



Management Information Portfolio

**Fulfilling student expectations through effective
workload planning**

June 2011

EXECUTIVE SUMMARY

Introduction

The primary purpose of a workload planning model is most commonly described as ‘a tool to ensure an equitable and transparent approach to allocate work activities across academic staff’.

This guide brings together the experience of institutions across the higher education sector in developing and implementing approaches to workload planning. This was gathered by way of an initial survey of current practice and working group discussions. In particular this guide utilises the experience of the few institutions who have achieved TRAC-compliant workload planning models.

It is apparent from the working group meetings and survey that sector practice is incredibly varied with wide differences in approaches to input methodology and detail, linkage to other processes and scope of transparency to name but a few. Not all of the current approaches would meet the requirements of a TRAC-compliant model. Institutions will need to decide for themselves what they want to achieve through workload models which will depend upon existing practice and availability of data, future management information demands and the resources available to implement the process.

This guide supports an Institution wide, TRAC-compliant approach to workload planning models (ie the model can directly inform TRAC returns). However it is recognised that in reality many Institutions may not wish to achieve this aim in the immediate future. Nonetheless much of the detailed considerations could be applied to individual department workload models to support best practice.

This guide is split into several sections, each of which addresses a key feature of implementing a workload planning model. A summary of each of these sections is set out below.

Understanding workload planning

Developing a workload planning model should be undertaken with core principles in mind. This guide identifies these principles as equity, transparency and consultation. These principles were originally suggested by Professor Peter Barrett and Dr Lucinda Barrett, University of Salford and discussed in their report ‘The Management of Academic Workloads: Summary Report 2007’¹.

Institutions should understand the uses and benefits of the model which are far reaching across the whole University, heads of departments, individual academics, students and external funding bodies. The benefits should be clearly articulated to academics to support project buy in. However the number of interested parties, “stakeholders”, also brings with it a number of obstacles to the ease of implementation.

¹ P. Barrett and L. Barrett, The Management of Academic Workloads: summary report (Leadership Foundation for Higher Education Research and Development series), 2007, ISBN 0-9553788-2-6 available from www.lfhe.ac.uk/publications/research.html (Accessed 14 June 2011.)

Three key principles of a workload planning model have been identified as:

- 1) Equity
 - Include ALL academic, teaching and research staff
 - form a neutral framework with the ability to adopt local variable factors
 - Include ALL activities
- 2) Transparency
 - Clearly understandable
 - Consistent application
 - Enable appropriate “visibility” of staff activities
- 3) Consultation
 - Ongoing process open to development and improvement

Approaches to workload planning – technical dimension

The development of a University-wide workload model will require a number of critical decisions to be made in relation to the model design and parameters. These decisions include, but are not limited to:

- **Tariff** – How a unit of activity is recorded, a measure of hours
- **Activities** – the type of activities and level of detail to be recorded within the model
- **Input or output methodology** – whether activity is measured from inputs such as identifying hours to deliver courses or outputs such as assigning a weighting to certain output activities.
- The level of **detail** involved
- **TRAC compliance**
- **Hierarchy** framework – building the framework from bottom up eg module – department – school – Institution
- **IT Inputs** – including HR, student records, programme data, research data
- **IT platform** eg excel, web based

These decisions should be approved by senior management.

Workload planning – compliance with TRAC

TRAC Update 4 – Academic time allocation (April 2010) includes a number of requirements for workload planning models and the related workload management cycle which are required if the model is to comply with and inform TRAC returns.² The key requirements for a TRAC-compliant model in accordance with TRAC Update 4 are:

- All activities are included
- Records all “managed hours”
- Formal approval at the planning and final stage
- Prepared from planned activity; for example, expected student numbers and module delivery
- Research recorded by research category

² TRAC update no 4 – Academic time allocation (April 2010) available from www.jcpsg.ac.uk/guidance/revisions/ (Accessed 14 June 2011)

Workload planning – recording research activities

The recording of time spent undertaking research activity remains an area of development in workload planning best practice. We note that none of the institutions with TRAC-compliant workload models are considered to be research intensive. However, certain research intensive institutions from the working group informing this project intend to implement compliant models in the near future.

In particular more research intensive institutions have difficulty in formalising the number of “managed hours” as required by TRAC update 4. Commonly teaching hours are input with research forming the balance of an assumed workload – but this introduces the risk that the institution’s research activity is understated or that staff are being encouraged to overwork.

An approach which uses a percentage allocated to teaching and research, similar to the current Time Allocation Schedule (TAS) approach, risks underestimating the teaching time which subsequently loses integrity if used as a basis to inform other management information such as course costing.

This guide brings current practice together, but recognises that guidance will develop as more institutions adopt University-wide workload planning models.

Approaches to workload planning – implementation and project management

Designing an academic workload model is relatively straightforward. Implementation is where difficulties can be encountered.

Throughout this project a common theme has been the amount of time and resource required to successfully implement a workload planning model across an institution. This is not a symptom of complex technical definitions of the model, but the difficulties in obtaining full engagement across an often large and diverse Institution. This is particularly the case if the model is to be sufficiently common across departments to enable TRAC data to be derived directly from the model and hence eliminate the need for TAS. Senior management ‘buy-in’ to the project was also identified as crucial. These difficulties should not however deter institutions from taking this development forward as the benefits from implementation are significant.

A successful workload planning model is not only a robust model, but a continuous management process for updating, verifying, checking and reporting on workload planning. Following implementation, the management cycle is critical to ongoing success of a workload planning model.

Workload planning - Management Information Project Survey

This project reviewed current practices widely adopted across the sector. Some of the key findings are:

- All institutions undertake some sort of workload planning model, however arrangements differ widely between and within institutions;
- Those with TRAC-compliant models were not considered research intensive institutions;
- There is no desire from the sector for a mandatory workload planning solution; and
- Workload planning is an integral part of university culture

Case studies

This guide includes a number of case studies that will provide real life experience from institutions that have TRAC-compliant workload planning models, or areas of identified good practice. At the back of this guide we have included six full case studies, four of which have been provided by institutions with models that have been designed to be TRAC-compliant (Edinburgh Napier, Salford, University of the West of England (UWE) and University of Sunderland). The University of Salford was the first institution to have a TRAC-compliant model and has been using its workload system for TRAC since 2000. These full case studies provide a “complete story” and we believe add great insight by reading in full. However we have interspersed sections of these full case studies throughout the document where relevant.

Top tips identified by institutions that have successfully implemented workload planning

We have summarised below the top tips that institutions identified, based on their experience of implementing workload planning:

- Agree the principles up front and ensure that they are reflected throughout all phases of development;
- The benefits sought from the process should be identified at the beginning and communicated to all stakeholders;
- Agreement of the technical dimensions by the key stakeholders will facilitate implementation;
- A TRAC-compliant model will need to encompass all activities and include all academic staff;
- Automating feeder systems (i.e. timetabling, research ledgers etc.) should be a phase two project, to prevent slowing the initial implementation of workload planning;
- Senior management buy-in is crucial to the successful implementation of a new workload planning model; and
- Involving academic staff in the delivery of training will help secure engagement.

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INTRODUCTION

What is workload planning?

The common aim identified of workload planning is to maximise the equitable and transparent spread of work loads across academic staff. The use of workload planning information will vary by Institution.

The ability to understand the workload of academic staff should be a critical management tool in being able to manage resources and to achieve financial sustainability. It is also an essential precursor to prioritising resources efficiently and to making effective decisions.

