (or capital expenditure) savings are a value added benefit.

The black dots in Table 3 show that there is no correlation between the amount of open plan workspace and the useable floor area allocated per person.

The most enclosed project (CASS) and the most open (QUTCIP2) have a remarkably similar Useable Floor Area per person, around 11-12 sqm.

Space has not necessarily been 'saved' by decreasing the number or size of offices, but instead has been redirected to areas for the benefit of all.

These include social spaces, shared meeting and resource spaces, and quiet areas for concentrated work.

The blurring of space functions on campus (particularly for students, but increasingly for academics also) reflects a growing acknowledgement that the value of education lies in informal interactions.<sup>2</sup>

For Tonsley, the generous floor area per person comes not from the individual offices, but from the large spaces for informal meetings, which have been included to encourage staff out of their offices to mingle with other building users.

At EEB, lower area per person is simply a product of the high number of sessional and post graduate staff, who are typically allocated less space.

# Equity in the quality of space

Physical space is a way to create intrinsic motivation and loyalty through a sense of identity; to tell people that their contribution matters.<sup>7</sup> This is as true for the most junior of staff as it is for the most senior.

One of the findings of the research was that a number of our clients believe that open workplaces create a more equitable work environment.

As Dr. Anne Hellstedt of the Melbourne School of Engineering expressed it, "the cloistered model produces haves and have-nots." At QUT CIP2 the space policy explicitly states that flexible open work spaces "provide a greater level of amenity and choice to all staff in the workplace."<sup>8</sup> And at GCI, providing equitable access to views was seen as a democratisation of the facade.

The standardised, more open approach with inboard offices and open perimeter spaces allows more people access to natural light, views, and a generally higher standard of accommodation.

It is this opportunity to break down hierarchical structures that creates anxiety for academics who have worked hard for their seniority and status. The opening up of the workspace can help to dismantle institutional silos, but must be undertaken with sensitivity to the underlying values of staff.

## It is difficult to argue against better environments for all staff, rather than just the privileged few.

This is particularly true in the increasingly competitive area of talent attraction and retention, another of the drivers of change identified by some of the clients.

## Confusing terminology

The terminology of new ways of working can be confusing. Our clients and other stakeholders describe it variously as open plan, flexible working, unallocated desks, hot desking, and activity based working.

The common interpretation of these terms as spaces with arrays of cubicle based workstations akin to a call centre environment is the basis for considerable angst for many academics.

While some areas of open plan workstations may be employed to accommodate staff, the days of mono-use space and furniture are numbered, replaced by more sophisticated combinations of meeting rooms, quiet zones, social gathering spaces and focussed work spaces that allow a range of activities to be undertaken during the working day.

All of the projects in this research but one (CASS) sought change towards a more open and flexible workplace, and the floor plans of each show how different the idea of open workspace can be, reflecting the distinctive character and activities of the clients.

# **CREATIVE INDUSTRIES**

**Queensland University of Technology** 

#### Date 2016 Total building GFA 13,000 sqm Total building Cost / Sqm

\$5,850 UFA / Person on typical floor 11 sqm Average office 0 sqm

University policy 0 sqm

"Enclosed offices (11sqm) will only be provided where there is a demonstrable functional requirement. For example, where the majority of time is spent in completely confidential work (eg staff counselling). The extent of enclosed built fit out should generally be limited to a maximum of 20% total project area."<sup>8</sup>

## Strong space policy and prioritisation

This building, designed by Hassell with Richard Kirk Architects, combines office, teaching, informal learning and studio spaces for visual and performing arts, and represents the leading edge of open plan academic workspace.

In response to low space utilisation rates across the campus, (and a desire for more flexible, equitable, and collaborative spaces), the Vice Chancellor strongly supported the approach that no individual offices were to be provided for staff.

Enclosed space was limited to meeting rooms. This was predicated on a balanced consideration of three elements: user needs, sustainable environment practices, and financial management.<sup>8</sup>

The value of a strong and clearly articulated policy, backed at the executive level and applied across the board (no offices for senior management either) cannot be underestimated.

The result for QUT is that the arguments were resolved long ago, and since occupation, only the anticipated low level of negativity remains.

While noise is a problem, issues of confidentiality have not materialised, and most staff can see the overall benefit of allocating space according to the University's stated priorities.

