



Tertiary  
Education  
Management  
Conference

# Refereed Papers

Edited by Ian R. Dobson and Raj Sharma



Association for Tertiary  
Education Management  
*connecting your career with people and practice*



**Association for Tertiary Education Management and Tertiary Education  
Facilities Managers' Association**

**Tertiary Education and Management Conference 2016  
Refereed Papers**

Ian R Dobson & Raj Sharma (Eds.)  
**TEMC - Refereed Papers 2016**  
ATEM Inc. & TEFMA Inc.  
ISBN 978-0-9808563-7-8



## TABLE OF CONTENTS

<b>Editors' introduction</b> Ian R Dobson & Raj Sharma	5
<b>Comparing academic workload models: How Australian universities resource teaching activities</b> Stijn Dekeyser, Richard Watson & Elizabeth Baré	7
<b>Curriculum mapping: A tool to support strategic and cultural change in higher education</b> Sharon Short & Betty Gill	21
<b>We can always be assured of change: A case study of the College of Arts, Social Sciences and Commerce, La Trobe university</b> Andrea Young & Donna Burnett	31



## EDITORS' INTRODUCTION

Ian R Dobson and Raj Sharma

This is the formal e-book of the TEM Conference refereed stream papers for 2016. A refereed stream has been offered at TEM conferences since 2010. We commence this *editors' introduction* by repeating ourselves from last year's refereed stream. TEM conferences have always attracted many excellent papers, and the advent of a refereed stream was a good thing. There is no reason why a conference attended predominantly by 'admin' staff should not also offer the opportunity for those delegates presenting a paper to be including within the system of metrics that generates federal government funding. However the TEM Conference has a rather strong practitioner focus to support the sharing of knowledge and 'know how'. That is only to be expected, because it is a conference sponsored by organisations of administrators and managers. The main reason for mentioning this is that we managers and administrators don't necessarily approach writing in the same way that academics do.

It is possible that there has been minor confusion as to which papers can be included in the refereed proceedings of a conference. Papers 'published' in this way constitute a funded research output and therefore such papers must meet the Higher Education Research Data Collection's definition of 'research' before being eligible for inclusion in refereed proceedings. However, just because not all practitioner papers can be defined as 'research' does not mean that they are not excellent papers. This goes some way towards explaining why it took over 30 years before the TEM Conference offered a refereed stream.

Writing up the results of 'scholarly research' is not typically the lot of university administrators, however, being in 'admin' does not preclude being able to publish. The editors of this volume are a good example of this. Between us, we have authored or co-authored well over 100 articles published in journals or in edited books. There is also nothing to prevent career administrators from acquiring a PhD, something else the editors of this volume have done. Getting started in publishing is not all that easy, but once you have done so, it gets easier every time. Publishing in a conference refereed stream is probably a good place to kick off a publishing career. The editors are more than happy to discuss with authors matters relating to submitting a paper to the refereed stream of future TEM conferences. It is also the case that over the past couple of decades, more administrative staff are being awarded PhDs without starting out as academics.

Compared with previous years, papers submitted for consideration in this year's refereed stream were few in number. In fact, only three papers were submitted, although several others were 'promised', only not to emerge, even weeks after the conference. By comparison, 17 papers submitted for assessment under provisions for the refereed stream in 2005, of which 14 were published in the refereed proceedings. One wonders why so few papers were submitted for the refereed stream this year, but we will take this up with the powers that be at ATEM.

Looking at this year's published papers, to start the ball rolling is a comparative paper on academic workload models. Stijn Dekeyser, Richard Watson and Elizabeth Baré note that the choice of model can have 'significant and diverse impacts'. They report that models offer broad agreement, but that models differ, and they can affect productivity. Read on to find out how!

Cultural mapping: have you heard of it? We hadn't either, but one of the benefits of being an editor is the early exposure one receives to ideas. Sharon Short and Betty Gill from Western Sydney University explain how to use a *curriculum management tool* and its capacity to support strategic and cultural change. It was used with great success at that university, allowing

curriculum designers to work out what was important. As the authors report, ‘Whilst no formal evaluation of the tool has yet been undertaken, its widespread use to date, initiated by end users themselves, is indication of its utility, and has resulted in positive anecdotal feedback from internal users, including academics and teaching development staff, as well as a range of external accreditation bodies’. A winner!

Andrea Young and Donna Burnett write about change at La Trobe University, and how they set out to establish a framework for analysing change. Their paper shows how theoretical frameworks from the management literature can help staff to understand the change process. Effective programmes can support staff in their development and in how they adjust to change. After all, an organisation’s staff are its primary asset! Investing in people is the best way to, they say.

The editors hope that readers find this set of papers to be of interest. They also hope that ATEM members who attend the TEM Conference regularly might start to consider submitting their work for consideration for the refereed stream. The more papers accepted in the refereed stream publication, the better. The editors’ main requests are that authors make sure their papers are ‘research’ (as defined), and that they follow the style guidelines. For anyone hoping to add publishing scholarly work to their career, seeking publication in a refereed stream is a good way to start the ball rolling. Most journals have horrific rejection rates, and even our own Journal of Higher Education Policy and Management rejects up to 80 per cent of papers submitted. Getting into e-print in a conference refereed stream usually presents fewer obstacles, and much less competition. Think about it!

Readers’ comments on this volume and the processes behind it will be gratefully received.

Until next year,

Your editors,

Ian R Dobson and Raj Sharma.

## **BIOGRAPHICAL NOTES**

**Ian R Dobson**’s career in higher education started in the early 1970s years in the Planning Branch at RMIT. Since then he enjoyed (for much of the time) long spells at the University of Melbourne and Monash University, ending in February 2005. Living on and off in Finland from 2005, he was a research director at the University of Helsinki, Finland, for nearly three years from mid-2010. Currently is an adjunct professional staff member at Monash University and has been editor of the Journal of Higher Education Policy and Management since 2001. His term finishes at the end of 2016. He also edits the NTEU’s Australian Universities’ Review. He completed a PhD at Monash University on higher education equity policy in 2004.

**Raj Sharma** worked in higher education for nearly four decades at institutions in three Australian states, both in higher education management and as an academic. He completed Master of Educational Administration and PhD degrees at the University of New England during the 1980s. Raj is a consultant in higher education in areas such as planning, institutional research, resource allocation and related fields.

**Ian R Dobson:** [editor@atem.org.au](mailto:editor@atem.org.au) & **Raj Sharma:** [dr.rajendra.sharma@gmail.com](mailto:dr.rajendra.sharma@gmail.com)

# **COMPARING ACADEMIC WORKLOAD MODELS: HOW AUSTRALIAN UNIVERSITIES RESOURCE TEACHING ACTIVITIES**

Stijn Dekeyser<sup>1</sup>, Richard Watson<sup>1</sup> & Elizabeth Baré<sup>2</sup>

<sup>1</sup>University of Southern Queensland, <sup>2</sup>University of Melbourne  
stijn.dekeyser@usq.edu.au, richard.watson@usq.edu.au, lizb@unimelb.edu.au

## **ABSTRACT**

The Australian higher education sector has undergone significant changes over the last two decades, and is set to be challenged by various pressures well into the future as debate on public funding and productivity continues. A recent report on the higher education workforce of the future identified agility of its workforce as the foremost attribute that a university must possess to be successful going forward. Furthermore, the report singled out more flexible academic workload models as a critical factor. The choice of model used at an institution has both significant and diverse impacts, including those on casualisation levels, financial viability, and productivity. In this paper, we report on our preliminary findings from a research project that aims to compare diverse academic workload models being used in a number of Australian universities. We show where models offer broad agreement throughout the sector, but also where there are significant differences. The observed variation offers a partial indication of the range of resourcing levels existing in Australian higher education today, and forms part of the discussion around workload models affecting the sector's productivity.

## **KEYWORDS**

Academic workload management, benchmarking, resource planning, productivity.

## **INTRODUCTION**

Part of the ongoing national debate regarding public funding of the higher education sector in Australia is the ostensible need for universities to further improve productivity and secure their economic viability. Traditional approaches include making more concerted use of external benchmarking of processes and further investing in innovative technologies (Universities Australia, 2016). According to a recent Australian Higher Education Industrial Association (AHEIA) commissioned report on the higher education workforce of the future, more flexible workload models are among the critical attributes that a university must possess to be successful going forward (Price Waterhouse Coopers, 2016). In other words, the choices made in the design of workload models are assumed to have an impact on productivity.

While there is an emerging literature on academic workload management, little has been written on the impact of workload formulae on the efficiency or productivity of a university. Much of the literature relates to identifying the need for a workload management system to ensure equity in work allocation (Kordzadze, 2013), processes for implementing workload management systems (Barrett & Barrett, 2007; 2010) and experience in individual institutions or academic units of implementation (Robertson & Germov, 2015; Vardi et al., 2008).



Universities globally have adopted an essentially corporate business approach, strategically aligning research, teaching and community engagement with key performance indicators. The resultant work environment is characterised by high workloads, competing expectations and reduced resources (Fredman & Doughney, 2011). Several studies examine academic staff responses to the implementation of workload management (Boyd, 2014; Kenny et al., 2012), though much of the contemporary research on academic staff tends to reflect on the macro-level impact of neoliberalism and managerialism in higher education institutions. There is far less emphasis on actual responses in teaching practice (Mathison, 2014; Hemer, 2014).

Numerous authors have noted that academic productivity as measured by research output has increased at least in the Anglophone world. Duncan et al. (2015) note the negative impact on academic satisfaction in the fragmentation of time in a day. Noting increased research productivity, Milam, Berger and Dey (2000) assume that research productivity has been achieved in US universities at the expense, not of teaching, but of service to the institution. Webber (2011) in a study designed to identify factors which contribute to faculty productivity studied of a sample of 9,300 records drawn from the National Study of Post-Secondary Faculty in 2004 and identified a positive relationship between time allocation and research productivity.

Graham (2015) in summarising the literature on academic workload management and performance in relation to the UK concludes that the inferred links between academic workload management and maximised outputs in teaching and research are yet to be explored. We agree with that conclusion.

For several years now our research team has been working on various aspects of academic workload management, with the twin aims of creating a detailed understanding of institutions' goals and current practice as well as the effects of workload management on the sector. For the current paper, we set about comparing academic workload models as they are currently used in Australian universities firstly to create a benchmark and secondly to test common assumptions of them being able to impact, either positively or negatively, financial viability and productivity.

This paper makes three distinct and significant contributions. The first is in the presentation of a method and system to generate detailed academic workload allocation data that allows workload models to be compared to one another. The second is the presentation of preliminary results of the comparison of the teaching components of a number of existing models, in effect creating a benchmark that universities may use to situate the teaching-related weightings of their own models. Finally, we discuss the requirements of further research needed to be able to fully test the impacts of workload models on productivity.

## **METHODOLOGY**

Academic workload allocation is both a complex as well as a sensitive process, and workload models have been adopted in part to enhance equity, transparency and fairness. While models are typically well described, there is often significant discussion both on the specifics (for example, weightings for individual activities), as well as on the overall objectives and outcomes. An objective and sound process for comparing workload models is therefore necessary. Before turning to the results of the comparison of a number of Australian workload models, we describe the methodology used to obtain comparable data.

### **Categorising academic workload models**

While university staff have long had an intuitive understanding of academic workload models, and several types of models have been described in research literature, in previous work (Dekeyser et al., 2014) we have presented methods to categorise such models. Through reporting on a survey on the subject we subsequently described frequency of usage of the various model types in Australian universities (Watson et al., 2015). What follows is a summary of these earlier contributions.

Academic workload models feature two main components. The ‘Envelope Approach’ describes which groupings (‘envelopes’) of academic work are available for allocation, as well as the process in which the sizes of the envelopes are determined. Envelopes typically include research, teaching, and service, but others may be defined as well. Size calculation entails working out envelope targets (work expectations in hours, points, or percentages) for individual academic staff. Most models specify an order of envelope size calculation, with the size of the final envelope being defined by the sizes of the other envelopes. For example, models employing the ‘research first’ approach would first calculate, per academic and per year, the research envelope size (often based on past productivity), and the time or percentage remaining would be available for the other envelopes such as service and teaching. In contrast, the ‘teaching first’ approach initially distributes the available amount of teaching equitably over all available academics, and the amount of time left (if any) is then available for research. Historically the most common approach, still used in a number of Australian universities but being overtaken by research-first models, is the fixed or balanced approach typically implemented as a 40-40-20 system. In such models, academics are nominally provided with forty per cent of their time being available for research, an equal percentage for teaching, and twenty per cent for service.

The second main component of academic workload models determines how hours (or points, or percentages) are allocated for specific teaching-related tasks that are performed in the context of a section’s courses (in some contexts alternatively known as subjects or units). Five common ‘Teaching Allocation Methods’ were identified, including ‘constant’, ‘contact hours’, ‘actual hours’, ‘points’, and ‘cost based’. The actual hours method is the dominant method in use today. Models that employ it specify a list of teaching-related activities along with their weightings; the length of the list indicates the granularity (or, uncharitably, the level of micro-management) of the model. We will discuss this method in more detail in the remainder of the paper, as most of the models we have analysed utilise it, and those that did not were converted to it for the purpose of comparison. For a discussion about the properties as well as advantages and disadvantages of each of the teaching allocation methods, see Dekeyser et al. (2014).

### **Formalising and representing models**

Over the past five years we have collected documentation on more than thirty-five workload models used in various academic sections (i.e. departments, schools, faculties) situated in more than twenty Australian universities. Some of the models were collected in the context of testing the genericity of a software system that we have developed to manage academic workload allocations. The ‘workload allocation management system’ WAMS is now in use in a number of universities managing diverse models as well as processes, and also supports our research projects. More than half of the models we have collected are compared in this paper. We briefly describe the process of transforming the information obtained into the format used to analyse and compare models.

In most cases the documentation for a model is limited to a single text averaging around fifteen pages; often multiple interviews have been required to be able to arrive at a consistent interpretation of the description. Such efforts are sometimes simplified with the inclusion of a sample spreadsheet reporting on actual allocations made within a section in a given year. As a first step we have gathered this information on the models in a cloud-storage folder shared with the team to facilitate research. A second step in the analysis of the models is their transformation into a consistent canonical representation. While this step is optional in the sense that the subsequent step can be performed directly from the original description, a distinct advantage is that it offers an additional opportunity to validate our interpretation. The final step entails entering the workload model's rules into the WAMS system, at which point all models are represented using the same mathematical formalisation.