However, whilst many institutions have localised examples of good practice of workload planning models, very few have institution-wide workload models which can be used to inform TRAC returns or institution-wide decisions around resource deployment and utilisation.

This guide aims to support an institution implementing an institution-wide model to provide enhanced management information at the Institution level. In addition the guide considers the key parameters that a model will require to be compliant with TRAC Update 4 and therefore able to directly inform the institution's TRAC return. This guide does not however form part of the TRAC guidance.

How this guide can help you

This guide brings together the experience of institutions across the higher education sector in developing and implementing approaches to workload planning. Whether you are a senior manager, an academic, a planner or a member of the finance team, it will help you to:

- understand what you want to achieve with workload planning
- identify the best approach for your institution
- get the most out of your workload planning data
- implement workload planning effectively across the institution

Six reasons why you should adopt workload planning

1. Equitable and transparent allocation of workloads.
2. Avoid the need for existing onerous Time Allocation Schedule requirements (assuming TRAC-compliant)
3. Support annual appraisal process
4. Support Equality agenda
5. Tool to manage undue stress – uphold work-life balance
6. Robust data for funding bodies
7. Support and validate Key

There is no 'one size fits all' approach to workload planning. We have seen across the working group a number of different approaches to achieve TRAC-compliant workload planning models. Institutions will need to decide for themselves what they want to achieve through workload planning from the level of detail included, methods of input, annual update process and links to other processes.

However, whilst this guide may not be able to give you all of the answers, it can tell you what the important questions are and how other institutions have approached them. In doing this, we hope that you will be able to learn from their experiences and build on their success.

About the guide

We have designed this guide to be of interest to anyone involved in workload planning in higher education, from Vice Chancellors and senior managers to individual academics and members of finance and planning staff. The guide is intended to support Universities understand workload planning models and the related requirements of TRAC.

We have started the document with a three page executive summary, highlighting the key things that everybody needs to know about workload planning.

We have also included at the start of each chapter a short summary of the main points covered. This is aimed specifically at senior managers, who may wish to understand the key principles but are unlikely to want to go into too much detail.

Top tip

'Top tips' look like this.

For those of you who want the detail, there is the rest of the guide. We have drawn on the experiences of institutions already working on university wide TRAC-compliant workload planning models to bring you a range of ideas, suggestions, examples and case studies. We have also included within the text some 'top tips' from these institutions. We have included these top tips in speech bubbles.

In addition this guide includes a number of case studies that will provide real life experience from institutions that have TRAC-compliant workload planning models, or areas of identified good practice. At the back of this guide we have included 6 full case studies 4 of which have been provided by institutions with TRAC-compliant models. These full case studies provide a "complete story" and we believe add great insight by being available in full. However we have interspersed specific examples from these full case studies throughout the document where relevant. These are referenced in green boxes. We hope that they are both helpful and thought provoking.

Case study

References to Case studies look like this. They are all anonymised, but have been provided by real institutions working to develop and implement workload planning models.

Acknowledgements

This guide would not have been possible without the insight and support from individuals involved in the working group formed from 32 Universities and led by the University of the West of England and the University of Warwick. The working group members included:

- Arts University College Bournemouth
- City University
- Cardiff University
- Durham University
- Edinburgh Napier University
- Heriot Watt University
- Institute of Education
- Loughborough University
- Newcastle University
- Northumbria University
- Oxford Brookes University
- Roehampton University
- Teesside University
- University of Bradford
- University of Brighton
- University of Dundee
- University of Derby
- University of Essex
- University of Exeter
- University of Glamorgan
- University of Hertfordshire
- University of Leeds
- University of Manchester
- University of Portsmouth
- University of Salford
- University of Sunderland
- University of Ulster
- University of Wolverhampton
- University of West of Scotland

Contributions were also received from the following institutions:

- Brunel University
- Birmingham City University
- Guildhall School of Music and Drama
- London Metropolitan University
- Queens University Belfast
- Royal Agricultural College
- Royal Veterinary College
- Sheffield Hallam University
- St Mary's University College
- UHI Millenium Institute
- University of Abertay, Dundee
- University of Bedfordshire
- University of Bath
- University of Central Lancashire
- University of Chester
- University of Glasgow
- University of Hull
- University of Kent
- University of Stirling
- University of Strathclyde
- University of Wales Institute Cardiff
- University of Westminster
- University of Worcester
- University of York

Whilst this guide endeavours to reflect the experience and input from this diverse group we acknowledge that this single report cannot reflect all the views and comments raised.

This guide follows previous research undertaken by Professor Peter Barrett and Dr Lucinda Barrett, funded through the Leadership Foundation. This work was informed by the Managing Academic Workloads (MAW) working group, many of whom have subsequently contributed significantly to this working group. We thank these individuals for their time and insight from which many of the working group members have benefited.

Specifically, the content of this guide follows two research projects undertaken by Professor Peter Barrett and Dr Lucinda Barrett as follows;

- 1) The Management of Academic Workloads Summary Report, January 2007. This publication summarises the findings of a review of the workloads of nine institutions. It develops a broad categorisation of workload policies together with the respective advantages and disadvantages. The report also recommends a broad ideal process based on three essential elements: equity, transparency and consultation.³
- 2) The Management of Academic Workloads: Improving Practice in the Sector Final Report, September 2009. Summarised in this publication are the findings of work carried out by a community of university partners seeking to support the implementation of improvements to and the dissemination of good practice in managing academic workloads (MAW). The report sets out in detail the benefits of managing academic workloads and provides guidance on building framework models, from both a technical and social standpoint. Significantly, the report contained a recommendation for Funding Councils: 'Building from the findings of the MAW project, the funding councils can, with confidence, give strong encouragement to universities to use rigorous academic workload management approaches to inform TRAC.'⁴

Copies of these reports and further resources linked to MAW can be found at www.research.salford.ac.uk/maw.

Finally thanks go to the Individuals and represented Institutions who have provided invaluable case studies to support the findings of this guide. The real life examples are an invaluable source of insight for the wider higher education sector.

³ Barrett (2007) available from www.lfhe.ac.uk/publications/research.html (Accessed 13th June 2011)

⁴ P. Barrett and L. Barrett, The Management of Academic Workloads: Improving Practice in the Sector (Leadership Foundation for Higher Education Research and Development series) ISBN 978-1-906627-13-3, 2009 available from www.lfhe.ac.uk/publications/research.html (Accessed 13th June 2011)

UNDERSTANDING WORKLOAD PLANNING

Implementing an institution-wide workload planning model, especially one that is TRAC-compliant, is a major project. It is therefore important that institutions assess the costs and benefits of implementation before undertaking such a large-scale change management process.

The Barrett report of September 2009 “The Management of Academic Workloads: Improving Practice in the Sector”⁵ provides detailed and useful information on the potential benefits of workload planning models for academic staff, Heads of School, Deans, Unions, University as a whole, students and funding bodies. We would recommend that this should be read by management implementing workload planning models to facilitate buy in across the University by all stakeholders.

The report identifies one of the strongest factors to develop a workload planning model as being the need to: **“Maximise the equitable and transparent spread of loads across academic staff.”**

The working group carried out a survey of current practice which has identified that there are few examples of TRAC-compliant workload planning models within the sector and none identified from research intensive institutions. We have included the findings of the survey at the back of this report.