#### **Drivers of Change**

- Consolidation of distributed facilities
- Obsolete and temporary accommodation
- New space management policy
- Testing new workspace ideas

#### Challenges

- Bookable quiet space
- Hot-desking
- Noise from students and staff
- "Always on" nature of the building

#### Benefits

- Collegiality and collaboration between staff
- Increased space utilisation
- Testing new workspace ideas

Creative Industries Precinct Stage 2, Queensland University of Technology, Brisbane, Australia. Photography by Peter Bennetts



"The studios are world class, and the public spaces are jaw-droppingly beautiful. All the staff recognise this. While some may still have reservations about open plan workstations, as a collection of spaces this building works really well."

Greg Jenkins, Head of Studies, Creative Industries Faculty

# MELBOURNE SCHOOL OF ENGINEERING

## The University of Melbourne

#### Date

2016 (ongoing)

Total building GFA

364 sqm

Total building Cost / Sqm \$1,980

**UFA / Person on typical floor** 10.9 sqm

Average office

0 sqm

University policy 10 - 16 sqm

### "The University uses TEFMA space standards<sup>6</sup> as a general reference point, but will depart significantly from these for the MSE project."<sup>8</sup>

1. MSE Doug McDonnell Building,

The University of Melbourne, Australia. 2. MSE Flexible Working Pilot,

The University of Melbourne, Australia. Photography by Nicole England

# Engaging staff in cultural change

A building refurbishment for the IT and Facilities teams to be located together is the first step in a wider project to explore the Melbourne School of Engineering's academic cohort shifting to a flexible working model.

Driven by the University's Strategic Plan and the School's own vision for higher education, the new space(s) are intended to induce a cultural change that will provide a professional experience for students, and maximise staff interaction.

This small project, which is currently in construction, is a test bed for ideas to increase collaboration, break down internal barriers and provide choice in work settings. There are no individually allocated desks, which has been a difficult concept to sell to some staff, while others are relishing the opportunity for change.

An ongoing workplace survey is providing feedback from this and other pilots, which will be incorporated into the next larger stage.

Workshops with staff have uncovered issues of professional respect: "You are telling us that the way we work is wrong", demonstrating the delicate nature of change management. It is also shows, perhaps more importantly, that communication with staff can prompt discussions that explore different ways of working.

The larger pilot project will be used as an engagement and education tool. Staff (including academics) will be rotated through the space to experience and test a flexible working model in anticipation of a complete changeover to the new approach in the coming years.

#### Drivers of Change

- University Strategic Plan
- School of Engineering 10 year vision to be a world exemplar
- Growth in student and staff numbers

#### Challenges

- Accommodating the full range of personalities in the staff group during user group workshops
- Allaying fears of change while maintaining commitment to the vision

#### Benefits (projected)

- Reputation enhancement
- Engagement with industry and community
- Professional environment for students
- Display of research and learning

"The cloistered model produces haves and havenots. Those that don't have an office generally work in environments with poor amenity. Flexible working space has the potential to be more equitable, providing everyone with a better working environment."

Dr. Anne Hellstedt, Project Director, Melbourne School of Engineering







# **GLOBAL CHANGE INSTITUTE**

# The University of Queensland

#### Date

2016 (ongoing)

Total building GFA 364 sqm Total building Cost / Sqm \$1,980 UFA / Person on typical floor 10.9 sqm

Average office 0 sqm

University policy 10 - 16 sqm

"The University's Space Management Policy state the one of the operational priorities is to "be mindful of the contribution that physical facilities make towards the University's carbon footprint and work towards applying standards that more effectively use space."<sup>11</sup>

Global Change Institute, The University of Queensland, Brisbane, Australia Photography by Angus Martin

### **Symbolism**

The Global Change Institute project provided an opportunity to demonstrate the University's environmental goals by using the building as a living laboratory of sustainability in practice.<sup>12</sup>

The building is naturally ventilated for most of the year, and has achieved a 6 Star Green Star rating from the Green Building Council of Australia.

But it is also considered an important symbol: Institute Manager Dr. David Harris explained that they wanted an appropriate space to be the 'front office' to demonstrate engagement with industry, government and other research groups. The building itself is a business development tool.

