

ACADEMIC OFFICE SPACE

AN ARGUMENT AGAINST OPEN-PLAN

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Note: all the references in this text are listed at the end of this paper with hyperlinks for easy consultation.

The anxiety of our era has to do fundamentally with space.

Michel Foucault

Overview

The aim of this paper is to discuss office design for academic staff at universities. I will be arguing that the increasing popularity of open-plan design needs to be reconsidered for the following reasons:

- Current research across all sectors – not just universities – is unequivocally demonstrating that this mode of office design is highly problematic. The most recent and innovative forms of office design are now moving on to alternative solutions.
- Open-plan is not suited to the type of work academics do.
- Open-plan leads to a significant reduction and deterioration in the student experience.

In short, rather than locking universities in to a problematic open-plan model which is already considered by experts to be outmoded (Smyth, 2009), I would like to suggest that we consider other more innovative and fit for purpose work place designs for academic staff.

Introduction

In the last decade, large American IT and finance companies (Kaufman, 2015) including Google, Yahoo, eBay, Facebook, Goldman Sachs and American Express have devoted part of their not inconsiderable marketing budgets to promulgating the idea of open-plan office design as a way of fostering team-

building and collaboration and other productive work practices amongst their staff members. Many other workplaces, including universities, swayed by the glossy marketing campaigns mounted by these corporate giants have followed suit in the design of their own workplaces.

A notable holdout on this front, however, has been Microsoft, arguably one of the oldest and most successful of all IT companies. Staff at Microsoft have their own individual offices on the basis that it is simply not cost effective to do otherwise (Alsop, 2014). As Nick MacPhee, former Vice President of Worldwide operations for Microsoft said in an interview with the *Harvard Business Review*: 'Would it be smart to save \$5,000 over the course of a year by putting a highly valued, expensive employee in open space, where that person won't do the best possible job? We don't think so.' (cited in Vickers, 2012)

A report on the ABC television Science program *Catalyst* on open-plan offices was broadcast in October 2014 (Branscombe, 2014). This graphically demonstrates the problems with the open-plan office model and also proposes an alternative. And lest there be any suspicion that I'm engaged in special pleading for academic workers here, this report demonstrates very clearly that the problems with open-plan office space exist across all industries and around the world.

The problems with open-plan

I would like to expand on some of the points offered in this segment before going on to discuss a possible alternative. If you google the key words "open-plan office", you will immediately be overwhelmed by a depressing and global tale of woe. An article published in *The Guardian* at the end of 2013 sums it all up perfectly in the title alone: 'Open-plan offices were devised by Satan in the deepest caverns of hell' (Burkeman, 2013).

A much cited research paper by Jungsoo Kim and Richard de Dear (Kim & de Dear, 2013) both at the University of Sydney addresses the whole problem of open-plan. Kim and de Dear conducted their research on a huge data base which surveyed 42,700 US office workers and published their findings in the December 2013 issue of the *Journal of Environmental Psychology*. They concluded:

The loss of productivity due to noise distraction ... was doubled in open-plan offices compared to private offices, and the tasks requiring complex verbal process were more likely to be disturbed than relatively simple or routine tasks...Our results categorically contradict the industry-accepted wisdom that open-plan layout enhances communication between colleagues and improves

occupants' overall work environmental satisfaction. This study showed that occupants' satisfaction on the interaction issue was actually higher for occupants of private offices with a very low dissatisfaction rate. (p. 25)

This is not the only research demonstrating that open plan office arrangements, if once seen as innovative (Fast Company, 2013), have been a spectacular failure on the very grounds they originally aimed to promote. Industry research and surveys, life insurance companies (Robertson, 2014), academic research (Oommen, Knowles, & Zhao, 2008) – not to mention the huge flood of anecdotal evidence - have all come to the same conclusion.

One of the principal benefits that, like a mantra, is cited in favour of open-plan, is that it fosters teamwork and collaboration amongst staff. But the demonstrated reality is that open-plan actually has a negative impact on and reduces collaboration between staff and actually can increase instances of conflict and hostility between staff. Not only that, but workers, if they have the opportunity, will stay at home to work or come in early or late to avoid being distracted by noise, movement and interaction with other people. These avoidance strategies have the obvious effect of reducing, not promoting, collaboration

The only demonstrable benefits of open-plan are short-term cost savings to employers. And as the remark I cited earlier from Microsoft more than adequately demonstrates, these savings are strictly short term. The 2013 US Workplace Survey conducted by Gensler (2013), a very large US corporate design and architecture firm with offices in 16 countries, shows a measurable 6% decline in productivity since 2008 and the wide introduction of open-plan in the US. The CEO of Gensler, Janet Pogue, concludes from this: 'To really drive performance, companies must create work environments where workers can shift between various work modes and feel comfortable working privately or collaborating with colleagues' (cited in Fairs, 2013).

Let's have a brief look at some of the other drawbacks of open-plan. Open-plan causes significant problems on the following fronts:

- Noise and visual distractions
- Privacy and confidentiality
- Student experience and interaction with colleagues
- Storage and ready access to necessary work materials, security of materials
- Health and wellness

Noise and visual distractions

Noise includes people talking, phones ringing, people walking past, people engaging others in conversation who don't want to be engaged. Distracting movement is also a problem. This makes it very hard to concentrate and a lot of academic work requires high level concentration. This problem, apart from inadequate space, is the most cited difficulty workers have with open-plan.