Principles of workload planning models

The previous research work by Barrett and Barrett ‘The Management of Academic Workloads Summary Report 2007’ identified three fundamental principles that should be applied to the implementation and management of workload planning models: **Equity, Transparency, and Consultation**. Responses gathered during the workload planning Project through questionnaire returns and discussion at workshops consistently identified these principles as being critical to a successful workload planning model.

Top tip

Agree the principles up front and ensure that they are reflected through all development phases

Equity

- Its basis is a broad, neutral framework promoting equity across the institution or department, with ability to adapt locally variable features to allow for, for example, different teaching styles. The equity of the framework will usually be verified through consultation with Trade Unions (see below).
- Inclusion of all academic, teaching and research staff. The results of the Barrett and Barrett report firmly supported the need to include ALL academic, teaching and research staff. Further discussions within the working group supported this conclusion.
- All activities are accounted for. The categories of activities should be sufficiently defined to avoid ambiguity, but equally be broad enough to encompass all activities.

⁵ Barrett (2009) available from www.lfhe.ac.uk/publications/research.html (Accessed 13th June 2011)

Case study

University of Salford - Equitable Loads

University of Salford has used the principle of equitable loads to define an acceptable variation in workloads. Deviation from this acceptable range is managed and reduced through re-allocation of activities and roles between staff facilitated through discussions with department heads and linked with the annual appraisal process. – ie resource management.

The model includes:

- Equity in workloads
 - An acceptable spread of workloads is set amongst academic staff, initially within each school, but ultimately across the whole faculty.
 - Targets of acceptable variation to the median workload:
 - School: 10% variation, moving to 5% variation
 - Faculty: 15% variation, moving to 10% variation
- The framework is defensible. This emphasises the need to ensure that the process set up in a particular institution is appropriately planned with input across stakeholders. The resulting outputs need to be robust.
 - The model will be able to highlight over or under-utilised staff.

Transparency

- Set out a clear understanding of what a full workload is in terms of number of hours or other units and range of activities
- Set out clear guidelines of discretionary and non discretionary allowances
- Be as simple as possible – i.e. enable the users to allocate time in an understandable and unambiguous way (this will probably avoid commonly used TRAC jargon)
- Have clearly understandable inputs and outputs (words vs codes; hours vs. bundles).
- Be consistent in its application
- Be transparent to users – it is suggested that the level of reader access will develop over time with increased engagement and understanding

Consultation

Broad consultation with key stakeholders in the design phase of a workload model will secure buy-in to a new workload planning Model. A good workload planning Model will also allow for an ongoing dynamic interaction between Heads and Academics, with a careful balance between the model guidelines with discretionary input. An institution should consider having a workload planning policy and regularly review and update guidelines.

The key stakeholders identified by the working group were:

- Academic Staff
- HR
- Finance

- Heads of Department
- Trade Unions
- Health and Safety
- Senior Management

Understanding the benefits

The benefits of robust workload planning models can enable greater engagement between management and academics.

We have summarised some of the main benefits identified from the working group below:

Improved Management Information

A key benefit of a robust workload planning model within an individual department or across an institution is the information it provides to management. Where a workload planning model has been implemented that has been developed with full stakeholder engagement, the outcome should be that the department / institution is better placed to:

- provide reliable, robust TRAC data which becomes an integral part of an Institution's management information, rather than an inconvenient 'add-on' through the TAS process
- support reliable information on where staff time is spent and hence the effectiveness and efficiency of a department's / institution's activities. This links directly to the related course allocation management information project
- support accurate, reliable and consistent information for course costing. This links directly to the related course costing management information project
- identify where staff are under / over utilised
- better support accurate, reliable budgeting and forecasting data. This links directly to the related departmental return analysis management information project
- assist in identifying potential cost savings linking with Value for Money objectives
- provide robust data to inform appraisal processes, by the same token, appraisal can inform workload planning in setting the broad workload balance
- assess recruitment requirements
- benchmark the cost and value-for-money of individual courses and/ or academic departments
- identify possible equality and diversity issues
- facilitate consistency in contact hours
- health and safety of staff – ensuring that individuals with very high work loads are identified and the potential impact appropriately managed
- encourage academic staff to think about funding of activities

Top tip

The key benefits to the Institution should be identified up front. These benefits should be articulated to the relevant stakeholders to assist their buy-in. Matching benefits to users (academics, back office, SMT) will help.

- support and validate key information set data

The information generated from the workload planning system can form part of the wider framework of management information in the University; e.g. academic, HR, Finance, research, student records and timetabling thus generating confidence in the data from these systems or quickly highlighting discrepancies to be resolved.

External benefits

The various funding bodies have been applying greater scrutiny and challenge to the accuracy of TRAC data within the sector initially as a result of the outcomes of recent quality assurance processes and more recently as a result of increased interest by Government in the TRAC data, as part of their research into developing future policy for the HE sector.

Developing robust workload planning models will further improve the credibility of this data across the sector, and enable the support of Government and funders to be maintained.

Staff satisfaction

Staff satisfaction may be enhanced by the implementation of a stakeholder approved workload planning model:

- Good models will be consultative and dynamic in their design, encouraging staff to become involved in the process
- Agreement of standard allocations demonstrate equitable and fair treatment of staff across departments / the institution
- Greater clarity of work expectations through generic guidelines and specified activities for an individual. This can be useful for staff both with and without specified contract hours
- Departmental heads will be able to quickly identify over / under utilised staff
- Individual workloads are agreed between department/ section heads and academics and can be usefully employed in appraisal discussions both in terms of overall workload and in terms of balancing an individual's workload across a range of activities
- Transparent, fair and equitable division of workloads between department (and potentially central university) staff
- A TRAC-compliant system can negate the need to complete a time analysis schedule (TAS). This was one of the key drivers in the decision of some institutions to introduce a robust, TRAC-compliant workload planning model

Understanding the barriers

The working group identified a number of barriers to successful implementation. It is acknowledged that the culture of an institution will affect the types of issues faced during implementation. Therefore, we have included a range of issues below together with ideas for how they can be best managed. We would advise that the main barriers are identified early on in a project and specific actions built into the project plan to deal with these.

Barrier	Proposed action
The culture is not conducive / receptive to increased management oversight of staff activities	Communication with academics and academic input into development is critical throughout the planning, development and implementation of workload planning models.
Department / faculty desire for autonomy	The decision to go ahead with an institution-wide workload planning model must take into account the balance between central oversight and department autonomy. Management will need to have genuine reasons that can be explained across the institution as to why central oversight is appropriate.
Perceived difficulties in allocating time across activities particularly when high research element	Existing practice demonstrates that time can be allocated between different activities. The perceived difficulties should be overcome by effective communication and training.
Workload models do not take into account different teaching styles	The institution is asking for academic staff to teach in a particular time frame as this is a balance that is set between the actual teaching and the quality being delivered. The activities within the model should allow for exceptional time, for example, developing new modules
'Hours-based' system does not take into account differing quality	A balanced scorecard approach should be taken to measuring the quality of teaching. This may include aspects from a workload model e.g. supporting contact time, but should be supplemented by other measures such as student satisfaction and feedback.
Lack of senior management support to implement	The implementation team should include appropriate senior management.
Finance team left to implement	A strong management team will ensure that appropriately skilled resources are available as part of the project plan, ensuring that it is not a 'Finance led' project.