While there was no discontent with their previous workspace, as a small organisation that outsources its laboratory and other intense research activities, the Institute was well placed to instigate open plan working: "Our small group of externally focused researchers were comfortable with open plan workspace. Their work doesn't need the privacy of a formal office arrangement, and when they do need privacy, they work from home." While occupant comfort in a naturally ventilated building has its challenges, Dr. Harris views this, too, as a chance for symbolism: "The nature of the building is that you engage with the environment more. It is a collaborative building, so co-operation is required."

#### **Drivers of Change**

- Matching institutional goal of sustainability with built form
- Additional space for growth
- Visible industry, community and institutional engagement
- New teaching models and programmes

#### Challenges

- Non-air conditioned building in subtropical environment is sometimes uncomfortable
- Noise from adjacent external sources

#### Benefits

- Openness
- Lower operating costs
- Central atrium provides good ambience
- Collaboration and communication
- Improved delivery of teaching models of architecture and engineering



"Open plan creates challenges, but it is very functional and improves output. It has reduced meeting times because of incidental conversations, and it reduces silos."

Dr. David Harris, Institute Manager, Global Change Institute





# UNSW ELECTRICAL ENGINEERING

## **University of New South Wales**

#### **Date** 2017

Total building GFA 14,200 sqm

Total building Cost / Sqm N/A

**UFA / Person on typical floor** 7.4 sqm

Average office 12 sqm

University policy 12 - 16 sqm

"Designing standard sized offices and workplaces results in significant flexibility. Academic promotion by merit means that the ratio of senior to junior staff is constantly changing; designating different sized offices based on seniority is consequently impractical."<sup>10</sup>

## Modernisation

The refurbishment of the Electrical Engineering Building is part of the University's Capital Renewal Program, which is gradually upgrading antiquated buildings across the campus to accommodate appropriate technology and services.

The upgrade focuses on research, teaching and learning spaces, but a modernised workplace was considered crucial in providing students better connections to academic staff.

Currently the PhD students are scattered wherever they can fit. In the new space, they will be located adjacent to academics in open plan areas, to the consternation of one academic: "We can't have open plan next to our offices, and we certainly can't have open plan workspaces ourselves."

A workplace survey of staff conducted before the design process began unsurprisingly uncovered strong support for maximising opportunities for individual work through quiet and private space. But staff also recognised that closed doors inhibited engagement with colleagues and ad hoc conversations. It was also acknowledged that a poor environment limits the attraction of high quality staff, which is one of the three fundamental principles underpinning the project: engage, focus, and attract.

#### **Drivers of Change**

- New pedagogies and programmes
- Attraction and retention of staff
- Modernisation of building services and workplace environment

#### Challenges

- Suitability of refurbishment over new build
- Integration of services, specifically IT and air conditioning
- Facade upgrade
- Space allocation tussle between offices, teaching and learning
- offices, teaching and learning spaces
- Academic staff resistance to change
- Professional staff resistance to increased visibility and surveillance

#### **Benefits (projected)**

- Contemporary, engaging space
- Improved connections between staff and students
- Flexibility
- Higher productivity

"Academic workplace design is much more complex than commercial workplace design because the user group is so entrenched in their way of doing things in the past. Change is really dependent on the prevailing work culture."

Joe Santangelo, Senior Project Manager, UNSW Planning and Development



Electrical Engineering Building, University of New South Wales, Sydney, Australia. Photography by Brett Boardman

11%

8%

**62**%

# FLINDERS AT TONSLEY

## **Flinders University**

#### **Date** 2015

Total building GFA 18,000 sqm

Total building Cost / Sqm \$5,650

UFA / Person on typical floor 14.2 sqm

Average office 12 sqm

University policy No standard

While the University had no specific space standards, the Vice Chancellor championed 12 square metre offices for this project. This was contentious as staff were relocating from 15-20 square metre offices, but has now become the university standard.

## Industry engagement

Interaction between academics, students, researchers and industry to encourage entrepreneurialism and innovation is central to the Tonsley development.

The building, on a new site off the main campus, co-locates the School with the New Venture Institute (a start-up incubator), Flinders Partners and various medical science research organisations.

Academics share floor space with industry researchers and students, bound together by large informal gathering areas.

While academic staff are provided with private office spaces, they are encouraged to conduct meetings in these shared spaces.

Requests for more enclosed spaces and more visitors chairs in offices have been managed since the building was occupied, and secure storage in common areas throughout the spaces has been taken up well by staff. For the University's Facilities Management team, this project was also an opportunity to test ideas of modularisation to increase space flexibility and procurement efficiency.