### **An overview of the workload models compared**

We have compared 19 models originating from nine Australian universities that are either involved in our research, have trialled our workload allocation management system (WAMS), or have made their models available to the public. While some of the models studied have since evolved markedly or been fully replaced, many are still in use today. Based on the properties of the models and the outcome of the survey reported in Watson et al. (2015), the set of models compared appears to form a reasonably representative sample of current Australian models. For example, eleven employ the actual hours teaching allocation method and six are based on the balanced envelope approach. The institutions themselves also form a cross-section of the sector, with representatives from the major groupings of the Innovative Research Universities (IRU), Australian Technology Network (ATN), Group of Eight (Go8), and the Regional Universities Network (RUN). In terms of spread over disciplines, seven models are used in science sections, five in humanities and education, and four from other disciplines. The remaining three are institution-wide models, applicable to all disciplines within the institution.

### **Simulating workload allocations using course profiles**

Once models are entered into the WAMS system, they can be used in the process of allocating workload to fictitious (or hypothetical) courses. This forms the crux of our comparison of models: each model in the system is used to allocate workload to several artificially constructed courses that are carefully designed to represent common or typical courses as they exist across disciplines and institutions. In this sense the notional courses are representatives of 'standard' courses taught in universities. The allocations are made against the rules of the Teaching Allocation Method components of the models, taking the properties of the notional courses (e.g. number of students enrolled, number of lectures presented, etc; see further discussion below) into consideration. The Envelope Approach components of the models are discarded in this part of the broader research project.

The output of allocations in WAMS is the same for all simulations: it is the total number of hours allocated for the teaching of a specific notional course, as well as a grouping into categories of teaching allocations. These categories, while essentially ad hoc in nature, are nevertheless applied to all models in an as consistent manner as is possible given the interpretation of model's rules by the research team. Seven main categories were created, including Face-to-Face Contact, Course Leadership, Assessment, and Consultation. See the results section further in this paper for details.

### **Details of the three notional courses used in the simulation**

We created three standard courses for which workload allocation was to be simulated for 19 different models. The courses must be sufficiently generic to be within the purview of the

models which span many disciplines, yet detailed enough to be able to work out realistic as well as comparable allocations. Workload models typically take a wide range of parameters into account, so we ensured that all necessary information was available to create allocations. We also aimed to single out the effect of enrolments on workload allocations. Therefore, the three notional course profiles varied only in the number of students, and fixed the other parameters. To be able to study the effects of other parameters, as well as different types of pedagogy, modes, cohorts et cetera, additional representative courses would need to be developed, simulated, and validated.

Course 1 ('Medium' notional course):

- 80 students (20 EFTSL)
- First year, entry level course
- Two hours of lectures per week, for 13 weeks
- Two hours of practical sessions per week per student; 4 student groups (20 per group)
- Three assignments and one end-of-semester exam
- Course material already developed; first offer of the year
- Staff teaching the course had already done so before.

Course 2 ('Small' notional course):

- 20 students (5 EFTSL)
- Otherwise same as Course 1 (but number of practical groups is now 1)

Course 3 ('Large' notional course):

- 350 students (87.5 EFTSL)
- Otherwise same as Course 1 (but 18 practical groups)

### A concrete example of a simulation

Illustrating the methodology explained so far, consider an actual hours model that is used to allocate workload to Course 1. In this case the model requires six distinct activity allocations spanning four categories, and generates a total of 343 hours, presented in Table 1. In the results section of this paper, the model applied here is the institution-wide model used in Institution A. The model is relatively coarse-grained, as there are only six allocations. We will show it is also relatively parsimonious, yielding the sixth lowest total resourcing for notional Course 1.

**Table 1: An example of workload allocations for notional Course 1**

Activity	Category	Input	Output (hours)
<b>Consultation First Year</b>	Consultation	80 students	18
<b>Lecture (original)</b>	Face-to-face contact	26 contact hours	65
<b>Tutorial (original)</b>	Face-to-face contact	26 contact hours	65
<b>Tutorials (repeat)</b>	Face-to-face contact	78 contact hours	97
<b>Marking (all)</b>	Assessment	80 students	80
<b>Lecturer in charge</b>	Course Leadership	N/A	18
			<b>Total: 343</b>

### Confidence and validation

Both the translation of model descriptions into the formal software representation, and the allocation of work to the notional course profiles may be subject to interpretation errors. We discern five levels of confidence in the accuracy of our results, based on the type of validation that was carried out.

*Full confidence (5 models):* some of the researchers involved in this study have direct experience managing some of the models being compared. In this case external validation was not required.

*Very high confidence (4 models):* the outcomes of the simulation were directly confirmed through interviews with workload managers.

*High confidence (6 models):* the outcomes were compared with similar allocations available in spread sheets accompanying the models.

*Medium confidence (1 model):* the model was first translated into a canonical representation, a step which enables researchers to identify possible gaps in their understanding of the model's documentation.

*Low confidence (3 models):* no external validation was feasible and hence the allocations made represent best guesses informed by the researchers' expertise in this area.

There is a third source of possible errors being introduced into the simulations. Some of the models in our study do not use the actual hours teaching allocation method, but instead use the cost method, points method, or contact hours method. For these models we have mapped the outputs to actual hours. To minimise error the mapping was determined, where possible, in consultation with the relevant workload managers. We identified three techniques to derive such mappings. The first one works for balanced envelope models and relies on the fact that 40 per cent of workload allocations must correspond to a full teaching load, making it possible to work out a mapping from points to hours. The second technique involves examining marking allocated to sessional staff. Since any points used in the system must be translated to sessional contract hours, this provides an opportunity to map points to hours. Finally, models often provide guidelines on how many hours of PhD supervision are expected; the points provided for such work can hence again be converted to hours. In one case we have used the average of the three techniques to determine a plausible mapping function, and this function was subsequently validated by the relevant workload manager.

## RESULTS

In the previous section, we have provided a comprehensive description of the methodology used to obtain the results reported here. The results are anonymised to the extent that individual academic sections of universities included in the comparison cannot be identified. The Table 2 provides minimal information about the codes used in the graphs included in the present section.

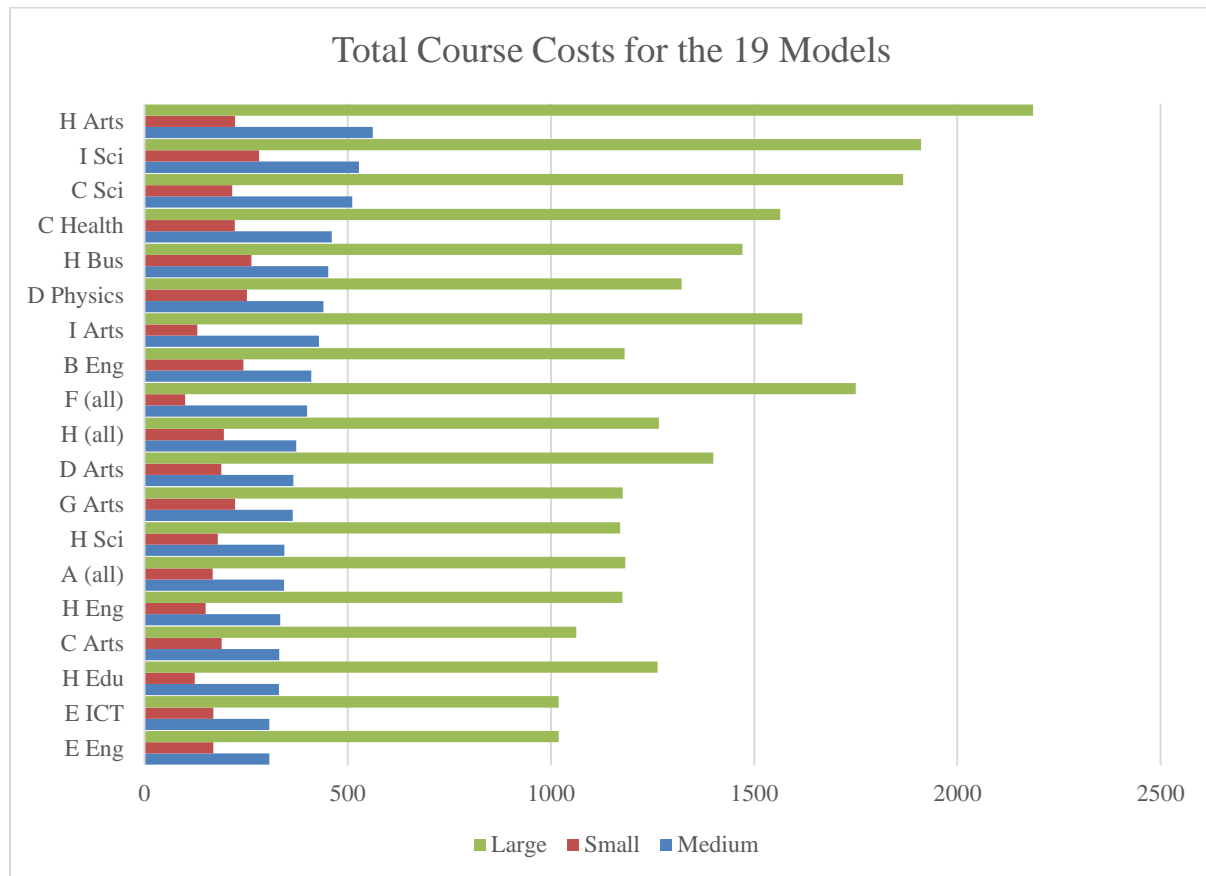
**Table 2: Key of institutional codes used in the analysis of results.**

Institution code	Number of models	Discipline
<b>A</b>	1	All (institution-wide model)
<b>B</b>	1	Science & Engineering
<b>C</b>	3	1: Arts ; 2: Health ; 3: Science
<b>D</b>	2	1: Arts ; 2: Science
<b>E</b>	2	1: Engineering ; 2: ICT
<b>F</b>	1	All (institution-wide model)
<b>G</b>	1	Arts
<b>H</b>	6	1: All ; 2: Arts ; 3: Bus ; 4: Edu ; 5: Eng ; 6: Sci
<b>I</b>	2	1: Arts ; 2: Sci

### Total course costs

Simulating allocations for three courses in accordance with the requirements of the 19 models studied in this paper results in a dataset of 57 distinct total costs expressed in hours available for teaching the courses. The dataset is visualised in Figure 1; the raw data is included in the

paper's appendix. To aid interpretation, the 19 distinct models have been sorted in descending order on the cost they produce for Course 1 (the 'medium' sized course profile).



**Figure 1: Total costs, in hours, for the notional courses generated by the workload models**

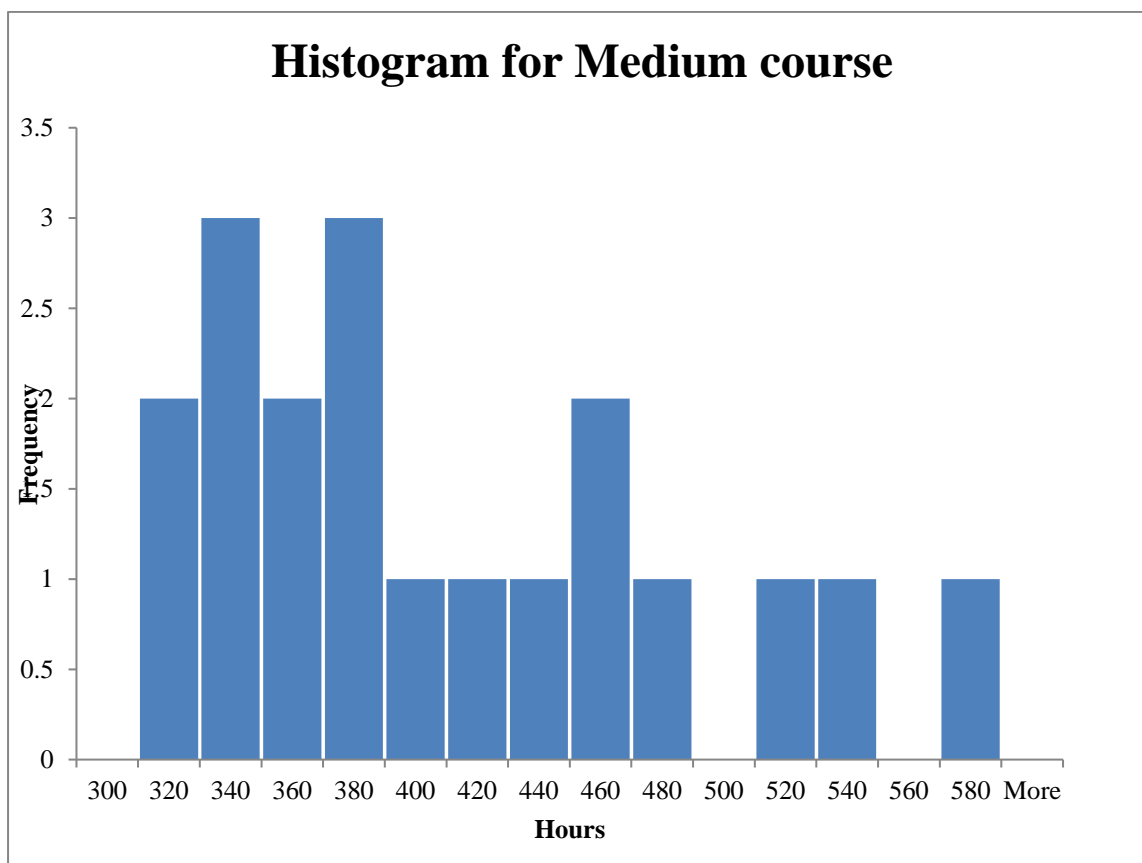
The data presented in Figure 1 is summarised in Table 3. Among other points it is clear that there is considerable variation in costs among the models and also between the three simulated courses. The variation observed for the Medium course is not uniformly replicated for the diverse models for any of the two other courses.

**Table 3: Summary of total allocation costs, in hours**

	Course 1 (Medium)	Course 2 (Small)	Course 3 (Large)
<b>Maximum cost</b>	561	282	2186
<b>Minimum cost</b>	307	100	1019
<b>Average cost</b>	403	191	1441
<b>Standard deviation</b>	81	53	352
<b>Median</b>	373	189	1321

### Frequency analysis of cost outcomes

On a per course basis the data shown in Figure 1 can be presented in histograms, indicating the frequency of specific cost ranges occurring. This is useful to indicate the distribution of models over costs expressed in narrow ranges of number of hours. Figure 2 presents such a histogram for the Medium sized generic course profile. It can be seen that ten of the 19 models are grouped at the bottom range of cost outcomes. It appears that teaching a course with 80 students would normally attract between 320 and 380 hours. In this frequency distribution, there is a tail of nine models that have almost unique, and more expensive, outcomes.