Barrier	Proposed action
Lack of resources required for implementation	A strong management team will ensure that appropriate resources are available as part of the project plan.
Model lacks flexibility – perception that one size cannot fit all	The model should be flexible to accommodate different needs of schools, within reasonable boundaries.
Over complexity leading to onerous administration	The design must ensure that it captures sufficient data without onerous requirements on the individuals.
Benefits not realised or outweighed by costs, or perceived to be	It is very important that an institution completes a cost vs. benefit exercise before undertaking such a programme. In doing so it should consider all the benefits that will be realised and be realistic about the implementation costs and ongoing running costs.
Union support	Trade Union involvement in the development stages is critical to ensuring their buy in to and support of the project. The working group reported differing attitudes from Unions with regards to the development of workload models. Critically Unions need to be engaged and understand the primary use of the management information is to ensure equitable allocation of workloads.

Case study

Edinburgh Napier University – Strong Union support

The academic trade unions have been supportive of the development of the workload system throughout, seeing it as a means to ensure transparency and equity in the allocation of work.

Workload planning Management Information Project Survey

A survey was undertaken amongst the working group to gain further information regarding the use of work load planning models in institutions. Some of the key findings are:

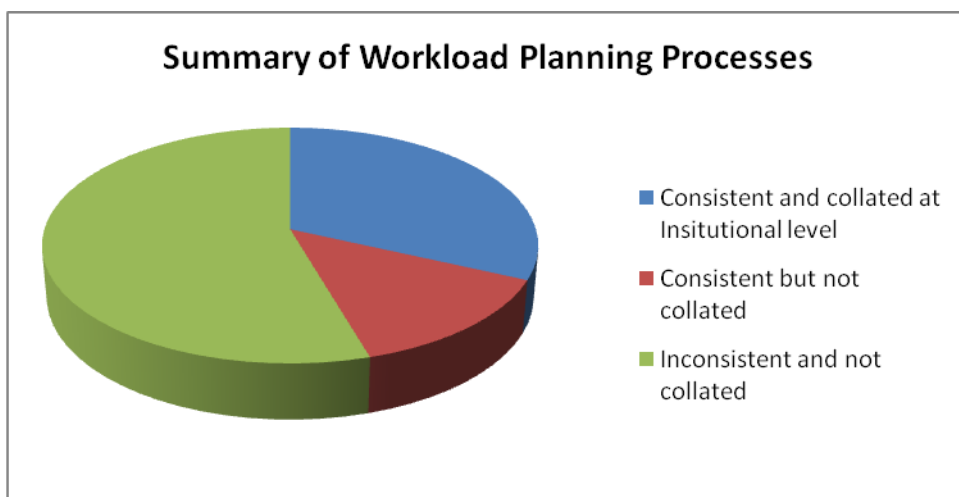
- All institutions undertake some sort of workload planning model, however arrangements differ widely between and within Institutions;
- Those with TRAC-compliant models were not considered research intensive institutions;
- There is no desire from the sector for a mandatory workload planning solution; and
- Workload planning is an integral part of University culture

Key findings

In October 2010, 31 institutions who had volunteered to participate in the workload planning Project were asked for background information on their current workload management processes. Of the 31 Institutions surveyed, 22 (71%) responded. Workshops were subsequently held to discuss the findings and to explore existing arrangements and proposed developments in greater detail. Overall, the findings showed a wide diversity of existing practice and a wide diversity in the intention and drivers to update workload planning models over the coming years.

One of the key findings was that all institutions already operate some form of workload planning model. The primary reason cited for this is the need to ensure that workload is distributed in an equitable way. However, the arrangements that institutions adopt for planning workload differ widely. The majority of institutions currently favour non-prescriptive solutions that enable departments or faculties to plan workload in a way that is most relevant to their own resource planning needs. In these circumstances a range of models will develop across an institution that are not consistent with each other and consequently the results cannot be collated at an institution level and are thus not TRAC-compliant.

The remaining 10 institutions had arrangements in place to ensure that workload planning is conducted in a consistent manner across the whole institution. Almost all of these institutions were post-92 universities. The majority of these institutions go on to collate their workload planning data at institution level.



The results from the survey and the involvement in follow up meetings revealed a number of institutions interested in developing institutionally consistent models either in the short or medium term.

Other key findings:

Measurement of staff time

- Input data was typically measured either in hours or units (which could be easily translated back to staff full time equivalent (FTE)).
- The most popular method of recording and collating data was a standard spreadsheet or database package, although web-based applications were also used.
- Universities that collate data on an institution-wide basis more commonly had (or were developing) bespoke systems which could interface with other systems, e.g. HR for personnel data, student records for module activity and finance for funded activity.
- The range of detail incorporated in the workload model varied not only from institution to institution, but also within institutions where processes were inconsistent and not collated.

TRAC Compliance

Four Institutions were identified as using the workload planning data in its current format to inform their TRAC models. Characteristics of these TRAC-compliant models include:

- Information is collated at institutional level
- The institutions with these models typically reported a lower proportion of research income (12% or less), compared to an average proportion of research income across all responding institutions of 24% (source – questionnaire returns)
- Six institutions noted that their workload planning processes were in a developmental phase; with the potential capability of becoming TRAC-compliant at the end of the process should the institution wish to adopt such functionality.
- Institutions with non TRAC-compliant models were asked what key changes would be necessary to enable their models to become TRAC-compliant. In addition to the procedural necessity of having their model audited every 3 years and requiring academic staff to periodically confirm their actual time allocation (i.e. to amend the original planning forecast to reflect the actual outcome), the following were identified as potential barriers to proceeding:
 - Obtaining 'buy-in' from staff and trade unions
 - Alignment of academic activities to the Time Analysis Schedule (TAS) categories, in particular the challenge of recording research activity
 - A change in culture – particularly where institutions had a variety of models designed and driven at discipline rather than institutional level
 - Identification of a suitable system to collect and record the data

Despite the perceived difficulties faced in implementing TRAC-compliant solutions there were felt to be significant advantages in pursuing such solutions:

- Belief that TRAC data is becoming increasingly important as institutional and sector benchmarks and therefore investment in reliable TRAC systems is more worthwhile than was previously the case.
- Developing a single management tool to support both workload planning and TRAC models is likely to be more efficient than running parallel systems.
- Opportunity to dispense with TAS returns which have proved to be unpopular in some institutions.
- View that TAS can be manipulated by participants and managers and therefore could be considered to be unreliable.

Maintaining institutions' freedom to select the most appropriate solution

There appears to be no desire from the sector for a mandatory workload planning model solution. Maintaining the freedom to select the solution most appropriate for each institution, and using multiple solutions within institutions if appropriate, remains a key requirement for most universities. It was noted that many of those universities that did not have institution-wide solutions were not necessarily unhappy with their model(s) and were not looking to change.

Perceived difficulties with developing workload planning models

Changing workload models was identified as a difficult project to manage. Those universities that already had institution-wide models stressed the high level of commitment needed to implement such solutions.

APPROACHES TO WORKLOAD PLANNING – TECHNICAL DIMENSIONS

There are a number of technical dimensions to a workload planning model. Institutions will need to consult across the organisation and utilise best practice available within the sector when developing their workload planning model solution. If an institution determines that the model should be TRAC-compliant then the requirements of a TRAC-compliant workload planning model need to be taken into account when forming these decisions. The requirements of TRAC Update 4 are included within the next section.

The Barrett report 2009 “The Management of Academic Workloads: Improving Practice in the Sector”⁶ includes a succinct and useful summary of the technical dimensions that should be considered when developing a workload model. We have included these technical dimensions and further dimensions identified by the working group below.

The Technical Dimensions

Top tip

A TRAC-compliant model requires planned activity data from a formal process. Eg - planned modules, courses, students and research projects. This could be either input or output defined.