Offices and meeting spaces are a uniform size (which has already enabled easy changes within the first twelve months), and furniture is standard throughout, enabling flexibility, equity and bulk purchasing across departments.

#### **Drivers of change**

- Testing new workplace ideas
- Modularisation
- Space and utilisation efficiencies
- Industry engagement and entrepreneurialism

#### Challenges

- Noise from too many students in the building
- Resistance to more open workspace from academics
- Growth, as the building reached capacity after 12 months

#### Benefits

- Modularisation of space and furniture
- Integration of teaching, learning and research
- Industry engagement
- Retaining students on campus (see Challenges)

Flinders at Tonsley, Flinders University, Adelaide, Australia. Photography by Peter Bennetts



"Tonsley was a new standalone building away from the main campus, so it was an opportunity to test some new workplace approaches."

Steve Woodrow, Project Director, Property and Facilities, Flinders University





# ADVANCED ENGINEERING

# The University of Queensland

#### Date 2013 Total building GFA 21,600 sqm Total building Cost / Sqm \$6,150 UFA / Person on typical floor 91 sqm Average office 12 sqm University policy No standard

Hassell designed AEB with Richard Kirk Architects to co-locate five materials science and engineering research centres and Civil Engineering (which has since outgrown its allocated space) on a prime site overlooking the University lakes

# Transparency of purpose

After an international tour of education buildings, the University supported the designers' concept for an open workspace, which would complement the "learning on display" concept of visual access to the student teaching spaces that make up a third of the building.

It would also demonstrate the University's commitment to sustainability on campus, by enabling cutting edge ventilation strategies.

However, the Project Control Group recognised during the design process that fully open workspaces were likely to be 'a step too far' for the academic staff, and so pursued a compromise position - the use of three quarter height glazed partitions, which afforded a degree of privacy, but also allowed light penetration and thermal transmission for the air conditioning system and natural ventilation.

The downside to this is that it also allows transmission of noise. Staff in open areas have adjusted to hearing others' conversations in the workplace, but academics in offices with half height partitions are less mindful. More quiet meeting areas are needed. In addition to the original international tour for the senior project staff, local tours for academic staff of successful open plan workspaces were also used to allay their fears.

One department was less open to new ideas than the other, with the client noting that the culture of any group significantly affects how change is perceived.

#### Drivers of change

- Space efficiency
- Light penetration
- Cost efficiency of dual mode air conditioning
- Integrated teaching

#### Challenges

- Moving academics to glass wall offices with less space, fewer bookshelves and less privacy. This has proven to be less problematic than anticipated
- Noise
- Optimisation of ventilation instead of air conditioning

#### Benefits

- Sustainability features provide learning opportunities for students
- Transparency of purpose
- Visibility of activity
- Beauty
- Ambience
- Showcase premises for university

Advanced Engineering Building, The University of Queensland, Brisbane, Australia. Photography by Peter Bennetts



"The building is fantastic so staff were willing to compromise on office space for the other benefits – views, location, ambience."

David St John, Chair, Project Control Group, The University of Queensland



# **COLLEGE OF ARTS & SOCIAL SCIENCES**

### **Australian National University**

**Date** 2017

Total building GFA 9,300 sqm

Total building Cost / Sqm \$4,300

UFA / Person on typical floor 12.4 sqm

Average office 14 sqm

University policy 12-16 sqm

"Single occupancy offices will only be provided to staff where their role requires such space to perform their responsibilities."<sup>9</sup>

College of Arts and Social Sciences, Australian National University, Canberra, Australia.

# **Tradition and reputation**

"Single occupancy offices will only be provided to staff where their role requires such space to perform their responsibilities." <sup>9</sup>

The Research School of Social Sciences within CASS is ranked number one in Australian universities in its fields of research, and ranked in the top 15 worldwide.

The aim of the new building is to strengthen the culture and brand of the School by consolidating its staff, who are currently scattered across the campus, into one facility. The building will house research activity only.

The designers challenged the client to consider open/collaborative settings. However, during the briefing process the client emphasised that, unlike many university faculties now, the majority of staff continue to work in traditional academic style: individually, requiring space for concentrated research within highly acoustically rated spaces. Collaboration occurs, and is preferred, through ritual rather than informal encounters.