Privacy and confidentiality

A survey of 10,500 workers in 14 different countries across Asia, Europe and North America (Steelcase, 2015c) conducted by research company Ipsos (see Ipsos MORI, 2015), and British office furniture specialists Steelcase (Steelcase, 2015b) in late 2014 found that 85% of workers were deeply unhappy with open-plan (Steelcase, 2015a), one of the main reasons being offered was insufficient privacy. People feel uncomfortably on display in open-plan, but one could cynically conclude perhaps that employers are happy with the surveillance effects that this induces. The reality is that it lowers workers' morale and productivity.

Applying this to an academic context, academic staff find themselves unable to conduct face to face private and/or confidential conversations or consultations with students and colleagues (Ryan, 2014; Baldry & Barnes, 2012). Confidential information on screens and paper is also potentially visible to others (Baty, 2007), which is highly problematic in terms of sensitive research and student confidentiality. Neither does this arrangement allow academics to engage in regular noise generating activities characteristic of academic work such as rehearsing and recording lectures, conducting online classes, confidential phone conversations and web conferences with students and colleagues (Ryan, 2014).

Separate meeting rooms or rooms for work that generates noise don't solve the problem – and this has been shown by various work place studies in universities (Ryan, 2014). Either the rooms are always booked, or because of bureaucratised booking systems are unavailable for impromptu meetings and activities. Another problem is the sheer difficulty of moving the large piles of books and papers that are often required for such activities to these rooms (Ryan, 2014). Some activities also require specialist software and computing equipment, which, again, is not easily moved around.

Student experience and interaction with colleagues

Open-plan poses a significant problem in the areas of student access (Ryan, 2014; Baldry & Barnes, 2012) and interaction with colleagues. Due to security arrangements usually in place and the lack of privacy on an open-plan floor, students can no longer readily consult staff on an impromptu basis. Appointments become necessary and meeting spaces need to be found and booked – which is not always possible.

Interaction between staff becomes more superficial as people are unwilling to conduct conversations where they feel they can be overheard (Ryan, 2014; Garcia, 2015). People also tend to stay away and work at home or work early or late to avoid distractions which means less interaction. And as people are unable to avoid each other, personality differences can become a source of strain (Marriner, 2014).

Storage and ready access to necessary work materials, security of materials

The current myth is that everything is now digitalised. This is simply not the case. Academics usually require access to substantial physical research and teaching materials which include books (sometimes rare and valuable), confidential papers, student assignments and projects, specialised computing equipment and curriculum and teaching materials. There are also research databases which need to be stored and consulted according to strict legal requirements with regards to confidentiality and privacy. Much equipment is purchased and generated by the staff themselves, not the institution. Because of all of this, this material cannot be left unattended in insecure open areas. There are also logistical difficulties in having to lock up this material every time a busy academic is obliged to leave their desk to teach, have a meeting or even just to have lunch (Ryan, 2014). Storage for, and access to, these materials is a very significant problem in open-plan.

Health and wellness

The *Catalyst* report showed the impact on stress levels of trying to concentrate in a noisy environment. Academic work requires high levels of concentration. Sick building syndrome is also more common in open-plan office arrangements than any other workplace (Passarelli, 2009). The signs of Sick building syndrome according to a World Health Organisation (WHO) definition can include any of the following: eye, nose or throat irritation; headaches, nausea, respiratory problems and rashes (Rostron, 2008).

A study by researchers from Stockholm university published in 2014 in the journal *Ergonomics* shows that the rates of illness, including flu, high blood pressure and stress levels in open-plan are very significantly higher amongst workers in open-plan in comparison with those in private offices and working from home (Bodin Danielsson, Chungkham, Wulff, & Westerlund, 2014; See also Feintzeig, 2014). *The Medical Journal of Australia* also published an article in 2014 which reports a case where the chief of staff of a large open plan office in Geelong in Victoria was diagnosed with tuberculosis (Bagherirad, Trevan, Globan, Tay, Stephens, & Athan, 2014). A quarter of his co-workers subsequently tested positive for tuberculosis. Research conducted by the insurance company Canada Life in 2014 also shows that employees working in open plan office averaged 70% more sick days than those who worked in private offices and from home (Robertson, 2014).

Added to this, are other problems such as the inability to individually adjust lighting and air temperature in open-plan as well as limited access to windows leading to reduced levels of well-being.

Possible solutions

So what is the solution to this in the face of the overwhelming ocean of evidence concerning the drawbacks of the open-plan model? (Bodin Danielsson, 2010)

It is not a question here of advocating the old model of cell-like offices lining long dingy corridors. Instead, I wish to draw attention to a model originally proposed by the Swedish architecture practice Tengbom, namely the 'combi-office' (Kotlyarov, 2015; Ryan, 2014) and variations thereof such as the 'neighbourhoods' design – perhaps with more private office space. (Office snapshots, 2014) This, in essence, is the grouping of offices with doors and windows around common kitchen and meeting areas. This model facilitates both concentrated work and collaboration. The private offices allow for concentrated uninterrupted work and for both scheduled and impromptu confidential meetings with students and colleagues at any time and also allows for spoken activities. They also facilitate the easy storage of confidential student and research files, books, specialised computer equipment and other materials relating to teaching and research. The common areas can be used for student grading meetings and other meetings in relation to research and teaching as well as impromptu connections between colleagues. Staff can move easily and quickly as needed between both spaces with a minimum of fuss.

In conclusion, it can only be hoped that universities will consider the serious problems created by putting academic staff into open-plan offices and design office space which is more suited to the pursuit of academic work and an amelioration of the student experience.

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