Input vs. Output methodology - Basing workload allocations on activities, such as contact hours for a module or unit, supplemented by preparation time and support allowances is defined as an ‘input’ methodology. Alternatively, basing allocations on work outputs such as the number of credits for modules taught and the number of students taught and volumes of research activity would be an ‘output’ methodology. A variety of methods are used across the sector. The working group widely supports the use of the input methodology utilising existing data from programmes and student records systems.

The choice of model is likely to be determined by the types of institution and its culture. It is also possible to adopt a hybrid of the two methodologies whereby input measures are used to determine workloads in the context of delivering agreed outcomes.

⁶ Barrett (2009) available from www.lfhe.ac.uk/publications/research.html

Case study

University of Salford - Output methodology

Teaching calculation: This is based on a connection to outputs, ie a module of y credits being delivered to x students. There is a fixed and variable part, relating to preparation / lecture delivery and tutorials / assessment respectively. The fixed aspect is driven by the credit weighting and the variable aspect by student numbers (but also scaled by credit size). Typical proportions of an annual workload were elicited for delivering education via various modes, based on questionnaire surveys of samples of academics. It was found that generally the amount of time was relatively constant irrespective of mode of delivery, with the exception of intensive group work, as might typify MBA work.

Using this information and the principles above, coefficients were calculated for the fixed and variable aspects to create formulae that produce default credit-based calculations for modules of teaching activities, drawing simply on their credit weighting and the numbers of students studying them.

Case study

Edinburgh Napier University - Input methodology

Edinburgh Napier use an input methodology to define how each module instance was delivered in terms of specific teaching and learning activities. These activities were defined in terms of whether the activity was a whole or part class activity, which in the latter case, required defining the group size. Teaching activities were defined in terms of **Contact, Assessment, Module Leadership and Preparation**.

Contact is derived from the number of hours a student is expected to attend the module for whole and part class activities. The total contact then being adjusted for the number of groups required to deliver the part class activities to the class. The number of hours is then converted one-for-one into units.

Assessment is normally 1 unit per student per 20-credit module.

Module Leadership is $(15 + 0.1 \times s)$ units where s is the number of students attending the module.

Preparation is normally 1 unit for every unit of Contact.

The load associated with Assessment and Preparation can be adjusted as required. This work had to be completed before the Workload Allocation Model (WAM) System could be used. New capability, in the form of new interfaces and processes had to be incorporated into the student record system (SITS), which required the use of external consultants. The WAM provides both planning for and a record of actual workload. Thus planned student numbers are inserted prior to the start of the academic year during the annual planning cycle. As students are enrolled on modules these numbers are updated. Finally, the number of students assessed on each module occurrence is also recorded to ensure the allocated workload is as accurate as possible.

Alternative Approach - An alternative approach to measuring workloads is shown in case study 6 'Contribution Mapping' ('CM'). It is primarily a performance and development tool, but elements are also used in a pilot phase to inform teaching allocations. CM recognises the impossibility of measuring everything and the fact that different people will take different amounts of time to complete the same task. Whilst this approach does identify some useful ideas around understanding activities this percentage method is not thought to meet the needs of an institution-wide model that informs TRAC of other costing data.

Units of measure / Tariff - the tariff may be represented by hours or representative hours that measure input or output activity, determined by credit level and students numbers. A TRAC-

Case study Alternative Approach

With CM the first part of the Performance and Development Review process is to prepare an individual contribution map which identifies the *relative* effort put into the different aspects of the role. Because the maps show *relative* effort, everyone's map will add up to 100%, whether they are part time or full time, workaholic or lazy! A contribution map is a very simple pie chart showing the effort going into the different areas of the role. The figures used to generate the map are intended to be based on personal *estimation* of relative effort.

compliant model requires that the workload planning model includes only time "managed by the institution".

For post-92 institutions with a standard academic contract (detailing 550 teaching hours) the total hours should bear some relation to these contracted hours. However for pre 92 institutions the academic contract is frequently much less specific in detailing the contracted hours, instead including references to the percentage of time that the academic is expected to undertake on research activities. This has led to much debate within the working group as to how the total number of hours should be identified for such institutions – a particularly salient issue for research intensive institutions. We have included a separate section on research to discuss this issue and potential solutions further.

The working group has concluded that:

- a) The model should have a fixed number of "managed hours" which are allocated to activities
- b) The teaching hours need to be built up from the unit of measure rather than a percentage of overall time. This will support the workload model forming a part of a wider cohort of management information. Actual teaching hours can be converted into an actual cost to inform detailed costing activities.

Top tip

Agreement of the technical dimensions by the key stakeholders will facilitate implementation

Case study

Edinburgh Napier University - Units / representative of hours, a “reasonable” reflection of work undertaken

This model has an agreed managed hours position to be allocated between defined activities, but in addition includes some headroom for “other activities”

“A model based on units was developed, which were used to recognise work undertaken rather than giving remission from some notional total workload. The total allocatable workload within the model of 1300 units is less than that specified by RCUK (1650 hours pa). This was chosen so that not all possible workload was allocated, leaving some ‘headroom’ to take account of activities that are undertaken but which are not worth recording in a workload allocation, thereby reflecting that all academics do more than just the specifically allocated workload. “

Case study

University of West of England - “Bundle” tariff and total available time

UWE adopt a common currency (workload “bundle”) which is transparent and easy to understand and one that recognises the professional nature of the work undertaken across the full academic role comprising some combination of teaching and teaching related (including supervision), research, knowledge exchange and development activities.

Choosing a common currency is difficult yet essential. The table below shows how hours can be mapped against credits/bundles and can relate to the post 92 HEI staff contract of 550 teaching hours or the notional hours capacity of staff on less well defined contracts (assuming a 37 hour week).

Description	Weeks	Hours	UWE WL Bundles
Whole Year	52	1924	n/a
Holiday and closure	9	333	n/a
Available time	43	1591	654
Post 92 HEIs national contract (research/scholarship/admin)	7	259	104
Workload “time”	36	1332	550

Activities included - need to be determined even where there is diverse practice as to which of the main work areas are included in the framework and how they are measured. The users of the model will be recording their workload in accordance with these activities. Therefore the activity descriptions should be “understandable”. A possible approach is to include a small “catch all” percentage to avoid great detail on the smallest of activities (e.g. 10%). The term “reasonable reflection of the truth” has been used to reflect the need for the model to contain enough detail for management information purposes, but not to get lost in too detailed information. Case Study 3 from University of the West of England identifies the TRAC categories and activities included.

Top tip

A TRAC-compliant model must include all activities – Teaching, Research and Other and include all academic staff.

Case study

Edinburgh Napier University - 23 activities

The Framework was intended to cover all aspects of work and to use as its basis the TRAC categories of Teaching, Research, Other and Support for defining workload categories and activities. Five categories of work were identified by subdividing the TRAC Teaching category into Teaching Delivery and Other Teaching Activities. In total the categories were subdivided into 23 activities. The Framework identified the nature of the work that was to be allocated to each activity and the manner in which the allocation was to be determined. Typical allocations were also specified.

Case study

University of Salford - 22 activities

The categories below are provided to code each line of the school workload balancing spreadsheets. Thus the ordering of the activities can be kept flexible to suit the Head of School, but through the above coding, all activities can be articulated to the TRAC categories.