**Figure 2: Histogram for notional Course 1**

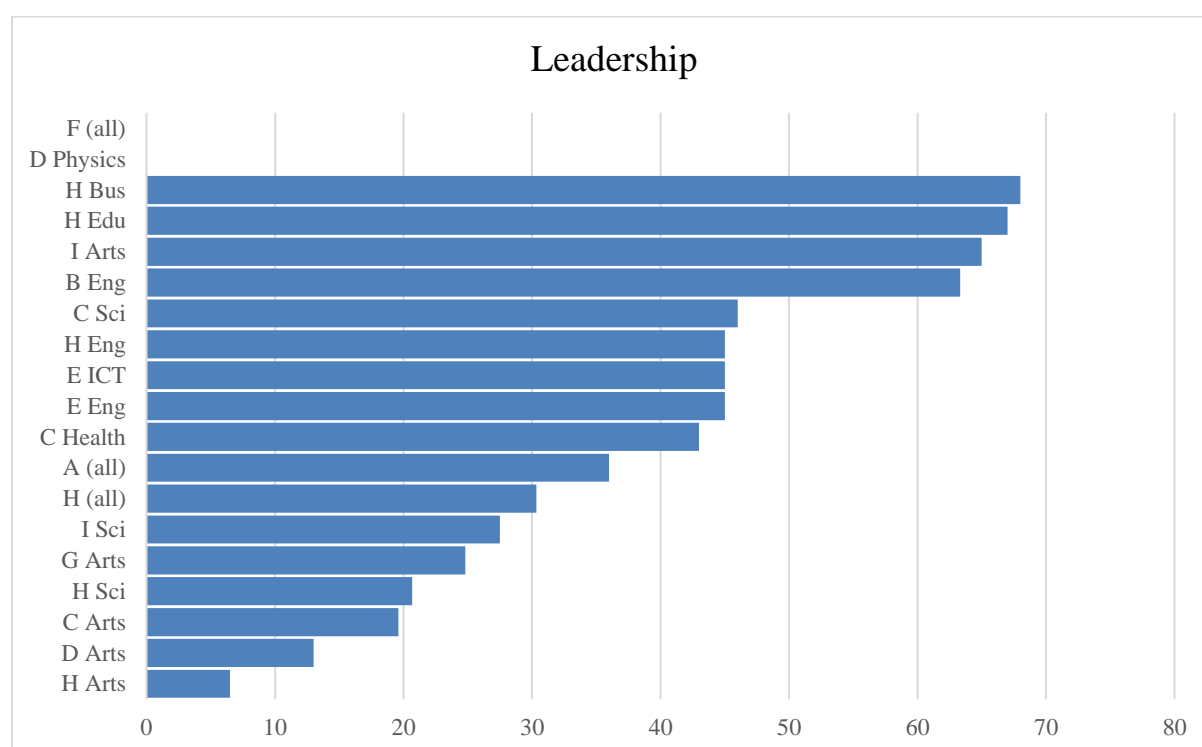
The histogram for the Large course, not reproduced in this paper, shows a similar type of distribution: most of the models produce outcomes between 1000 and 1400 hours, and a tail of seven models produce fully unique, more expensive outcomes. The histogram for the Small course presents an almost normal distribution ranging from 100 hours to 280 hours with the majority just under 200.

### **Contribution and variation in categories**

The total cost of teaching a course is not the only outcome of the workload allocation simulation. Subtotals are also available for seven main categories such as ‘Leadership’ and ‘Assessment’; the resulting data is included in the appendix to this paper. Perhaps unsurprisingly, the contribution of face-to-face teaching activities is significant in most simulations. For the example shown in Table 1, this category accounts for almost exactly two thirds of the total teaching cost of Model A as applied to Course 1.

For other categories, the relative contribution as well as absolute numbers can vary significantly. Figure 3 presents the data for the ‘Leadership’ category as applied to the medium sized Course 1. While around one quarter of the models produce a similar outcome of 45 hours, and a further fifth of the models produce a high-end outcome of around 65, the other models appear more isolated. It should be noted that the ‘Leadership’ category is much less well defined than ‘Face-to-face Contact’ and ‘Assessment’ are, for example. As a result, tasks associated with this category in some models may be subsumed in other allocations in other models. This also explains why the two models shown at the top of Figure 3 are empty: Model F is a cost-based model where there is only one ‘block’ allocation made for 80 students, and

Model D is a contact-hours model where all other costs are subsumed in the allocations made per lecture and practical session.



**Figure 3: cost contribution of allocations in the leadership category**

There are categories and subcategories where significant standardisation across the Australian higher education section appears to have taken place. One example is in marking: a substantial majority of models allocate one hour of marking per student enrolled in the course over the full semester. Outliers here are models that provide an allocation per distinct piece of assessment. In our generic course profiles we have stipulated three assignments plus an end of semester exam; expensive models are hence partially explained through this property.

A second example concerns the activity of lecturing which in our WAMS simulation system was set up as a subcategory of ‘Face-to-face Contact’. Most models provide two hours of preparation for each hour of delivery. We suggest that the apparent standardisation of this particular activity arises from a decision by the Academic Salaries Tribunal (1980), based on practice in universities in New South Wales at that time. The Tribunal had asked Vice Chancellors to provide data on actual time taken, but this was not forthcoming. The resulting time allocation remains in the Higher Education Industry (Academic Staff) Award. The large variation observed in the overall face-to-face category is due, then, to the different treatment by models of repeating groups of practical sessions. In our generic medium sized course there are four repeating groups. Some models allocate preparation only for the first group, while others continue to provide full preparation time for each occurrence. Some models offer a third way by providing a discounted allocation. The different treatment of repeat groups provides a second partial explanation of the variations on total costs observed in this study.

### **Sensitivity of input parameters**

The final outcome of the comparison of models concerns the importance or otherwise of some of the parameters included in the design of the generic course profiles. All models except one are highly and directly dependent on the number of students enrolled. That is why our three



generic course profiles varied only that input parameter. The model that is the exception is a ‘contact hours’ type of model, where the total cost of teaching a course is a function of how many hours of face-to-face contact there are. However, the enrolment count still has a significant indirect impact: it determines the number of repeat practical sessions are required, and hence how many contact hours there are.

Conversely, there are three models where the number of contact hours being taught are immaterial to the output. Unsurprisingly, one of those is a ‘cost based’ model, and the two others are essentially hybrid models that combine cost based with actual hours. Two models take into account whether or not a course is at first-year level; our three generic profiles hence attracted higher allocations for these models than would have been the case otherwise. Finally, as mentioned in preceding sections, the number of repeat groups and the number of individual assessment pieces also played an important role in a limited number of models.

## DISCUSSION

Two discussion points immediately emerge from the presentation of the results in the previous section. First, what is the immediate meaning of the observed differences between models, and second, what is the reason for the differences? Turning to the latter first, we analysed the data to determine whether the outcomes could be explained by differences between disciplines, or by differences between types of institutions (e.g. Regional versus Group-of-Eight). While the overall dataset is relatively small, and hence confidence is low, it appears that neither of the two groupings is a contributing factor to the differentiation. Also, given that a relatively well-defined aspect of workload allocation, namely the occurrence or otherwise of a provision for preparation for a repeat practical session, yields highly variable outcomes, it is apparent that activity weightings in workload models are not always an objective estimate of the actual work involved in the activity. From these two observations, together with the knowledge that many models originated from the lower levels in institutions’ hierarchies, we conjecture that weightings for some activities have emerged spontaneously and in relative isolation. This contrasts with a very limited number of activities where weightings appear to be almost uniform across the sector and likely reflect early examples of legal decision in this context.

What, then, is the meaning of the observed differences? At a simplistic level, it would suggest that some universities appear to be resourcing the same conceptual unit of work (the teaching of the same notional course) in fewer hours than other institutions do. In the absence of crucial data on student outcomes or effects on staff, this simplistic view would indicate a potential for institutions to achieve higher efficiency or productivity simply through an imposition of low(er) weightings on those activities that can yield significant differences in resourcing. However, given that the low weightings observed in some models are unlikely to reflect the actual time needed to perform the task, any race to the bottom would be unlikely to be sustainable especially when applied to whole universities rather than isolated departments.

In addition, productivity cannot be measured in terms of models’ teaching allocation methods alone. At least a second component is needed: the effect of envelope size allocations assigned to individual academic staff. Consider the (hypothesised) existence of a workload model that on the one hand provides a high cost (e.g. 400 hours) to the Medium notional Course 1 studied in this paper, but on the other hand delivers a 90 per cent teaching envelope (e.g. 1600 hours) for an academic staff member. The first component would ostensibly provide a somewhat relaxed teaching workload for a lecturer, but combined with the second component could still

mean she is required to teach four such courses. Conversely, if the model delivers a 40 per cent teaching envelope to a professor, but a low course cost (e.g. 200 hours), the amount of teaching would be almost the same for both academics.

Of the two workload model components, teaching allocation and envelope calculation, changes to the latter are likely to have a higher potential impact on an institution's productivity. This is because many of the models (see the histogram graphs in the results section of this paper) are already grouped around the lower teaching costs for courses. Those 'common' lower cost weightings may or may not be a true indication for the actual amount of work expended, and are unlikely to further decrease. Consequently, only for the minority of models (those that are clearly more generous in terms of teaching activity weightings than the mean for the sector) is there still real scope for optimisation. Another reason for universities' increased scrutiny of envelope calculation is that there is an apparently untested assumption that 80 per cent of research productivity is provided by 20 per cent of academic staff. However, regardless of whether this is true (and substantial research is needed to determine the veracity) changing the envelope calculation method is much more difficult to do than changing weightings for teaching activities, or removing inefficient courses. That is because many enterprise agreements explicitly set the envelope sizes, mostly as a balanced 40-40-20 system.

To fully determine the effect of workload models on academic productivity, at a minimum the combination of both envelope calculation and teaching allocations must be studied. Hence in future work we aim to perform a similar type of research as presented in the current paper, by substituting notional course profiles with notional staff profiles. Simulating the envelope size output generated by diverse models for identical input is more difficult to do, however, and will require substantial collaboration with participating institutions to ensure comprehensive data validation. The outcomes will not only be valuable in the context of determining productivity but also shed light on whether academic workload models contribute to the hypothesised fragmentation of the academic profession where the archetypical academic makes way for teaching specialists and research intensive staff.

Returning to the apparent spontaneous or arbitrary nature in which weightings of some teaching activities have been determined in the past, we note that while presenting the preliminary outcomes of this study during a workshop with participating institutions a trend of convergence was seen to emerge. Participants indicated that while workload management used to happen within individual academic sections, the process is now moving to a more managed situation often at higher levels in the institution. Consolidating diverse models provides opportunity for convergence, as do increased exchanges of practice during workshops and other events. Given increased convergence as well as increased maturity of workload management, combined with the sector's understanding that it must be constructive and proactive in the discussion of public funding and productivity, it is plausible that an audited, sector wide best practice will emerge. It is incumbent on academic managers that objective data is used to make decisions, taking into account effects on student outcomes as well as staff satisfaction while balancing the need for economic viability of higher education.

## CONCLUSIONS

Academic workload management is increasingly important in the Australian higher education sector. While we have seen evidence of a spontaneous nature of the evolution of early models, it is apparent that a more managed approach is emerging with consolidation of models at higher

levels and nascent convergence of at least some of the teaching-related parameters. However, much of the evolution is occurring within individual institutions and very little data is available to help guide the broader development. Given the considerable potential impact of workload models on many aspects of the university sector, not least staff satisfaction, student outcomes, institutional viability, and the level of public funding; we argue that comprehensive cross-institutional scrutiny of models is necessary to yield exhaustive and comparable data enabling a constructive debate to take place to improve outcomes across the board.

*Stijn Dekeyser and Richard Watson are both associate professors in computer science at the University of Southern Queensland and have both served as heads of department.*

*Elizabeth Baré is a past head of administration at the University of Melbourne. Both Ms Baré and Dr Dekeyser are Honorary Senior Fellows at the L.H. Martin Institute.*

## REFERENCES

Academic Salaries Tribunal (1980). *Part-time Academic Staff*, Clause 72, page 36. Australian Government Publishing Service, Canberra, June 1980.

Barrett, L. & Barrett, P. (2007). Current Practice in the Allocation of Academic Workloads. *Higher Education Quarterly*, 61(4), 461–478.

Barrett, L. & Barrett, P. (2010). Cycles of Innovation in Managing Academic Workloads. *Higher Education Quarterly*, 64(2), 183–199. doi: 10.1111/j.1468-2273.2009.00436.x

Boyd, L. (2014). Exploring the utility of workload models in academe: a pilot study. *Journal of Higher Education Policy and Management*, 36(3), 315–326.

Dekeyser, S., Watson, R., & Baré, E. (2014). *Designing an academic workload model in the age of blended learning*. In: Tertiary Education and Management Conference, Cairns, Australia.

Duncan R., Tilbrook K., & Krivokapic-Skoko, B. (2015). Does academic work make Australian academics happy? *Australian Universities Review*, 57(1).

Fredman, N. & Doughney, J. (2011). Academic dissatisfaction, managerial change and neo-liberalism. *Higher Education*, 64, 41–58. DOI: 10.1007/s10734-011-9479-y

Graham, A. (2015). Academic staff performance and workload in higher education in the UK: the conceptual dichotomy. *Journal of Further and Higher Education*, 39(5), 665–679.

Hemer, S. (2014). Finding time for quality teaching: an ethnographic study of academic workloads in the social sciences and their impact on teaching practices, *Higher Education Research & Development*, 33(3), 483–495.

Kenny, J., Fluck, A. & Jetson, T. (2012) Placing a value on academic work: The development and implementation of a time-based academic workload model. The Australian Universities' Review, 54, 2, 50-60.

Kordzadze, M. (2013). Solving problems of inequity in academic staff workload distribution. *GESJ: Education Science and Psychology*, No.2 (24).

Mathison, K. (2014). Effects of the performance management context on Australian academics' engagement with the scholarship of teaching and learning: a pilot study. *Australian Education Research*, 42:97–116.

Milam, J., Berger, J., & Dey, E. (2000). Faculty time allocation, a study of change over twenty years. *Journal of Higher Education*, 71(4).

Price-Waterhouse-Coopers (2016). *Australian higher education workforce of the future*. Report commissioned by the Australian Higher Education Industrial Association (AHEIA).

Robertson, M., & Germov, J. (2015). Bringing the budget back into academic work allocation models: a management perspective. *Journal of Higher Education Policy and Management*, 37(5), 507–518, DOI: 10.1080/1360080X.2015.1079398.

Universities Australia (2016). *Productivity & Efficiency*. Retrieved from [www.universitiesaustralia.edu.au/](http://www.universitiesaustralia.edu.au/)

Vardi, I. (2008). The impacts of different types of workload allocation models on academic satisfaction and working life. *Higher Education* (2009) 57: 499–508. DOI: 10.1007/s10734-008-9159-8.

Watson, R., King, R., Dekeyser, S., Baré, E., & Baldock, C. (2015) *Current practice in academic workload allocation processes in Australia*. In: Tertiary Education and Management Conference: Leading Locally Competing Globally, Wollongong, Australia.

Webber, K. (2011). Factors Related to Faculty Research Productivity and Implications for Academic Planners. *Planning for Higher Education*, 39(4), 32–43.