Factoring in client aspirations for each occupant to have views and natural light, Hassell designed a double loaded corridor around a central courtyard. A limited number of workstation clusters were included to break up the long corridors, some glazed for acoustic separation, and others open.

This building is the only project in the study for which the client did not seek to challenge (decrease) their university's standard office space allocation.

#### **Drivers of change**

- Enhance brand and reputation with external collaborators
- Consolidate disparate buildings and departments

#### Challenges

 Convincing University Design Panel of need for traditional cellular office approach, which is arguably contrary to space management policy

#### Benefits

- Collegiality
- Private spaces with limited acoustic and visual distraction
- Views and natural light for all occupants
- Enhanced productivity within a space where staff want to be

Everything about the space plan appears to go against current design trends. However, if traditional academic workplace design provides a productive environment and aligns with institutional goals, then it can be adopted.





# THREE LESSONS

### **1. Communicate clearly**

When staff understand the project priorities and consequent trade-offs inherent in any design, they are more willing to accept compromise.

# Environmentally sustainable design as an enabler

At AEB, staff were convinced of the need for three quarter height partitions (resulting in a noisier workplace) because it would enable dual mode air conditioning. This sustainability measure proved to be important for staff to demonstrate an alignment between their work and their physical workplace.

#### **Contribution to broader priorities**

At QUT CIP2, studio spaces were prioritised over office space. The staff understood that teaching students in world-class facilities was of greater benefit to the students and the school as a whole (in programming, reputation, and creative possibilities) than more generous offices for the academic and professional staff.

#### **Policies and champions**

Strong space allocation policies that provided clear guidelines for implementation aided the process for a number of projects. For example, at QUT, new space management policy limited enclosed spaces to twenty per cent of area, which is generally committed to meeting spaces. This effectively excludes offices for staff.

Champions also played an important role, helping staff to overcome any difficulties encountered in changing their work practices to suit their new environment, and in spreading the word about the potential benefits to a wider audience.

# 2. Try before you buy

Simply telling staff their new workplace will be better, more collegiate and more productive is unlikely to convince a reticent stakeholder group - academics - of the need for change. Resistance to more open workplaces is based on real fears of outdated call centre environments and expanses of workstation cubicles. Staff should be able to experience and understand the new approach.

#### Tours and open communication

A number of projects in this study undertook tours for staff (not just senior management) of successful workplaces that reflect the new approach in order to allay fears of noise, confidentiality, and productivity losses. At MSE this will be taken a step further with staff to be rotated through a pilot project to experience first hand the School's new flexible working approach.

Open communication of building plans during design, and tours of the new workplace in construction also reduce the element of surprise. This can ease the transition into the new workplace by allowing opportunities for adjusting the design, and familiarising staff with new processes and adjacencies.

The experiential benefits (natural light, transparency, openness etc.) of a new workplace were underestimated by our clients. The experience of working in a beautifully designed space was a powerful tool in converting sceptical staff, and undoubtedly an important part of the iterative process of change.

Global Change Institute, The University of Queensland, Brisbane, Australia. Photography by Christopher Frederick Jones

# **3.** Address noise and confidentiality

Workplace researchers have found that "the most effective spaces bring people together and remove barriers while also providing sufficient seclusion that people don't fear being overheard or interrupted."<sup>13</sup> Despite the space efficiencies and benefits of collaboration and communication identified in these projects, occupant issues relating to noise, privacy and confidentiality are apparent in some of the completed buildings. The provision of accessible, bookable, quiet space for meetings, phone calls, and focused individual work remains a challenge for designers and clients. The inclusion of potentially under-utilised meeting space must be considered in comparison to the significantly greater inefficiency of under-utilised large offices.

Storage of exam papers, reference books and research material was a consistent issue raised by academics. Adequate and conveniently located storage units can be successfully implemented if staff are aware of and educated in how to use them. Some of the projects included lockable storage at the work point, and others used remote storage located throughout the facility in central areas.

Both approaches have been generally (though not universally) accepted, despite initial resistance. In one case, recalcitrant staff still have boxes of unpacked items in their workspaces a year after moving to the new premises. Several clients noted there will always be a small number of resistors and disgruntled occupants, even in a well-loved design.





The new approach represents a redistribution of space to encourage a more interactive and engaging place for all.

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Deakin Prime, Deakin University, Melbourne, Australia. Photography by Nicole England

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