General School / Univ Work	g
General Admin / Management	ga
Teaching (Undergraduate)	tu
Teaching (Postgraduate)	tp
Teaching Admin/Management	ta
Student Recruitment	tr
Teaching Development	td
Research	r
Research Admin/Management	ra
Research Student Supervision	rs
Research Projects	rp
Enterprise	e
Enterprise admin/Management	ea
Commercial Consultancy	cc
Commercial Teaching	ct
Knowledge transfer / partnerships	kt
Staff Development (General)	dg
Staff Development (Teaching)	dt
Staff Development (Enterprise)	de
Staff Development (Research)	dr
External Professional activities	ex
Others	o

The level of detail involved - for example to avoid the model becoming too detailed and complex this may include the provision of a small allocation to capture numerous small, but disparate tasks. If the outputs of the model are intended to inform course costing analysis then it may be appropriate to ensure that the activities are captured at a module or programme level as appropriate.

TRAC compliance – whether the model is intended to meet the TRAC compliance requirements. We have included a separate section detailing the TRAC requirements and how the workload model may be designed to meet these.

IT inputs - the inputs to the workload planning model may be derived from a variety of places. At one end of the spectrum the workload planning model to obtain automatic direct inputs from other systems. At the other end of the spectrum the inputs are updated manually. Commonly inputs are generated from the following information:

- academic staff from HR systems
- programme data
- student records
- finance systems / research ledger(externally funded activity – eg research by research sponsor)
- timetable data

Top tip

Institutions should consider whether automated linkage of inputs should be included as a second phase of implementation

From the experience of the working group those institutions that had workload planning models with direct links to other systems had experienced some critical problems which had delayed implementation. Therefore, it may be advisable to seek system integration as part of a second phase of implementation.

Case study

Edinburgh Napier University - IT inputs

The Workload Allocation Model (WAM) uses data from many of the University's key databases.

- Module delivery data is obtained from the Student Record System. Most importantly, as the number of students enrolled or assessed on each module occurrence changes the data extracted for WAM purposes is updated accordingly. Thus the WAM provides a true reflection of the workload associated with each module occurrence at the end of each semester.
- The HR System is used to provide information on all employees that teach. Future versions of the WAM system will also include research staff, drawing details from the HR System. Data such as employee number, name, subject group and contract FTE are exported from the HR System to the WAM on a regular basis. Such data also contains information for staff employed on part-time contracts.
- Data used from the Finance System pertains to externally funded activity and specific University funded activity. This is accessed directly from the WAM. The data required by the WAM is just the project code and its description. This data pertains to research and commercial projects regardless of funding source and type.

IT platform – The working group identified a number of different approaches to the IT platform for the model. Some favoured an excel spreadsheet approach with data collection from departments into the excel spreadsheets which are centrally collated. Others have used a central database with academics having a web based portal into which department heads and academics can input and adjust workloads. Those with institution-wide models more commonly had, or were developing, bespoke systems to capture workload data. All methods require control over who can update and when data can be updated. Care also needs to be taken over the security of the information that is held. Appropriate advice and guidance should be sought to ensure appropriate controls are established.

Case study

University of Sunderland - IT Inputs and Platform

The working group appointed an independent consultant and software developer with a good understanding of the Higher Education sector and TRAC. A detailed specification which included Human Resource data, General Ledger data and Academic Module data was collated for the bespoke system to be developed as effectively as possible

The system uses interfaces with the Human Resources database and the SITS student records system, allowing for accurate staff and module data to be entered into the system via a series of drop down menus, meaning that the system is quick to use and there is less need for free form text, which can lead to errors or miscoding.

The system has proved to be simple to use, and will lead to a number of improvements in the understanding of academic workloads across the Faculties, ensuring fairness of allocations, but will also allow for instant and detailed analysis by Academic Managers, allowing them to maintain and improve on the flexibility they already have within their teams. It will also automatically record the data required for TRAC purposes and has negated the use of Time Allocation Questionnaires.

WORKLOAD PLANNING - COMPLIANCE WITH TRAC

Institutions seeking to implement workload planning models should consider the benefits of replacing its existing TAS system, used to inform the TRAC process. TRAC Update 4⁷ sets out the minimum requirements that a workload planning model will require to satisfy the needs of TRAC reporting. This section sets out these requirements and the required elements of a workload planning model that would be needed to enable compliance.

The TRAC Development Group (TDG) recognised that workload planning models which inform TRAC data can have the dual benefit of providing more robust management information and cutting out the existing onerous requirements of completing TAS returns, thus delivering an efficiency.

TRAC requirements

TRAC is based on several key principles and conventions. The main principles that should be followed, which should be mirrored within a workload planning model, are:

- Materiality
- Fair and reasonably stated
- Flexibility and choice
- Consistency of costing treatment
- Auditability

The current process of collating sample timesheet data through TAS can be an onerous task. Whilst some institutions believe that this works well and is accepted practice others have continued to struggle with collating sufficient numbers of returns and are dubious as to the quality of those returns. Whilst additional procedures are introduced with a full workload planning model, there can be a considerable benefit in avoiding the need for TAS returns.

TRAC Update 4

The TRAC Development Group issued TRAC update 4 regarding academic time allocation in response to feedback received from the HE sector. A workload management/planning approach can be used to provide TRAC data provided if it meets at least the following minimum requirements:

Minimum requirement	How addressed in best practice workload planning model
• It is used by the institution for purposes other than TRAC (e.g. to plan or manage workloads);	• It is highly unlikely that an institution would have the drive to develop TRAC-compliant workload planning models without a further management purpose. We have included a list of the possible uses and benefits of a robust workload planning model in this guide.
• A manager or administrator prepares the planned activity data for each year for each academic member of staff. This is	• This guide sets out suggestions for how the model should be pre-populated with planned activity based upon expected teaching activity

⁷ TRAC update no 4 – Academic time allocation (April 2010) available from www.jcpsg.ac.uk/guidance/revisions/

Minimum requirement	How addressed in best practice workload planning model
based on a formal process e.g. with plans based on planned modules, courses and students, research projects and activity, other projects and activity, formal leadership and management responsibilities, requirements for scholarship and administrative activity, holiday entitlements and so on. This process is carried out with all academics in the departments covered by this method of TRAC time allocation, every year (i.e. there is no sampling)	and research activity. • The workload cycle in this guide sets out how there should be managers or administrators to oversee the process of populating data and agreeing data with academics to ensure compliance. • The process will benefit by being integrated with the annual appraisal process.
• Existing definitions of activities are followed. However: i. Only time ‘managed by the institution’ and likely to represent a relevant use of their resources, is recorded ii. The activity categories of Teaching, Research, Other and Support and their sub-categories are recorded as currently, and institution’s own-funded Research is allocated to Teaching where the primary purpose is Teaching iii. Academic time spent on Research is recorded at the level of research sponsor type. (It might be easier to do this at year-end rather than at the planning stage);	• When designing the workload planning model it is important that activities are linked to current TRAC definitions. • The process requires an audit at least every third year. This audit should include verification that the activities are appropriately linked to the current TRAC definitions. • This guide sets out how time should be identified either from contracted hours of normal managed hours. This advice is in compliance with the requirement to include only time managed by the institution.
• Each academic agrees to the plan drawn up for them as part of a formal process;	• The workload management cycle set out in section this guide includes the requirement for a close down and agreement at the planning stage.
• At the end of each year the academic confirms that the plan was delivered, or revises the data. This review would be informed by actual modules/courses and students taught, active research grants, etc (i.e. similar data to that described in the second bullet point above) as well as other events or changes in circumstance during the year that affected workload. Any revisions would be approved by managers;	• The workload management cycle set out in this guide includes the requirement for a close down and agreement of actual data at the end of the year. • The workload management cycle set out in this guide includes the requirement for the academic and manager to approve the final workload activities. • In practice this could and should be completed during the year to be a reasonable representation