## APPENDIX

Total teaching costs, in hours, for the three notional courses obtained through simulated allocation of activities as per requirements of the 19 academic workload models studied. The letters A through I indicate the anonymised institution from which the models originated.

Model / Course	Medium	Small	Large
<b>A (all)</b>	344	168	1183
<b>B Eng</b>	411	244	1182
<b>C Arts</b>	332	189	1063
<b>C Health</b>	461	222	1564
<b>C Sci</b>	511	216	1867
<b>D Arts</b>	366	189	1400
<b>D Physics</b>	440	252	1321
<b>E Eng</b>	307	169	1019
<b>E ICT</b>	307	169	1019
<b>F (all)</b>	400	100	1750
<b>G Arts</b>	365	223	1177
<b>H (all)</b>	373	195	1265
<b>H Arts</b>	561	223	2186
<b>H Bus</b>	452	263	1472
<b>H Edu</b>	331	124	1263
<b>H Eng</b>	334	150	1176
<b>H Sci</b>	344	181	1170
<b>I Arts</b>	429	130	1619
<b>I Sci</b>	527	282	1911

For medium-sized (80 enrolled students) notional Course 1, the following table breaks down the allocations made per category of teaching-related activities. Actual hours type of models feature allocations against several main categories, whereas contact hours and cost based models do not.

Model / Category	Assessm.	Block	Consult.	Developm.	F2F contact	Leadership	Non-F2F
<b>A (all)</b>	80				227.5	36	
<b>B Eng</b>	40		13.328		234	63.328	60
<b>C Arts</b>	80		24		208	19.6	
<b>C Health</b>	80				338	43	
<b>C Sci</b>	179				286	46	
<b>D Arts</b>	80			91	182	13	
<b>D Phys</b>					440.44		
<b>E Eng</b>	80			26	156	45	
<b>E ICT</b>	80			26	156	45	
<b>F (all)</b>		400					
<b>G Arts</b>	80				260	24.8	
<b>H (all)</b>	86.664		48.336	78	130	30.328	
<b>H Arts</b>	86.664				312	6.5	156
<b>H Bus</b>	100		40	10	234	68	
<b>H Edu</b>		264				67	
<b>H Eng</b>	80		40		169	45	
<b>H Sci</b>	80		27.2	8	208	20.6664	
<b>I Arts</b>					364	65	
<b>I Sci</b>	227		12.8	52	208	27.5	

# **CURRICULUM MAPPING: A TOOL TO SUPPORT STRATEGIC AND CULTURAL CHANGE IN HIGHER EDUCATION**

Sharon Short & Betty Gill

Office of PVC Learning Transformations, Western Sydney University

[s.short@westernsydney.edu.au](mailto:s.short@westernsydney.edu.au)    [b.gill@westernsydney.edu.au](mailto:b.gill@westernsydney.edu.au)

## **ABSTRACT**

This paper reports on the implementation and ongoing evolution of the Western Sydney University *Curriculum Mapping Tool* and its proven capacity to support strategic and cultural change. The tools functions and components are described along with its utility as a tool to support strategic change through facilitating measurement of key outcomes – a prerequisite to cultural transformation. The success of the tool results from adherence to key principles underpinning its design: that it be as user friendly and intuitive to use as feasibly possible, and responsive to the needs of its end users.

## **KEY WORDS**

Curriculum mapping; strategic change; cultural transformation;

## **INTRODUCTION**

This paper reports on the implementation and ongoing evolution of the Western Sydney University *Curriculum Mapping Tool* (CMT) and its proven capacity to support strategic and cultural change. Development of the tool commenced in 2013 responding to changes in the higher education policy and regulatory landscape (TEQSA; AQF; Higher Education Standards Panel) which placed increased emphasis on quality assurance and accountability, including requiring institutions to evidence graduate outcomes and standards and how they are achieved and assured. The Higher Education Standards Panel's then *Draft Standards for Course Design and Learning Outcomes* (March 2013) clearly reinforced recognised pedagogical best practice in articulating the need for alignment and integration of course and unit learning outcomes and assessment across the curriculum. Importantly, the standards also reinforced the importance of generic skills and attributes required by graduates, including communication and employment related skills, whilst reinforcing the need for mastery of disciplinary and/or interdisciplinary knowledge and skills characterising the field of study – the traditional focus of academics.

Providing a tool which would assist academics in achieving these outcomes was the initial aim in development of the curriculum mapping tool by enabling the production of visual and summary data which could: (1) demonstrate the alignment of course and unit learning outcomes and assessment across and within segments of a course to assist in the scaffolding of student learning; and (2) explicitly integrate the embedding of generic skills and higher order attributes articulated through the university's graduate attributes. The further evolution of the tool in response to user requests and feedback is described below, along with the principles underpinning its development which have helped to ensure its success.

## **DISCUSSION**

Ensuring the alignment and scaffolding of student learning, the primary aim of the curriculum mapping tool, has traditionally been hampered within higher education by the modularisation of courses, with the result that units are often planned and taught by individual staff in relative isolation (Higher Education Academy, 2012). Providing a tool which would enable teaching teams to integrate key information concerning individual units and hence to visualise and conceptualise the curriculum was a primary aim in developing the tool. Fundamentally this necessitated demonstrating the connection between unit learning outcomes and their assessment, to course learning outcomes and university graduate attributes enabling curricula alignment and assurance to be demonstrated. Graduate attributes, articulated by all Australian universities, represent the ‘qualities, skills and understandings a university community agrees its students should develop’ (Bowden et al., 2000) regardless of the field of study, thus they are generic in nature.

Generic skills generally include interpersonal and communication skills (written & oral), along with teamwork, critical thinking and problem solving skills which consistently rank highest in terms of graduate skills and abilities valued by employers. Consistent anecdotal reports from employers reveal a perception that graduates do not rate highly in terms of many of these skills. The 2007 Western Sydney University (WSU) Employer Survey supported these observations, confirming the importance of communications skills, but ranking them relatively low on the extent to which, in employers’ view, recent graduates possess these skills (Grebennikov & Shah, 2008). Similarly, a decade earlier Hart, Bowden and Watters (1999) claimed that writing skills consistently rated poorly by employers, followed by the observation that this was ‘somewhat surprising’, given the common use of essays and other written tasks as an assessment tool in higher education.

The requirement to teach, develop and assess “generic skills” was noted by James, McInnis and Devlin (2002) as one of the key drivers for assessment renewal in higher education. Whilst “generic” skills and abilities cannot be learned or developed outside a disciplinary context (Clanchy & Ballard, 1995) it is less clear that academics accept responsibility for the intentional teaching of such skills and their explicit embedding within curriculum is often overlooked. It was therefore recognised that each of these elements would necessitate cultural change, which it was hoped use of the tool would help support.

Barrie (2004) has reported that graduate attributes articulated by Australian universities are not commonly understood by academics with responsibility for their teaching and development. Whilst the act of curriculum mapping cannot in and of itself ensure that a common understanding is developed, the process of examining the outputs of the tool by teaching teams necessitates their discussion, including how and where (in which units/subjects) they will be taught and developed, thus ensuring that they are explicitly considered by the teaching team, a necessary first step to developing a common understanding.

### **The curriculum mapping process**

Curriculum mapping is designed to be part of and to inform curriculum review and redesign. By its very nature this is an extremely complex process as Figure 1 demonstrates.

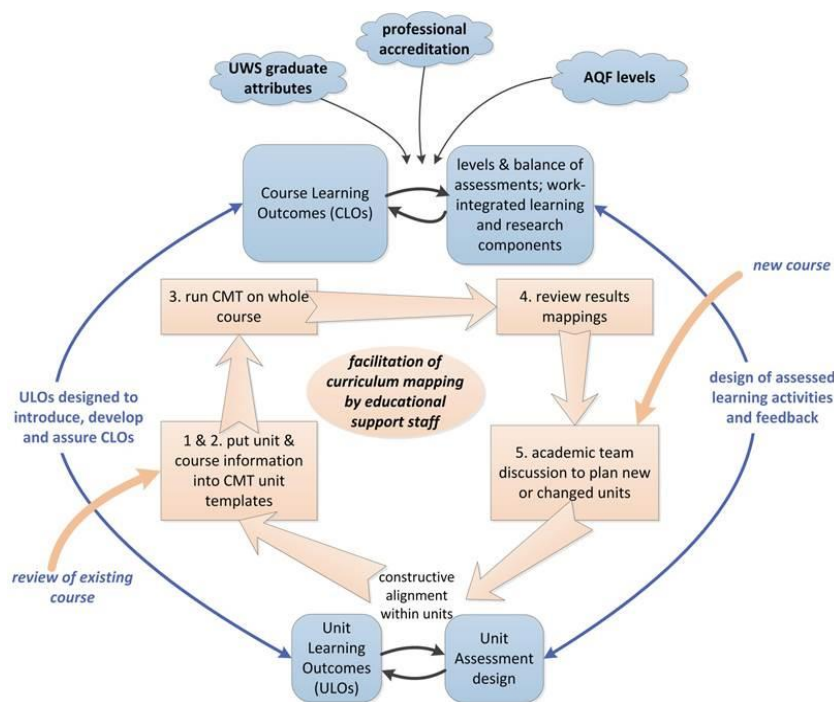


Figure 1: The curriculum mapping process (Source: WSU CMT Pedagogical Framework)

The interactive curriculum mapping tool enables discrete bits of information to be inputted in the software program and automatically integrated so that connections and interactions are made explicit through visualisation, as well as production of summary data. These outputs are then used to inform critical review and analysis of the curriculum by teaching teams. Central to this process, as Sumsion and Goodfellow (2004) assert, is collegial dialogue between the teaching team which is paramount to achieving curriculum change.

### The major components mapped in the tool

As previously noted, the fundamental aim of the tool was to enable unit (subject) learning outcomes to be mapped to course learning outcomes of a program of study, as well as the university graduate attributes to show how and when these outcomes are taught and developed. *Assurance of learning* levels (Introduced; Developed; Assured) are mapped in order to demonstrate where in the curriculum the key concepts, skills and attributes articulated in the course learning outcomes are developed and ultimately assured (assessed at the level expected of a graduate). The *level of thinking* (Anderson & Krathwohl, 2001) involved in each unit learning outcome is identified and mapped to demonstrate increasing level of cognitive complexity throughout the curriculum. The production of visual representations and summaries of this information and other key elements (described below) enable their alignment and scaffolding across the curriculum to be demonstrated, provide evidence to evaluate the adequacy of that alignment, identify gaps, inconsistencies, under-representation of key elements, as well as strengths and coherence across the curriculum. From early in its development the capacity to map *Professional Standards* (i.e. the requirements of Professional Accreditation bodies) across the curriculum was added in order to facilitate the development of documentation required for professional accreditation.

The capacity to map *assessment* in a comprehensive, informative and useful way across the curriculum was a major focus in the tools development. Research into assessment practices at



Western Sydney University (Gill, 2013) supported the need for a whole-of-course approach to the planning and development of assessment, enabling student learning and assessment to be integrated and scaffolded horizontally and vertically throughout the curriculum. The following components of assessment are mapped:

1. Assessment type: Each item of assessment is categorised as:

Assessment Type	Description
Coursework	assessment that is not invigilated and occurs at any time during a unit of study
Intra-semester Exam	assessment that is invigilated and occurs during a unit of study other than the University examination period
Final Exam	assessment that is invigilated and occurs at the end of a unit of study during the University examination period

This initial classification enables all assessment across the course to be easily identifiable, a requirement of many accrediting bodies.

2. Assessment mode:

A definitive list of assessment modes are included against which all assessment items are mapped. Definitions for each mode and examples of this mode of assessment for a variety of disciplines are provided. Mapping outputs enable the variety of assessment across the curriculum to be demonstrated. The provision of definitions and examples assist in clarifying the ways in which each mode may be interpreted and used across disciplines and also encourages consistency in the terminology used to present those modes to students. This was deemed important as a review of assessment practices (Gill, 2013) had demonstrated a source of confusion for students was that individuals, within the same discipline and indeed course, often labelled assessment items differently, though they were actually the same, with the same expectations for students.

3. Specification of the Unit Learning Outcomes assessed by each item:

Each item of assessment is mapped to the unit learning outcomes which they are designed to assess. Through this process the assessment of course learning outcomes and graduate attributes can be readily identified.

4. Level of authenticity:

Each item of assessment is categorised by its level of authenticity (Low; Medium; High; or Very high) a definition of which is provided in the tool. Authenticity in assessment is determined by the degree to which the task connects learning at university with what graduates would be doing in the workplace. It is expected that a range of assessment tasks will appropriately be constructed at lower levels and that students will have opportunities to work on tasks with higher levels of authenticity as they progress through their program of study. The extent to which this occurs is readily demonstrated through automated outputs.

5. Key Assessment information:

For each assessment item the following information is provided – (1) percentage weighting or alternatively that it is a satisfactory/unsatisfactory grading, and whether it is a threshold item (a defined performance level to pass the unit); and (2) whether the item is to be an individual or group submission.

6. Assessment schedule:

A semester calendar is provided to map when each assessment item is due. Multiple assessment events for an item can also be mapped (i.e. weekly or fortnightly), as well multiple components. This enables output of the total assessment load for a group of students within a course to be demonstrated. This has proved exceedingly useful as it enables teaching teams to see the full assessment load experienced by students, the sequencing and variety of assessment, and to assess its appropriateness. Being able to readily see this information and understanding the total student workload (Gill, 2015) has initiated discussions among teaching teams leading to modification of assessment schedules, and an enhanced understanding of the experience.

The result of such mapping thus far undertaken has led to course-based teaching team discussions on assessment load (both the number and types of assessment within a given semester, or year, but also across the entire course. Armed with this information, readily available, teaching teams have made evidenced based modifications to assessment across units ensuring a more holistic, integrated and developmental approach to assessment.

A student version of the assessment schedule for each semester of the course is also available and is recommended to be provided to students to assist them in planning and managing their assessment across units.

#### 7. Marking:

The marking structure for each assessment item is provided identifying whether student performance is marked on an individual or group basis. Additionally, who is involved in the marking of each item is provided, including instructor, self, peer, industry and combinations.

#### 8. Feedback schedule and how feedback will be provided:

When feedback will be provided for each item is mapped in the semester assessment schedule. This encourages teaching teams to reflect on whether student feedback on an item is provided in time to enable learning to be reflected on for subsequent items of a similar genre (e.g. essays across multiple units) (Gill, 2015). Feedback type for each item is identified including peer feedback, thus encouraging academics to consider different ways of providing feedback to students.

### **Mapping of strategic priorities**

Several key strategies which facilitate the development of generic skills were incorporated into the tool. These include the facility to map where the teaching of academic literacy (information literacy, as well as written and verbal communication skills) and research skills are explicitly embedded within the curriculum. In addition, the identification and mapping of different types of work integrated learning was included, both because it was a university strategic priority, but also because it has been demonstrated to be an important and effective mechanism for developing generic skills essential for employability (Crebert et al., 2004).

A key priority at the time the tool was being developed was the university's move to blended learning with a greater emphasis on online learning. For this reason the facility to categorise each unit to a specified blended learning profile was included in the tool.

### **The utility in mapping strategic priorities and evolution of the tool**

The inclusion of information about strategic priorities within the tool means that teaching teams are reminded of the need to consider these aspects within their curriculum design and development, keeping the priority to the fore. Just as importantly however that is once the information is mapped outputs are readily available – at the press of a button. This is an

important utility of the curriculum mapping tool into the future. Like any large organisation it is not unusual for different parts of the organisation to request reporting from academic units (schools/faculties etc.) against strategic priorities. Responding to such requests often necessitates a substantial amount of work finding and collating the information. Once mapped in the tool, reporting against it becomes quick and simple. More importantly however, the information requested is often broad in scope, for example, a request to report on all units which involve work integrated learning (WIL) without necessarily ensuring a common understanding of what indeed constitutes WIL, or the different types and levels of WIL. Mapping such strategic priorities requires clear articulation and agreement around definitions and categories. This was true for all components of the tool and considerable effort was put into achieving these outcomes. Working parties were established with broad representation from stakeholders to work through the issues, provide discussion papers and seek feedback until broad agreement was reached. This process was deemed essential to gain the support across the academy and ensure that what was included in the tool was useful and meaningful to those who would use it.

Being able to readily measure indicators of strategic priorities is essential for realising change. As Lakos & Phipps (2004) point out, ‘what gets measured gets managed; value lies in understanding, communicating, and measuring what matters...’ (p. 347). Measurement is a strategic prerequisite for successful cultural transformation.

Recognition of these advantages is evident in requests from other areas of the university to incorporate further priority issues within the curriculum. These have included the request to incorporate *education for sustainability* into the mapping tool so that in the future all units of study which incorporate sustainability concepts are readily identified and categorised. This request followed a pilot study undertaken by the WSU Office of Sustainability which utilised the CMT as ‘a valuable starting point that enabled prompt identification of relevant units for further interrogation’ (Date-Huxtable & Dollin, 2015).

Similarly, a request was received to map across curricula where primary responsibility for the teaching of academic numeracy was embedded, as was already the case for academic literacy. The importance of explicitly identifying and mapping the teaching of literacies and other generic skills reflected within graduate attribute statements cannot be underestimated. As Jones (2009) argues ‘generic attributes [are] seen as a competitor to content’ (p. 186) for space in the curriculum and very often not seen by academics as being their responsibility to teach. As noted earlier the result is that the explicit embedding within the curriculum of responsibility for intentional teaching of such skills and attributes is often overlooked. Their subsequent incorporation and disappearance into disciplinary knowledge (Jones, 2009) meant that their teaching was at best implicit and discussions with teaching teams often revealed that “everyone” and “no one” took responsibility for their teaching. The reasons for this are complex and beyond the scope of this paper, and the process of mapping them at what is a largely rudimentary level will not solve these challenges, however raising awareness and helping to provide some common understandings is a necessary and practical first step towards the cultural change which is needed and which the curriculum mapping tool development seeks to support.

### **A focus on usability and effectiveness**

From commencement, the focus of the team responsible for development of the tool has been firmly set on ensuring that the tool is accessible and readily usable. The primacy of this goal

arose from two factors. Firstly, the experience of members of the team with university systems which were highly cumbersome, non-intuitive and problematic for end users, creating frustration and avoidance. Secondly, was a recognition that many of the end users of the CMT, academics in particular, would be intermittent users, making the need for optimum usability and intuitiveness essential if the tool was to be of value to those end users. Principles followed from commencement included that: (1) there be minimal need to navigate between pages, so that wherever possible all information is provided on one screen; (2) information such as definitions etc be provided in pop-ups on the page so that they are readily accessible; (3) and minimal clicks of the mouse be required in the quest to reduce repetitive strain injuries associated with computer use.

As the initial tool was utilised by course teams across the university continual feedback was encouraged. Most particularly it was made very clear that negative feedback, as well as positive feedback was welcome, as well as ideas for improvement and enhancement of the tool. This was important, because members of the team had experienced, as end users of other systems being developed, where it became clear that negative feedback or criticism was not welcome. The result was that the systems developed held little utility for end users, resulting in the frustrations and avoidance described above.

Every effort was made by the team to incorporate into the tool features which end users deemed important. For example, early in the tools development the ability to map course learning outcomes to professional accreditation requirements was a singular item, that is, only one set of professional accreditation standards could be mapped. However, early feedback from some disciplines of the need to be able to map multiple standards was provided and this capacity incorporated into the tool. Similarly, the original design of the tool allowed professional accreditation standards to be mapped to course learning outcomes, but feedback from some disciplines was that they needed to be able to map directly to unit learning outcomes, a further enhancement to the tool which was provided.

Use of the tool, which was originally voluntary, has been widespread across the university, and recently mandated within the draft Western Sydney University Learning & Teaching Plan. Whilst no formal evaluation of the tool has yet been undertaken, its widespread use to date, initiated by end users themselves, is indication of its utility, and has resulted in positive anecdotal feedback from internal users, including academics and teaching development staff, as well as a range of external accreditation bodies.

When presenting its capabilities and capacity to assist in review and design of science curricula to university science and mathematics educators Ross, Howitt and Peronnik (2014) described the tool as ‘dynamic and impressive’, providing ‘a sophisticated representation of everything we know to be important’ in curriculum design.

## **CONCLUSION**

As noted above, recognition of the utility of the tool, originally designed for voluntary use has led to its use being mandated within the draft Western Sydney University Learning Futures Plan 2016-2020 to assist teaching teams to ‘review and reimagine courses and units to assure course currency, aligned outcomes, teaching and assessment and learning designs that support active student learning’. The tool is currently under development as a web-based tool which will enable greater accessibility. As described above, ongoing evolution of the tool has resulted

in significant enhancements in response to user requests and feedback, as well as identified strategic imperatives, providing the capacity to readily measure and track performance, a necessary pre-requisite for strategic change to be realised. The tools development also identified the need for greater clarity in terminology and a more common understanding of elements mapped in the tool across the university, a further positive outcome. A great deal of the success of the tool has resulted from adherence to key principles underpinning its design – that it be as user friendly and intuitive to use as feasibly possible, and throughout its development it would be responsive to the needs of its end users, resulting in the user generated enhancements described in this paper.

## BIOGRAPHICAL NOTE

Sharon Short is the Executive Officer within the Office of the Pro Vice-Chancellor (Learning Transformation). Her key responsibilities include project managing the development and piloting of a Western Sydney curriculum mapping tool to support and inform a more holistic and integrated approach to curriculum development.

Associate Professor Betty Gill (now retired) was Associate Pro Vice-Chancellor – Education (Health & Science) at Western Sydney University. She instigated and led the development of the Curriculum Mapping Tool and its use across the University.

## REFERENCES

Anderson, L., & Krathwohl, D. A. (2001). *Taxonomy for Learning, Teaching and Assessing: A Revision of Bloom's Taxonomy of Educational Objectives*. New York: Longman.

Barrie, S.C. (2004). A research-based approach to generic graduate attributes policy. *Higher Education Research & Development*, 23(3), 261-275.  
DOI: 0.1080/072943604200023591

Bowden, J., Hart, G., King, B., Trigwell, K. & Watts, O. (2000) *Generic capabilities of ATN University graduates*. Canberra: Australian Government Department of Education, Training and Youth Affairs. Retrieved from  
<http://www.clt.uts.edu.au/atn.grad.cap.project.index.html>

Clanchy, J. & Ballard, B. (1995). Generic skills in the context of higher education. *Higher Education Research & Development*, 14(2), 155-166.

Crebert, G., Bates, M.J., Bell, B.J., Patrick, C. & Cragolini, V. (2004) Developing generic skills at university, during work placement and in employment: graduates' perceptions. *Higher Education Research & Development*, 23(2), 147-165.

Date-Huxtable, E.M. & Dollin, J. (2015). *Education for Sustainability Learning Concepts: Report of Pilot Study with the School of Education*. Unpublished. Western Sydney University.

Gill, B. (2013). *Assuring best practice in first year first session assessment: Report on tier one and tier two course reports*. Western Sydney University. Retrieved from

[http://www.westernsydney.edu.au/\\_data/assets/pdf\\_file/0011/752609/Report\\_Assuring\\_Best\\_Practice\\_in\\_First\\_Year\\_Assessment-SEEC\\_final\\_.pdf](http://www.westernsydney.edu.au/_data/assets/pdf_file/0011/752609/Report_Assuring_Best_Practice_in_First_Year_Assessment-SEEC_final_.pdf)

Gill, B. (2015). Talking about the elephant in the room: Improving fundamental Assessment practices. *Student Success*, 6(2), 53-63. DOI: 10.5204/SSJ.v6I2.291

Grebennikov, L. & Shah, M. (2008). Engaging Employers with the University: Skills needed and changes expected by industries. Australian Universities Community Engagement Alliance Conference.

Hart, G., Bowden, J. & Watters, J. (1999). Graduate Capabilities: a Framework for Assessing Course Quality. *Higher Education in Europe*, 24 (2), 301-308.

Higher Education Academy. (2012). *A marked improvement: Transforming assessment in Higher education*. Retrieved from [https://www.heacademy.ac.uk/sites/default/files/a\\_marked\\_improvement.pdf](https://www.heacademy.ac.uk/sites/default/files/a_marked_improvement.pdf)

Higher Education Standards Panel. (2013). *Draft Standards for Course Design and Learning Outcomes*. Retrieved from [www.HEstandards.gov.au](http://www.HEstandards.gov.au)

James, R., McInnis, C. & Devlin, M. (2002). *Assessing Learning in Australian Universities: Ideas, strategies and resources for quality in student assessment*. Centre for the study for Higher Education & the Australian Universities Teaching Committee, Melbourne.

Jones, A. (2009). Generic attributes as espoused theory: the importance of context. *Higher Education*, 58, 175-191.

Lakos, A. & Phipps, S. (2004). Creating a culture of assessment: A catalyst for organizational change. *Libraries and the Academy*, 4(3), 345-361.

Ross, P., Howitt, S. & Poronnik, P. (2014). Certainty, chaos and creativity: key ingredients in complex curriculum design in the sciences. Paper presented to the *Australian Conference on Science & Mathematics Education*, September, 2014, University of Sydney, Sydney Aust.

Samsion, J. & Goodfellow, J. (2004). Identifying generic skills through curriculum mapping: a critical evaluation. *Higher Education Research & Development*, 23(3), 329-346. DOI: 0.1080/0729436042000235436

Western Sydney University. (n.d.). *Curriculum Mapping Tool Pedagogical Framework*. Unpublished, Western Sydney University.

Western Sydney University. (2016). *Learning Futures Plan: 2016-2020*. Retrieved from [https://www.westernsydney.edu.au/\\_data/assets/pdf\\_file/0004/1095034/Learning\\_Futures\\_Plan\\_2016-2020.pdf](https://www.westernsydney.edu.au/_data/assets/pdf_file/0004/1095034/Learning_Futures_Plan_2016-2020.pdf)



# **WE CAN ALWAYS BE ASSURED OF CHANGE: A CASE STUDY OF THE COLLEGE OF ARTS, SOCIAL SCIENCES AND COMMERCE, LA TROBE UNIVERSITY.**

Andrea Young,  
Director, Educational Experience, La Trobe University  
&  
Donna Burnett,  
School Manager, La Trobe Business School, La Trobe University  
[Andi.young@latrobe.edu.au](mailto:Andi.young@latrobe.edu.au) [d.burnett@latrobe.edu.au](mailto:d.burnett@latrobe.edu.au)

## **ABSTRACT**

This paper examines the development of ‘best practice’ and how evolving communication practices are being developed and implemented within newly formed College teams at an Australian university. The authors set out to establish a framework for analysing change, and then discuss specific aspects of the change processes that have occurred in the College of Arts, Social Sciences and Commerce, identifying both what has worked well and areas of ongoing challenge. An analysis of why certain outcomes have been achieved is developed along with an analysis of how traditional change theories and practice have been adapted to meet the needs of the College and its staff, and how these models have supported the College in moving through the change process.

## **KEYWORDS**

change management, communication, staff development, mobility, process improvement

## **INTRODUCTION**

Leading, implementing and managing change in organisations is often seen as an insurmountable challenge, however, with change, comes opportunity to reshape organizational culture in positive ways, and also to be proactive in relation to future planning, strategic alignment and endless leveraging possibilities.

At La Trobe University, we experienced a significant change programme at the end of 2014 and through 2015, as part of the implementation of the University’s Future Ready strategy. The changes made as part of the Funding Future Ready program in 2014 enabled the University to build on achievements made to that point in time and would secure the University’s capacity to invest in its future staffing and infrastructure to support teaching and research. (La Trobe University, 2015). Major structural reorganisation and a need for contraction of staffing headcount were part of the process, which impacted significantly on the knowledge base, team dynamics and staff morale, and process functions of the organisation. This structural change resulted in the development of two Colleges; The College of Arts, Social Sciences and Commerce (hence forth ASSC), and the College of Science, Health and Engineering (hence forth SHE). These Colleges were implemented in



January 2015 and have been functioning under the new structure for one and a half academic years.

Focusing on ASSC, part of the change programme involved the formation of completely new teams across all levels in the College along with new and revised team structures across the four newly created schools in ASSC.

Communication, knowing and understanding our business, customer focus, process improvement, leveraging capabilities, implementing reputation-enhancing strategies and developing and building our people, all formed part of a larger change management 'best practice' programme, which is ongoing.

Talking a proactive approach to managing this change, ASSC teams embarked on a comprehensive programme of implementing best practice in three key areas; **staff development and mobility, communication, and process improvement.**

In this paper, we establish a framework for analysing change, and we then discuss specific aspects of the change process that have occurred in ASSC, identifying both what has worked well and areas of ongoing challenge, as well as developing an analysis of why certain outcomes have been achieved. Data for the paper includes academic research; publicly available university documents; and personal observations and reflections of the authors of this paper on the change process.

## THE CHANGE DILEMMA

### The Theory

It is important to note from the outset that the change methodology used by La Trobe University for the Funding Future Ready Change Program was fundamentally underpinned by a requirement to effectively meet collective agreement obligations and while working through a University-endorsed change management methodology to create systemic, holistic and sustained change.

The change models and analysis thereof, referred to in this paper, are those that the authors have used to illustrate the implementation of the change from the College perspective. They are academic models drawn on for their relevance to the topic and are therefore distinct from the change methodology used by La Trobe for Future Ready programme. With this distinction in mind, we begin by considering Lewin's (1947 cited by Burnes, 2004) three step model involving: unfreezing, moving and refreezing (Figure 1).