Minimum requirement	How addressed in best practice workload planning model
A formal audit of the <u>process</u> is carried out every three years (this does not need to audit individual academic's activity). This would be arranged by the institution and might, for example, involve their internal auditors.	The audit scope for a workload planning model should be risk based – focussed on the process, verification and updates to hard coded data rather than verifying individual activity. The institution should ensure that it has plans in place to audit the model. This is quite a specialised area of activity so it is important to define a clear scope of works for this audit.
Institutions can use this workload planning/management approach in some departments, and other time allocation methods in other departments. <i>All departments using existing time allocation methods should comply with the existing TRAC requirements as described in point B.4.1 of the Statement of Requirements.</i>	- One of the critical decisions in an implementation plan is whether the process should be trialled on a number of departments / faculties before being rolled out across the institution. This TRAC update supports the ability to do this rather than the need to apply workload planning across the entire institution. - However we would note that this could cause issues if the time allocation from a workload planning model gave different results to existing TAS sourced inputs.

The guidance goes on to say that “Institutions should decide over the next year (i.e. by the end of the 2010/11 academic year) whether this new requirement might be relevant to them. If implementing, they should introduce the changes as soon as is practically possible, given any other changes they intend to make to their internal management systems.”

It is therefore strongly recommended that designing the workload planning process to fulfil the TRAC requirements should be considered as part of your implementation.

WORKLOAD PLANNING – RECORDING RESEARCH ACTIVITIES

The findings of the working group were that only less research-intensive institutions operate institution-wide workload models. Therefore there is little detailed information on the recording of research in Institution-wide workload models, whether externally or internally funded. This has been an area of much debate during this project and each solution brings with it its own issues. We have included case studies from existing practice into this report. However this an area which will benefit from being revisited once a number of research-intensive institutions have adopted institution wide workload planning models.

The problems

Total hours / units The academic contract within pre-1992, research-intensive institutions tends to be silent as to the number of contracted hours but may document a requirement to complete research as a percentage of their workload.

A workload planning model that meets TRAC requirements is required to record only time “managed by the institution” which, is defined in Update 4 to the TRAC guidance.

Institutions may adopt an approach whereby the total hours or units worked are capped e.g. at 1650 hours. The workload model requires inputs of planned activity for teaching and support activities on either an input or output based methodology. Either way the number of teaching and support hours will be set based upon actual activities with research taking the balance.

In theory recording time in such a manner should not give rise to significant differences to the TAS process. However by limiting the number of available hours to research the result could give a different proportion of time allocated between teaching and research and therefore a different TRAC result. (eg TAS outputs Teaching 40% research 60%, workload model outputs teaching 45%, research 55%).

An alternative approach is to record research as a % of workload. However this could give rise to the anomaly of 2 academics each teaching say 2 modules, but with a different balancing proportion of their time being allocated to this teaching activity. This approach was generally not found or supported.

Many institutions developing Institution wide models intend for the model to form part of a cohort of management information including costing information. To inform costing information in a robust manner it is important to record teaching on an actual hours basis rather than a % basis.

Complexity of recording research activities TRAC requires documentation of research activities by sponsor. At the time of resource planning such activities may only be partially known, whereas at the end of the year these activities become certain. This results in the requirement for identifying expected activity at the planning phase and updating throughout the year and after the year end for actual activity.

Current practice

Due to the complexity of measuring hours spent on the activity, internally funded research is typically either left out of models altogether or given a blanket allowance based, for example, on the 40:40:20 model of splitting teaching, research and administration. However, some models link this allowance to activities, incorporating but not limited to:

- The writing and submission of grant applications
- The management of research grants and external contracts
- Refereed journal papers/ book chapters / patents
- Monographs
- Conference organisation
- Post-graduate Research supervision

Unless long term in nature, it will be hard to plan in advance for externally funded research activity. However, workload models can be updated retrospectively to take successful applications into account.

Some institutions have successfully used a process of agreeing expected externally funded research at the planning phase. This could be based on historic trends, known tender activity and an individual's goals. At this point in time only a proportion of the years externally funded research contracts will be known. During the year the model can be updated with information from the research / finance ledgers which will record research activity by research sponsor type. The model can then be updated throughout the year to reflect the revised activity and record research in sufficient detail to meet the TRAC requirements of identifying externally funded research by research sponsor type. At the year end the workload model should reflect actual externally funded research activity undertaken.

We have included 2 extracts from case studies below – although it should be noted that none of these arise from research-intensive institutions. In addition case study 5 includes a useful review of current activities within a research intensive institution, but again acknowledges the work needed to implement a university-wide TRAC-compliant model. Case study 6 identifies key research activity inputs and outputs which could be used to measure research activity in a workload model.

Case study

Edinburgh Napier University - Managing research

Research falls into three main categories; externally funded research, internally funded research and T-stream allocations. Externally funded research, regardless of source, simply requires the allocation of workload units against the project code in the WAM. TRAC requires that such research funding needs to be associated with the type of funder. This information is retained in the Finance System. Thus part of the process associated with the TRAC return is to determine the funding source for each project and then to correlate this with data held in the WAM to determine how much time each academic has spent on each funding source. Internally funded research, funded as part of the Funding Council's block grant through the Research Excellence Grant, Knowledge Transfer Grant, Charitable Adjustment etc, is just a special case of externally funded research in that some academics have their time 'bought-out' against such funding. The WAM records the amount of time against each such project.

T-stream allocation results from allocation of the part of the teaching block grant to research to support research informed teaching activity. This allocation is managed by means of a central allocation to Faculties and then to Schools. The T-stream allocation is then made to specific academics by the Head of School and Research Institute Director, advised by the Faculty Associate or Assistant Dean responsible for research. This is recorded in the WAM as such. These T-stream allocations are then returned as part of the Support for Teaching TRAC Category.

Case study

University of Salford - Managing research

The research allocation for an individual entered into the model was a single figure that represented a percentage of the median workload units of the staff in a given school. This single figure did in fact emerge from a deliberate peer assessment process of individuals' research performance over the previous year tempered by plans for the coming year. This process was calibrated by discipline across a portfolio of four research activity areas, the 4Ps: projects (or pounds), postgraduates, papers and presence. This calibration was encapsulated in discipline-specific tables giving indications of levels of performance for the 4Ps, ranging from international (5), to national (4), to sub-national (3), finally to "getting started" (2). These levels broadly reflected the then RAE categories. Analyses of the norms from previous RAEs was used to provide calibration for the specific activities.

Research active staff (members of research institutes) were asked annually to: provide information on their outputs, to give an indication of plans for the future year and to provide an assessment of their level of performance in the context of the relevant table for them. These self-assessments were then considered by panels of senior colleagues in each research institute and in the vast majority of cases were found to be a reasonable assessment, but in say 5% of cases they under-estimated the individuals' performance and in just a few cases they over-claimed. Once the level of activity had been agreed, including factoring in plausible plans, this was translated into a "research report" that had two elements: a set of agreed targets across the 4Ps and an allocation of time for research. The targets varied depending on an individual's strengths and inclinations, but the research institute worked to arrange for the members' collective efforts to be synergetic. (continued on next page)

(continued)

This could mean changes in emphasis at different phases of the RAE / REF, maybe with Projects being more heavily emphasised towards the start for some and papers being highlighted for others if there were gaps towards the end of a cycle. The allocation of time was kept simple by just multiplying the individual's research rating (5-2) by 10 to give allocations in a range of 50-20%.