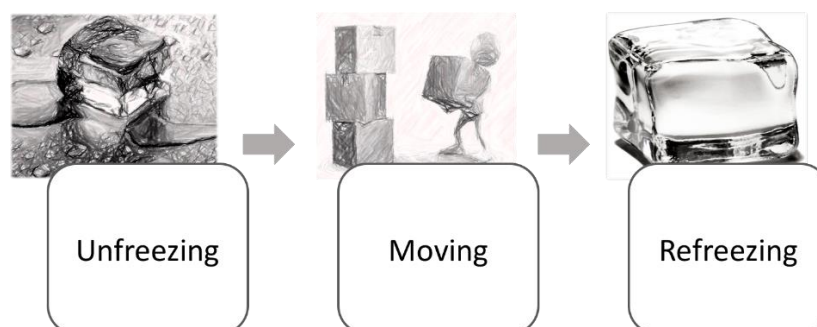


Figure 1: Kurt Lewin's Change Model (Adapted from: Sims, R, R., 2002)

As Lewin depicts, senior leadership at La Trobe recognised the need for change based on a range of significant internal and external challenges, and created the perception and understanding that a change was required by educating all staff through several communication channels which included face-to-face town hall meetings and formal written communications. From this, senior leadership then moved toward the new, desired level of behaviour and finally, is now in the process of solidifying that new behaviour as the norm.

To effect this change, La Trobe created an awareness amongst staff of why old behaviours, thinking, and processes needed to change and how the old ways were hindering the organisation in achieving its objectives. Reynolds and Stair (2013) suggest that leaders should be tasked to provide adequate information to the employees letting them know the need for change. Therefore La Trobe, in building this awareness in staff of the need for change, expected that its employees ceased old habits by creating a climate that was receptive to change. Part of the climate related to factors around mindset, behaviour and expectations of staff, and part of the climate related to organisational structures, and whether they were facilitating or hindering the attainment of organisational goals.

A renewed strategic plan, Future Ready, highlighted some very ambitious strategic objectives around all areas of operation, and to achieve these, staff had to transition. Employees began to learn that this change was real and happening and that they had to shift their thinking towards achieving the desired behaviour. It was during this stage that La Trobe identified some resistance to change and planned ways of overcoming these barriers (Kimball & Lussier, 2013). Those staff on the ground now needed to embrace a different way of doing things, upskill themselves and accept the new 'norm'.

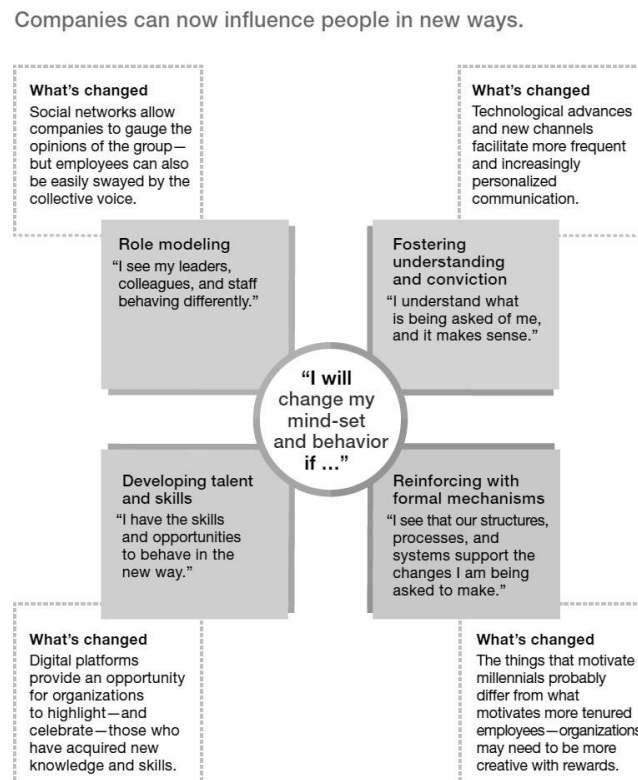
Referencing Lewin's model, La Trobe now finds itself in the 'refreezing' phase of "reinforcing, stabilising and solidifying the new state after the change" (Sims, 2002). This, in theory, is the final stage whereby change is implemented and becomes part of the organisational culture (Kimball & Lussier, 2013). Staff should be feeling empowered to contribute to the new environment and behaviours should be reflective of this stable state. La Trobe is trying to move towards a state where "changes made to organisational processes, goals, structure, offerings or people are accepted and refrozen as the new norm or status quo..." (Sims, 2002).

It was, and still is, important for senior management at La Trobe to foster a stable environment and reinforce the change so that staff are not in a position of falling back into old ways of doing things. Leaders need to provide support and resources to ensure the changes remain and that the organisation moves forward. If this stage is not done well, the organisation could revert very quickly to what was the former status quo. Positive reinforcement can keep the momentum going and allow the change to be cemented into the organisation's culture.

This reinforcement was carried out in several ways, including the introduction of a reward system; acknowledgement of individualised efforts identified by line managers and channelled through to senior managers; intentionally seeking out the opinions of employees; and valuing their feedback.

### **The Success of Theory into Practice**

Basford and Schaninger (2016) concur that large-scale organisational change is challenging and that there is significant evidence to suggest that most organisational transformations continue to fail. In today's fast paced environment, they argue that transformational change stands the best chance of success when four key ingredients are present focused on changing mind-sets and behaviour: fostering understanding and conviction, reinforcing changes through formal mechanisms, developing talent and skills and role modelling. Collectively known as the 'influence model' Basford and Schaninger (2016, p. 2) suggest that 'digital technologies and the changing nature of the workforce have created new opportunities and challenges...' for this model (Figure 2), contributing to the success of transformation where all four components are used.



**Figure 2: The Influence Model in the Digital Age. Source: Basford& Schaninger, (2016).**

The change within ASSC aligns with three of the four dimensions detailed above: fostering understanding and conviction (communication); developing talent and skills (staff mobility and career success) and reinforcing with formal mechanisms (process improvement). The fourth dimension, role modelling, will occur as the change embeds and culture shifts, with organisational leaders needing to display the new expected behaviours.

To understand the challenge ahead we first needed to understand where perceived gaps in communication, staff capability and process existed. Operating in the previous university-wide model of five faculties, 15 schools and 49 departments we shifted into two colleges, 11 schools and 27 departments. Our College, ASSC, was now four schools and 11 departments as illustrated in Figure 3.



**Figure 3: The La Trobe University structural changes in 2014**

To gain efficiencies, it was perceived that the change required some functions to be moved from faculties into College-level resourcing. The college service offering included planning and governance, partnership operations, college education, technical services and experiential learning. Resource was also placed into university-level services, which included human resources, student administration, ICT, marketing, finance, graduate research, and infrastructure and operations. School resource was focused into discipline areas with administrative functions reduced and an expectation that services would now be sourced from university and college level offerings.

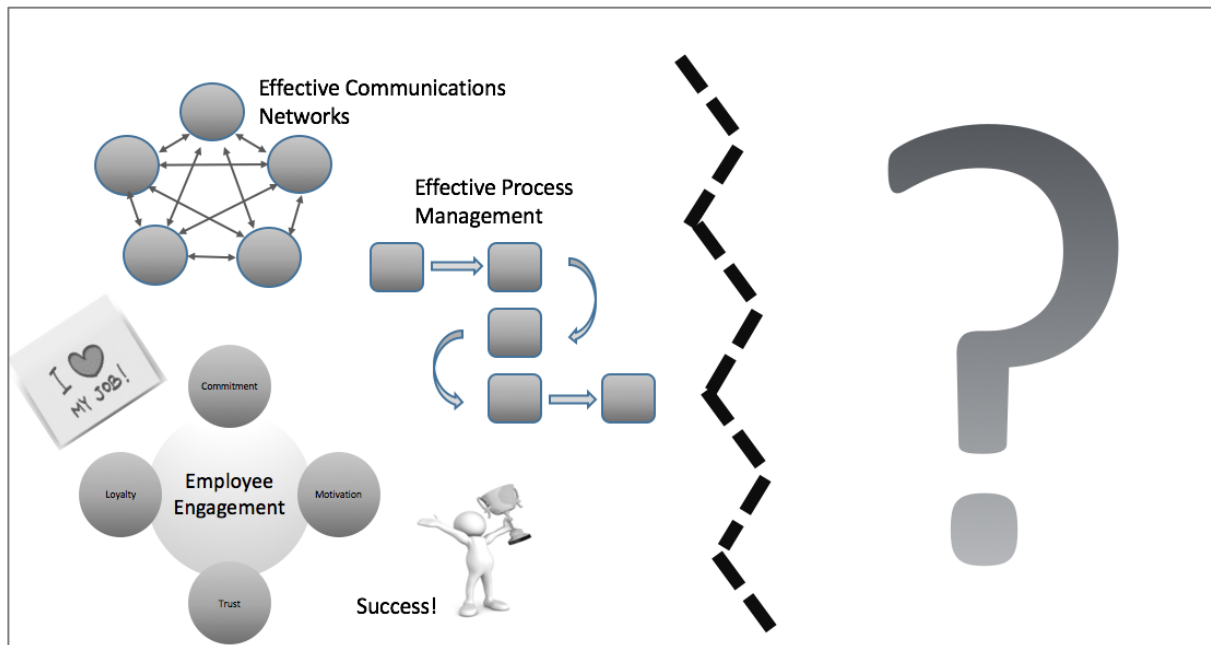
The challenge, when looking at tried and tested models for change management, such as Kotter's (2015) eight step process for leading change (Figure 4), was that the change cycle we found ourselves in had forgotten to 'enable action by removing barriers' and 'institute change' by way of defining how we communicate and function in the new environment.



**Figure 4: Kotter's 8 step process for leading change. Adapted from Kotter (2015).**

ASSC found itself in the position of needing to manage this disruptive change which was impacting on many levels of operations, including staff motivation and behaviour, in the context of an organisation with a limited experience of large-scale, simultaneous reform. Figure 5 illustrates the magnitude of the change and its impact on communication, staff

capacity and process. Once these challenges had been identified, the next challenge was how to engage with them positively to facilitate the success of the change process, enabling ASSC to contribute to the attainment of the University's Future Ready strategy.



**Figure 5: The impact of change in 2014-2015. Source: Authors of this paper**

## GAINING MOMENTUM

### Staff Development

To be successful in change programmes, all stakeholders hold a level of responsibility for continuing professional development which extends to their employing institution, professional associations, and other support networks (Varlejs, 1994). Under the new structure, ASSC found itself in the position of needing to support staff in roles which were unfamiliar to them, and in some cases where skill level expectations were not yet aligned with staff capabilities. This situation may have derailed the change process as it was sometimes reported that the basic needs of staff were not being met. As illustrated in Figure 6, for staff to feel a level of association with an organisation, basic needs of security and belonging need to be met, including providing a stable physical and emotional environment, clear job descriptions and responsibilities, appropriate rewards systems and social acceptance i.e. friendships and team spirit as staff had moved teams and were now needing to reform friendships.

## Maslow's Hierarchy of Needs

Applied to the Workplace

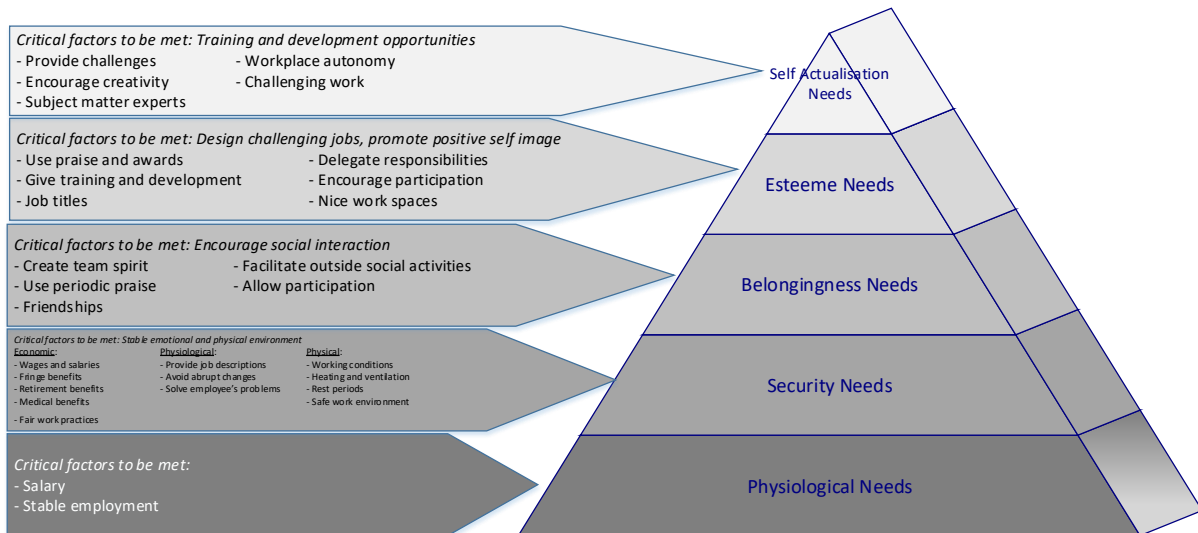
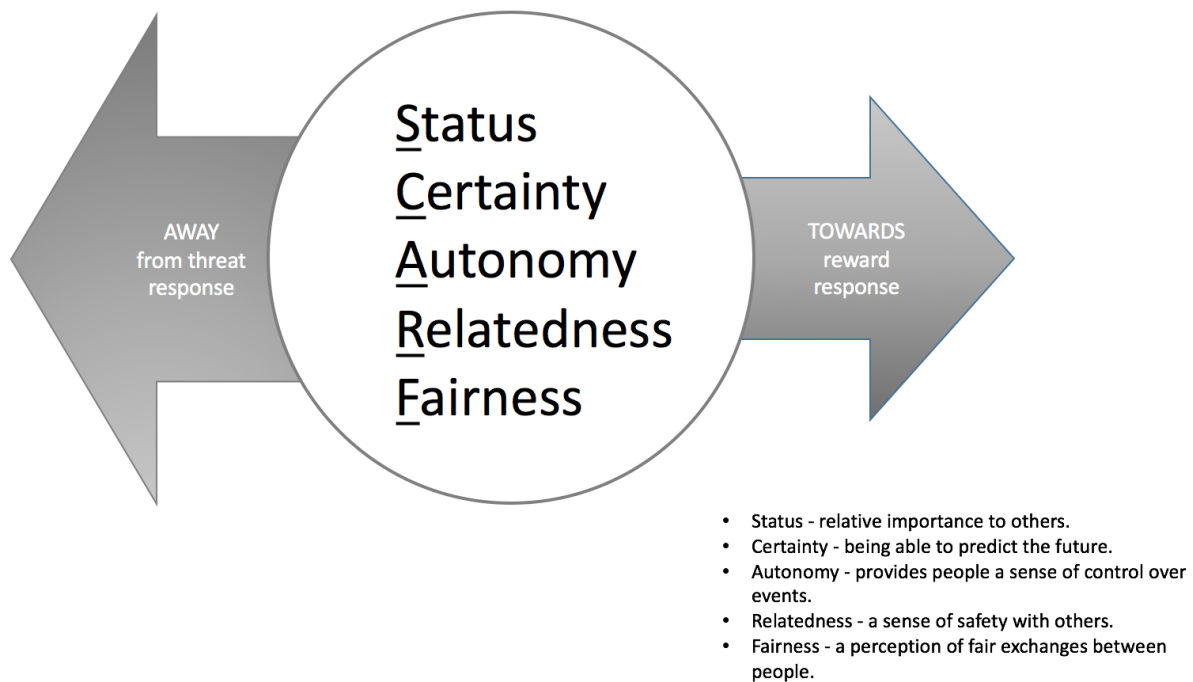


Figure 6: Maslow's Hierarchy of needs applied to the Workplace. Adapted from: Tanner (2015)

### Engagement and Motivation

Elton Mayo (1933) noted that the social needs of the employee are critical to workplace engagement and acknowledged that people are not rational beings and that human behaviour is motivated by sentiments, not facts and logic. ASSC had recognised these emotional level triggers and had ensured that managers were visible to their staff and were accessible. The positive impact of this approach during the unfreezing, moving and now the refreezing stages, demonstrated a more fundamental level of communication with staff, often one-on-one, to reassure individuals of their value to the college and to offer a level of certainty about the future. If we take these emotional responses and consider David Rock's (2008) model (Figure 7), it could be argued that through the change process, staff in ASSC were in a position where the five domains of: Status, our sense of worth and where we fit into a hierarchy both socially and organisationally; Certainty, where clarity and certainty are important; Autonomy, our sense of control over what we are doing; Relatedness, our social groups and sense of belonging; and Fairness, the perception of fair exchanges between people, were being challenged.



**Figure 7: David Rock's SCARF Model. (Adapted from: Batista, 2010).**

Indeed, Nautin (2014) suggests that 'the individual level is where the vision breaks down: employees see only the gap between the aspirational language and their daily work lives and may become cynical rather than motivated'. Therefore, not only was the university seeking to effect organisational level change, ASSC was also seeking to achieve individual level change too, for those within the College.

Hochschild (1983) suggested that disengaged employees uncouple themselves from work roles and withdraw cognitively and emotionally, something that ASSC was seeing frequently over the change period. Emile Durkheim (cited by Wren and Bedeian, 2009) referred to these same phenomena, suggesting that when people are forced into a state of anomie they become 'rootless' and that their 'individual identities are lost'. This rootlessness can be described as a lack of commitment and loyalty on behalf of the employee as they are constantly being shifted from one workplace to another, all of which have differing norms. Furthermore, the employees that one would work with would differ between jobs, hence heightening the state of anomie and impeding the social needs of the employee.

The College sought to address this in several ways, including but not limited to, offering employees assistance in the form of counselling; training; having a clear communication plan whilst also deliberately over-communicating to staff. This strategy further reinforced the 'moving' phase of Lewin's model. ASSC management provided networking opportunities, actively sought employee opinion and feedback and encouraged the Senior Management Team to be more 'visible'. Underpinning these initiatives, and critical to the success of any change process, was creating effective forms of communication. As Crainer and Dearlove suggest, 'what leaders really do is communicate' (2008, p. 41).

### **The Rebuild: Staff Engagement and Development**

Key principles for successful engagement and development of staff within organisations include: regular performance-related needs assessments, availability of appropriate staff development programmes and activities; administrative commitment to facilitate attendance

at development opportunities along with appropriate policies being in place to support this initiative which outline the levels of expectation for both the individual and organisation; appropriately designed and marketed programmes/courses/workshops; and appropriate recording mechanisms to detail staff participation and learning and offer recognition of continued learning and upskilling.

Drawing on the above principles, and recognising that staff are our most valuable asset, ASSC has actively sought to provide staff opportunities to engage in development opportunities. These have included secondments, shadowing, and mentoring, and active promotion of a culture of continuous learning and opportunity. In addition, we have embedded Business Partnering models that serve a dual purpose; one of ensuring that the change strategy and structure was incorporated into the business, and the second of enabling subject matter expertise to remain within the College to support day-to-day business.

### **Business Partnering at La Trobe**

Deployment of business partners in the colleges and divisions of the University was a deliberate strategy to assist the pro vice-chancellors and divisional heads to achieve their strategic goals and to enable the partners to provide expertise on matters which are in line with La Trobe's strategic vision.

While key services are facilitated directly by the College in the areas of college education, placements, external partnerships, work integrated learning and planning & governance, critical 'business partners' coordinate interaction with vital elements of tertiary administration operations. These operations include: human resources, student administration, ICT, marketing, and finance. Each of these services sit directly within the College enabling access and visibility and all are allocated management level responsibilities within the College. The 'business partners' are the main point of contact for their area of expertise. This close alignment of these services, with all College activity, has reaped benefits ensuring that all operational areas are represented and are part of a collaborative approach to addressing the big picture issues. To further build relationships, these business partners are required members at the ASSC Management Team liaisons, working alongside college managers to negotiate outcomes and brainstorm issues. A fully collaborative model of decision making and issues resolution has been developed and is proving to be an effective way to navigate the complex issues faced in the organisation.

### **Staff Engagement Initiatives**

We are all familiar with the standard types of engagement opportunities that might be offered in organisations. Often these might be team based and perhaps involve a cake or two and a cup of tea, where, if you are lucky the team might all engage as one, or more likely, smaller silos of 'friendship circles' will break out and discussions of the latest episode of Game of Thrones will ensue! The Senior Management Team in the College wanted to try to engage our staff in something that might be more meaningful and might break down the feelings of isolation and 'newness', both of the College structure and of the teams staff found themselves in. We also wanted to behave as a College, and not as several teams all trying to head in the same direction, but perhaps passing like ships in the night and never actually meeting each other, or feeling confident in approaching one another because we didn't really know that voice on the end of the phone. As Robyn McLeod (2016) suggests... 'No leader says, 'Let's create silos and avoid working effectively with other groups' or 'Hey everyone, keep your head down, stay in your lane, and pretend (fill in the blank) division doesn't exist'. As a management team we were also acutely aware that we needed to provide our staff with 'clear



lines of communication, appropriate induction and training, and [rewards for] positive behaviours that are essential to developing [changed] behaviours and attitudes that seek improve the organisational climate and culture' (Wren & Bedeian, 2009). To engage with these issues, ASSC provided the following innovative solutions to team building, information sharing and staff development.

### ***Meet the team sessions***

These sessions were aimed at 'unveiling the unknown' in teams across the College and encouraging greater understanding of all team activity in the lead up to the new structure and since the structure has been embedded. These sessions are run by each team, and they provide a 'day in the life of' snapshot of team activity. Indeed, directly drawing on the notion of Pech and Durden (2004) that 'organisations need to build a culture of knowledge sharing in which senior managers and, indeed all members of the organisation, are connected to and remain connected to the collective consciousness', we have encouraged full engagement in these sessions.

To action this idea, teams were tasked with developing a fun way of informing other teams of who they were, team member roles, their activities and priorities. To date these sessions have included quizzes, online presentations, and informal question and answer sessions. They have been received very positively, so much so we are now embarking on round two of these 'meet the team sessions'. In this round, rather than focussing on who is who and role remits, each area will detail wins over the past 12 months and current projects being undertaken in order for the wider community to be able to connect the dots between their area's activity and the wider College agendas. Our success in this has certainly placed us on the path to becoming a 'learning 'organisation'' and as such offer us 'unlimited potential to learn, to improve and to extend [our] knowledge, and of course to become wiser.' (Pech & Durden, 2004)

### ***La Trobe 101***

This initiative, introduced in semester 1, 2016, is a one-stop resource hub that enables all staff to learn about new and existing systems, processes and services delivered by specific teams. Run in conjunction with orientation activities, this event is held over one full week and delivered in all our regional hubs (Bundoora, Bendigo, Albury-Wodonga, Shepparton and Mildura). Staff are available in central locations to discuss their areas of expertise and to demonstrate systems or provide one-on-one training for any staff member wishing to learn more about that service. Run across all key activity this event has provide to be effective in raising awareness of teams and their service offerings and in supporting staff to be more confident and efficient in navigating the many systems and processes across La Trobe.

### ***The Knowledge Base***

The 'knowledge base' is an online site that we have developed which houses one-page cheat sheets and short videos on key systems, processes and teams. All staff have 24/7 access to this site. Located on our La Trobe 101 Unite Site, this database of information is regularly updated and referenced by staff, encouraging a culture of self service for all staff.

### ***Professional and Administrative Staff Awards Scheme***

Introduced in 2015, this awards scheme is focused on staff achievements and recognises the contribution of individual staff members or of co-workers in the College who have excelled in the performance of their duties, made outstanding contributions and inspired other members of the College Community. Very much focussed on the transition period and 'going

the extra mile' in times of change and uncertainty during its first year of running, now into its second year, the criteria have been refined and the awards more deliberately placed into the College structure of recognition to ensure continued appreciation of staff achievements. The impetus for these awards has been to provide a means to publicly acknowledge the important work being undertaken by staff in a context of change.

### ***Professional Staff Development Sessions***

The management of the College are very committed to the development of ASSC staff and to that effect that have ensured that all professional and administrative staff have access to professional development opportunities. During 2015 these included DiSC profiling (a behaviour assessment tool) and strengths awareness development, time management and tools for effective work practices. In 2016 we have embarked on the first of a series of Emotional Intelligence sessions aimed at building on those skills developed in staff during 2015.

### ***Dual Matrix reporting***

To maximise collaboration and contribution of staff across the College, many senior staff have a matrix reporting structure applied. This cross-functional working arrangement facilitates the university structure by enabling staff reporting directly into different parts of the College or University, to work together and contribute their skills and expertise to wider projects and strategic agendas across the College. An example of this can be seen in the college education area which reports directly into the senior deputy vice chancellor agenda, outside of the College, and has matrix reporting into the general manager of the College. This arrangement sees college education engaged in contributing towards all facets of college strategy whilst also engaging in student administration agendas. This constitutes a wholly collaborative approach to achieving outcomes.

### ***Staff Mobility within and beyond ASSC***

The management team are determined and very committed to facilitating staff mobility and enabling conversations to happen across organisational structures. A success measure of the new structure includes consistency and sharing of best practice with the University's other College (SHE), which mirrors the structure within ASSC. There is an understanding that where possible all processes and procedures should align to facilitate 'one approach' to most tasks. To achieve this, various initiatives have been put in place, notwithstanding a very consistent and clear message that all staff should consider collaboration and impact for the other college when developing any new procedures or tackling issues. After all, two heads are often better than one at solving issues, so therefore two colleges tackling an issue should prove to be very fruitful (and does).

An example of such collaborations across the colleges exists in school manager training which has been implemented across both colleges to provide managers with the same base-line skills development around negotiation, influence and decision making. Best practice is shared and process alignment facilitated across both colleges with mapped processes shared via forums and an intranet resource. Informal coffee meets with the Vice-President Administration, Chief Financial Officer and other University leaders take place offering further opportunity to discuss issues and share successes. These discussions often bring key operational challenges to the senior table allowing for greater visibility of challenges and swifter resolution. This also reinforces La Trobe's commitment to staff and further highlights success in the 'moving' and re-freezing stages of Lewin's model.

Having similar structures and expectations also facilitates staff mobility across colleges as there is a shared understanding of roles and expectations. The College has been instrumental in supporting secondment opportunities for staff at all levels across all campuses. This activity promotes both staff development and adds another level of engagement and integration throughout the College. To assist easy transition for staff, an ‘off-line’ approvals process has been developed within the College (with the support of human resources), allowing for faster progression through the recruitment stages for a secondment. Policy and procedures have been drawn up specifically for the management of secondments and staff afforded the opportunity to undertake a secondment opportunity are required to report back their findings to their substantive team with their experiences, achievements and any constructive feedback that may assist other secondments into the future.

## GETTING THE MESSAGE ‘OUT THERE’

### Communication

Communicating the ‘change story’ effectively can help to create strong employee commitment to the transformation effort (Gorgens, Gruebel and Moosdorf, 2013). Timing is critical, and as Nautin (2014) notes, too early and the organisation risks losing credibility for the change as employees cannot see the impacts of the change; too late and rumours will spread as to the effectiveness of the change programme, potentially damaging morale. Therefore, the strategy chosen needs to be appropriate to the change process and targeted to the audience accordingly.

Communication is the corner stone of a great change programme, and in the case of ASSC the tools used were heavily focussed around a College ‘*Internal Change Communications Plan*’ (Figure 8) which covered over ten different channels of communication and was split into four key stages of communication. This plan was drafted from January 2015 and focussed on the first few months of transition, noting key milestones and activities to achieve our objectives.

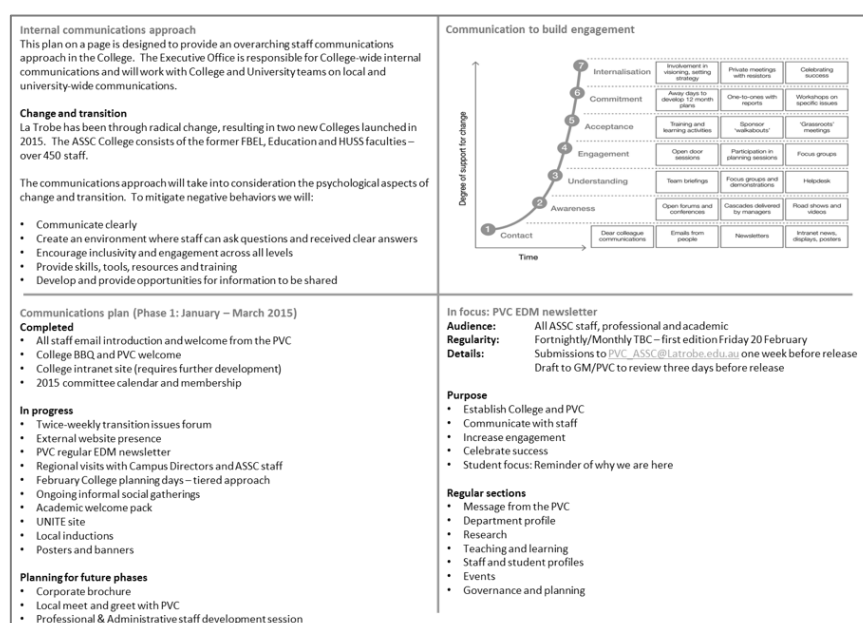


Figure 8: ASSC Internal Change Communications Plan (as at January 2015).

According to Ewenstein, Smith and Sologar (2015), the key to successful contemporary change management is in utilising digital tools that can enhance the change experience. They suggest that digitising five key areas can help make internal change efforts more effective and enduring. These are: providing just-in-time feedback, offering the right type of information when the recipient can act on it; personalising the experience by filtering information in a way that is uniquely relevant to those receiving it, allowing them to see how they fit into the change programme at an individual and team level; sidestepping hierarchy by creating opportunities for individuals to connect across the organisation without the burden of bureaucracy; building empathy, community and a shared purpose by providing colleagues and outlet to share experience, information and updates on progress to date; and, demonstrating progress by communicating in real time on achievements so all can engage. ASSC provided a comprehensive communication strategy which addressed all the above aspects noted by Ewenstein et al. (2015).

The College introduced a new online publication, College News, which holds the purpose of welcoming and introducing new staff; provides updates on team activities; and offers a consistent link back to all college level activities, which include social events offered by the College. This is a publication which provides the community with a regular source of information which colleagues can access as they wish.

Speaking to Ewenstein, Smith and Sologar's (2015) point related to sidestepping hierarchy by creating opportunities for individuals to connect across the organisation, ASSC has been very supportive of staff developing appropriate communication channels across the schools and college, instigated by individuals to support process development and best practice working models. This approach has also seen strong working relationships develop and has helped engage staff in 'belonging' to the College.

Staff forums have been created that offer staff a voice and a place to vent their concerns or offer suggestions for change. Initially these were transition forums, and were a place for issues to be noted and action plans developed. These transition forums have now been replaced by regular forums for staff to discuss issues which include 'whole of college gatherings' and college and department level meetings. These discussion opportunities continue to prove invaluable for issues resolution and in developing effective collaborative partnerships across the College.

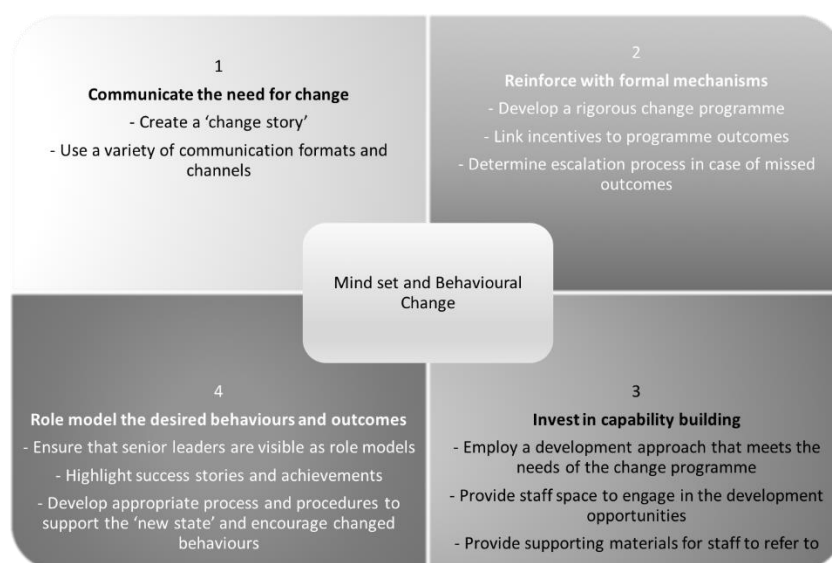
During the transition phase, weekly morning teas were run where new staff would be introduced, reducing any held anxieties of moving to new roles and teams, and weekly senior management staff meetings were organised to ensure all managers were providing consistent messaging, were reporting service level failures whilst also noting what was working well, along with celebrating team 'wins'. Now we are into the final stages of the change programme, we maintain morning teas on a regular basis, through the 'meet the team' sessions described above, and the senior management team meet fortnightly to discuss key priorities.

To ensure that the change programme is successful and remains embedded and effective within the new structure, all managers are accountable under the General Manager for consistent messaging and for role-modelling the cultural behaviour expected under the new model. Career Success (performance appraisals by any other name) also embed this change through clear objectives for all staff cascaded through from senior levels into all staff career

success plans. This formal mechanism sees all staff working towards achieving the university and college goals, whilst also achieving outcomes on an individual level.

## WHAT DO WE NEED TO SUCCEED?

So far we have discussed several aspects of change management and the steps taken in ASSC to successfully transition from the old state into the new. Looking at Figure 9, interventions for change, adapted from the model in Gorgens et al., (2013) model, ASSC now had one more element to tackle; that of developing appropriate processes and procedures that would support the new operating model and encourage behavioural change.



**Figure 9: Intervention Stages for Change. (Adapted from: Gorgens et al., 2013).**

## Process Improvement

The consolidation of five faculties into two colleges offered the College the perfect opportunity to streamline process and procedure and to minimise any duplication across different schools and departments. It also allowed for a focus on consistency. For example, in Student Services, there is now a 'one-stop-shop' for advice and assistance across all Schools, as well as equitable outcomes for certain essential services such as special consideration. To achieve this, the College has had significant influence into the development of policy and procedure supporting the student experience. Where there may have previously been several interpretations of policy impacting on student experience, ASSC was now able to stipulate overarching principles of practice that could be applied to student activity and which facilitated a more uniform outcome. Examples of such process change, benefitting both students and staff, are briefly outlined below.

## Academic Progression

Academic Progression at La Trobe was a process that was previously managed at the Faculty level, with the potential for policy to be interpreted differently by each Faculty, resulting in student outcomes being specific to the Faculty that they were undertaking subjects within. Although appropriate in terms of decision making and compliance with policy, this Faculty interpreted procedure was ripe for review under the new structure as this was now being managed centrally and overseen by learning and teaching and student administration. The

change that ensued was one of streamlining the process into three stages for students; one, single unit fail; two, 'at risk'; and three, unsatisfactory progress. The details of this change will not be discussed here, however, the outcome of this change has been one of positive engagement with students and improved student experience.

### ***Process Mapping***

As mentioned above, all processes were 'blank paper' at the time of transition which meant that the College was in the position of mapping out all processes across, and into, the college. This was no easy task as we know that universities can be prolific in their process management! This activity was undertaken in the first few months of ASSC being formed and has been ongoing ever since. The task facilitated consideration of 'stop, start, keep' within processes and allowed us to ask those important questions such as 'why are we doing this?' and 'can we do this differently?'. It also allowed us to put into place collaborative agreements that had not previously been possible (or necessary), including College-wide understanding of agreed timelines for mission critical tasks such as course development timelines, handbook deadlines and other key systems related activity critical to the smooth running of the college. Such collaboration and engagement across the College was a new experience for us, and one that we now utilise regularly to achieve outcomes.

### ***Subject Matter Experts***

To complement the business partner arrangements, Schools within the College determined the need for embedded 'Subject Matter Experts' to provide face-to-face support for both academic and professional staff. A driver for this initiative was to facilitate staff in obtaining customised service and training into systems and processes they otherwise would have had to train themselves in, spending valuable time navigating unfamiliar systems, often missing crucial information or not engaging with the systems or processes at all in some cases. These subject matter experts were individuals that hold expert knowledge in their field of specialisation, such as finance and accounting, curriculum database management, timetabling and other specific expertise that would otherwise not be found in the schools.

The subject matter experts were from centrally managed departments and whilst they provide a service at the university level, they do not necessarily cater for school or discipline specific requirements. This generalist approach is positive as it promotes a standardised way of dealing with matters across each school and helps to reduce multiple ways of managing processes.

To raise awareness of the skills and knowledge that these subject matter experts could offer, 'Drop In' sessions were organised. subject matter experts were physically located within the schools for a defined period per week. Each session was focused on a different topic and therefore ensured that over time exposure to each specific knowledge base was available for those who wished to learn about that service and embed it within their skill sets. This has been an extremely successful initiative.

This initiative has now become 'business-as-usual' and staff can receive customised service and training, in a 'just-in-time' fashion, which has proved to be invaluable for staff.

An added benefit has seen the subject matter experts benefiting from the arrangement. They are building rapport with staff around the university, understanding discipline specific requirements and needs, raising awareness of issues and can return to the central function areas with a wealth of newly found knowledge. This knowledge has contributed to the review

and development of processes across the organisation, as it has been realised that ‘one size’ does not fit all in some instances.

## HOW ARE WE TRACKING

ASSC has been on the change journey for the past eighteen months and we have achieved a significant amount in that time. Figure 10 illustrates in one snap-shot, what those achievements look like for the College.



**Figure 10: ASSC achievements from January 2015 and our continued trajectory.**

These achievements illustrate a monumental effort and commitment of the great majority of staff within ASSC and across La Trobe to making this change successful. We are striving to achieve the objectives of the Future Ready strategy and to improve our student experience for all our current and future learners. We are not yet there though and we recognise that we have a significant amount of work still left to do, but we are on the right path and are engaged and willing to ‘make this happen’. In terms of Kotter’s model (2015) we are now in the stages of sustaining and instituting this change and we are moving towards achieving our goals.

## CONCLUSION

This paper has discussed the change programme undertaken and ongoing at La Trobe and specifically in ASSC. Embarking on this journey in 2015, with significant early steps occurring in 2014, we have highlighted where change has had an impact, specifically in staff engagement and development, process management and communication effectiveness. We have demonstrated how this change followed some typical change models and how at each step we encountered challenges which were overcome using other theoretical models applied in practice. In this way, the paper has shown how theoretical frameworks from the management literature can help us to understand the change process. Lewin’s model provides an effective conceptual framework for analysing change, and the insights of that model can be enhanced by considering other models such as those developed by Kotter, Maslow, and Basford and Schaninger. In particular, the four dimensions of the model developed by Basford and Schaninger provide important insights into critical elements of a change process.

Referring back to the influence model (Figure 2) as a tool/framework that organisations can work with as they go through change processes, La Trobe has successfully navigated this and has been able to foster an understanding and conviction for the change; has determined role models through senior staff whereby they have displayed behaviours that align with the cultural shift; developed talent and skills through a clear focus on staff development that allows staff to gain the skills to behave in a new way; and reinforced through formal process and procedure, demonstrating that systems and structure reinforce and support the changes implemented.

With the benefit of hindsight, we can conclude that we have successfully navigated the change space, and that we have learned from our experiences what works well, and what not to do! We have recognised that we have managed to implement effective programmes that support staff in their development and in adjusting to change, and that our staff are our primary asset – without them we could not have achieved all that we have to date. Investing in our people is arguably the most effective course of action we could have taken throughout this change process. Related to this, effective and ongoing communication has emerged as critical to the capacity to lead and enable organisational change. Effective communication has been vital for positive change. Where communication has been less effective, so the change process has been negatively impacted.

We also recognise that we are still on this change journey and that we have some ongoing work to do in improving our process management and our communication. Indeed, change is an ongoing and ever present factor in contemporary organisations. We have made good progress against our strategic agendas, but we continue to identify areas for improvement, and those ‘gaps’ that were not necessarily thought about in the initial stages of the change process continue to expose themselves. As part of an ongoing process of transformation, ASSC will keep a forward trajectory towards our utopia of achieving a smooth running ‘ship’ that is self-learning, agile and self-sufficient in addressing any challenges arising, in a collaborative, timely and efficient manner.

## **ACKNOWLEDGEMENTS**

The authors would like to acknowledge the helpful feedback and comments received from Ms Natalie MacDonald, Professor Timothy Marjoribanks, Dr Nicola McNeil, Dr Paul Ramage, Mr Simon Hall, Ms Stacey Walton and Ms Wendy Lundgaard, on an earlier draft of this paper.

## **BIOGRAPHICAL NOTES**

Andrea Young is Director, Educational Experience, for La Trobe Learning and Teaching, La Trobe University. She has worked in the higher education sector for the past 19 years, starting in 1997 at Bournemouth University, UK. She has held various leadership and management roles, taking up an opportunity in Australia in 2011 with the University of Melbourne as Manager, Student Services, School of Engineering. She joined La Trobe University in March 2015.

Donna Burnett is the School Manager for the La Trobe Business School in the College of Arts, Social Sciences and Commerce at La Trobe University. She has worked in the higher



education sector for the past 10 years. Throughout her diverse career, Donna has gained extensive experience in business administration, leadership and training, business planning and human resource management. She joined La Trobe University in February 2006.

## REFERENCES

Basford, T., & Schaninger, B. (2016). The four building blocks of change. McKinsey Quarterly, April 2016.

Batista, E. (2010)., David Rock on Neuroscience, Leadership and the SCARF Model. Retrieved from <http://www.edbatista.com/2010/03/scarf.html>

Burnes, B. (2004). Kurt Lewin and the Planned Approach to Change: A Re-appraisal. In: 2004. Journal of Management Studies 41(6), 977-1002.

Crainer, S. & Dearlove, D. (2008). The heart of leadership. Business Strategy Review, 19: 40–45.

Ewenstein, B., Smith, W., & Sologar, A. (2015). Changing change management. In: McKinsey Digital, July 2015.

La Trobe University (2015). Future Ready: Strategic Plan 2013-2017, La Trobe University, November 2015.

Gorgens, S., Greubel, S., & Moosdorf, A. (2013). How to mobilise 20,000 people. McKinsey Quarterly, Winter 2013/14, 52-58.

Hochschild, A. R. (1983). The Managed Heart. Commercialisation of Human Feeling. Berkeley: California Press.

Kimball, D., & Lussier, R. (2013). Applied sport Management Skills. 2<sup>nd</sup> edn. Human Kinetics.

Kotter, J. (2015). 8 steps to accelerate change in 2015. Kotter International.

Mayo, E. (1933). The Human Problems of an Industrial Civilization, New York, Macmillan Co.

McLeod, R. (2016). Why it is imperative to break down silos now – and five ways to do it [online]. Retrieved from <http://chatsworthconsulting.com/2015/01/29/why-it-is-imperative-to-break-down-silos-now-and-five-ways-to-do-it/#sthash.5OelNLMP.dpuf>

Nautin, T. (2014). The aligned organisation. McKinsey Quarterly, 136-142.

Pech, R. J., & Durden, G. (2004). Where the decision-makers went wrong: from capitalism to cannibalism. Corporate Governance, 4, 65-75.

Reynolds, G., & Stair R. (2013). Principles of Information Systems. 11<sup>th</sup> edn. Cengage Learning.

Rock, D. (2008). SCARF: A brain-based model for collaborating with and influencing others. In: Neuroleadership Journal, Issue one, 2008.

Sims, R. R. (2002). Managing Organizational Behavior. Illustrated edn. Greenwood publishing group.

Tanner, R. (2015). Management is a journey [online]. Retrieved from <https://managementisajourney.com/motivation-applying-maslows-hierarchy-of-needs-theory/>

Varlejs, J. (1994). Continuing Professional Development and Workplace Learning Section. In: 2002. Continuing Professional Development: Principles and Best Practice. Retrieved from <http://www.ifla.org/VII/s43/index.htm>

Wren, D. A., & Bediean, A. G. (2009). The Evolution of Management Thought, New Jersey: Wiley & Sons Inc.