This approach applied to all academic staff and, in addition to possibly sustaining an allocation, it could represent a rise or fall in research workload depending on the individual's level of success compared with the previous year.

The "research report" acted as a mini-research appraisal and was fed into the school appraisal and general workload allocation process as a first call on staff resources. Where it could not be accommodated for practical reasons, e.g. specialist teaching demands, then each exception was highlighted and fed back to the research institute and, on the rare occasions a reduction in a allocation proved unavoidable, the individual's targets would be reduced to match the time actually given.

This approach endeavoured to broadly reflect variation in levels of staff performance, without trying to be unrealistically accurate. It also set out to encourage a balance of activities, including longer-term, speculative efforts as well as short-term tangible achievements. Research institutes achieved a range of levels of performance including, for the institutes that had used this approach for longest, achieving and maintaining the highest ratings at successive RAEs, be that 5 or 5*, etc. An independent financial benchmarking comparison by Tribal* indicated that compared with sector norms this managed approach to research activity resulted in a +2.5% contribution, compared with -42.6% for the sector generally and -21.1% for a more closely focused on a set of comparator institutions.

*The Tribal benchmarking figures ignored overheads, but consistently across the institutions.

The nature of research and consultancy activities are such that there will be a 'known' amount of commitment, but also an unknown, target for increased activity levels. Institutions should therefore not be concerned about using judgements to inform initial workload allocations in these areas, as the process includes some opportunities for refinement and updating during the year, such that by the end of the year there is a more reasonable reflection of the actual workloads delivered.

APPROACHES TO WORKLOAD PLANNING – PROJECT MANAGEMENT AND IMPLEMENTATION

Throughout this project a common theme has been the time and resources required to successfully implement a workload planning model across an institution. Below we have set out some of the key considerations to assist institutions in project managing the implementation of a new workload planning model.

A successful workload planning model is not only a robust model, but an ongoing process for updating, verifying, checking and reporting on workload planning – the “workload management cycle”. Following on from implementation, the annual process is critical to the ongoing success of a workload planning model. Below we set out some of the key considerations that need to be taken into account when deciding upon the process. We have included examples of best practice as seen across the sector where appropriate.

Implementing a workload planning model

We have identified a number of key considerations to be thought through as part of a project initiation. These considerations are no different to any significant project undertaking within a University.

Tone from the top

The implementation of a University-wide workload model is likely to be a change in practice and in many cases a cultural change for the vast majority of academics. It is recognised that academics, as would be expected, tend to give priority to teaching and research delivery rather than to back office administration processes such as workload modelling. Having support and appropriate messaging from the top will promote engagement with the process.

Governance and project management

Successful implementation has been achieved where a project steering group and working group have been set up to oversee implementation.

From the workshop discussions it has been apparent that a number of institutions have requested the finance / TRAC team to develop workload planning models. This would seem a high-risk strategy given that the process impacts across the institution and focuses on academic delivery. Those institutions that had implemented TRAC-compliant workload planning models unanimously agreed that a cross institutional team, having a balanced representation of the academic and non academic communities, was essential to enabling successful implementation.

Top tip

“Designing an academic workload model is relatively straightforward. Implementation is where the hard work comes in.”

Top tip

Senior management buy in was identified by the working group as crucial to the successful implementation of a new workload planning model

Case study

Edinburgh Napier University – Successful Working group – academic focus

The members of the working group were drawn from academics (including Heads of Schools), Faculty Managers, Associate Deans with responsibility for resource management and academic trade union representatives. There were no representatives from Finance, Human Resources or Student Affairs (Registry) although systems staff from these areas were involved in the later development of recording software. The working group reported to a Vice-Principal who acted as the project's champion across

Case study

University of Salford - Academic and back office representation – initial design phase

A working party was established with representation from all parts of the Faculty: Academic Staff, Heads of Schools, Dean, and inputs from Finance, Personnel and the Trade Union. The initial question was centred on how best to manage workloads, with an emphasis on: Aims/policy, model and methods, norms, tools and support.

Case study

University of the West of England - Design group, Implementation group and technical support

The governance of the WLM project has involved a project board chaired by the Deputy Vice Chancellor – meeting quarterly from December 2008 to date; a WLM Design Group (WLMDG) chaired by the project owner and consisting of all Associate Deans as the project had teaching and learning as well as resource implications – met monthly from December 2008 to September 2009; a WLM Governance Group again chaired by the DVC with a membership of the Deans and project owner – meeting from September 2009 to date; a WLM Implementation Group (WLMIG) consisting of Associate Deans (Planning and Resources) and the faculties' administrator responsible for oversight of the WLM – meeting monthly from September 2009 to date. Running in parallel to the academic side of the project has been a technical stream developing robust data and a spreadsheet application that allows as much automation of the completion of the WLM as possible.

Communication with stakeholders

Consultation with all stakeholders is needed throughout the project to secure 'buy-in' for the eventual implementation. Periodic reviews of the project with key stakeholders will ensure the project is kept on track and decisions are effectively communicated.

The project plan should include a communication plan with each of these stakeholder groups. Any stakeholders left out of the communication at the planning stage could raise issues late in the implementation process.

The key stakeholders identified by the working group were:

- Academic Staff;
- HR;
- Finance;
- Heads of Department;
- Trade Unions;
- Health and Safety; and
- Senior Management.

A good workload planning model will also allow for an ongoing dynamic interaction between heads and academics, with a careful balance between the model guidelines with discretionary input.

Training

The timely and relevant roll out of training will be critical to ensure that department heads and academics have appropriate knowledge and buy in to the process.

Top tip

Involving academic staff in the delivery of training will help engagement

Case study

Edinburgh Napier University - Training

Once the system had been built and tested, the training commenced for subject group leaders who are the middle managers responsible for allocating work to academic staff. The University had appointed a TRAC Academic Manager, who was responsible for training the users of the system. Each subject group is about 10 to 15 academics and a typical School will have between 3 and 6 such subject groups. In total some 50 people were trained. A key message at the training sessions was the workload allocation is a social process that involves discussions between allocator and allocatee

The workload management cycle

There are a number of key considerations to be taken into account relating to the implementation and the ongoing workload management cycle.

Project management roles

Workload planning support team – there will be the need for ongoing support for the workload planning process. Roles for this team will include:

- Overseeing the annual process
- Providing training and guidance updates
- Answering ad hoc queries
- Communicating procedures in a timely manner
- Reviewing process and raising issues as identified
- Providing high level assurance over comparability between faculties and departments

Workload managers – workload managers will be needed across the Institution. These managers will need to be known to the academics as they will need to approve academic workload based on knowledge and expectations. It is likely that these managers will be identified at the department level. They may already be appraisal managers as this would link well with an existing role. One institution within the working group had identified 50 workload managers who are also academics.

Individual academics- each individual academic is involved in reviewing and updating their workload in discussion with their workload managers. How this is practically done will depend on decisions over access rights (below), but in all circumstances the academics should have sight of and the ability to feedback on their workload.

Other staff – for complete workload management information the workload planning model could be extended out to all staff including academic (teaching and research), support staff and technicians.

Auditors – The TRAC guidelines require an audit of the model at least every 3 years.

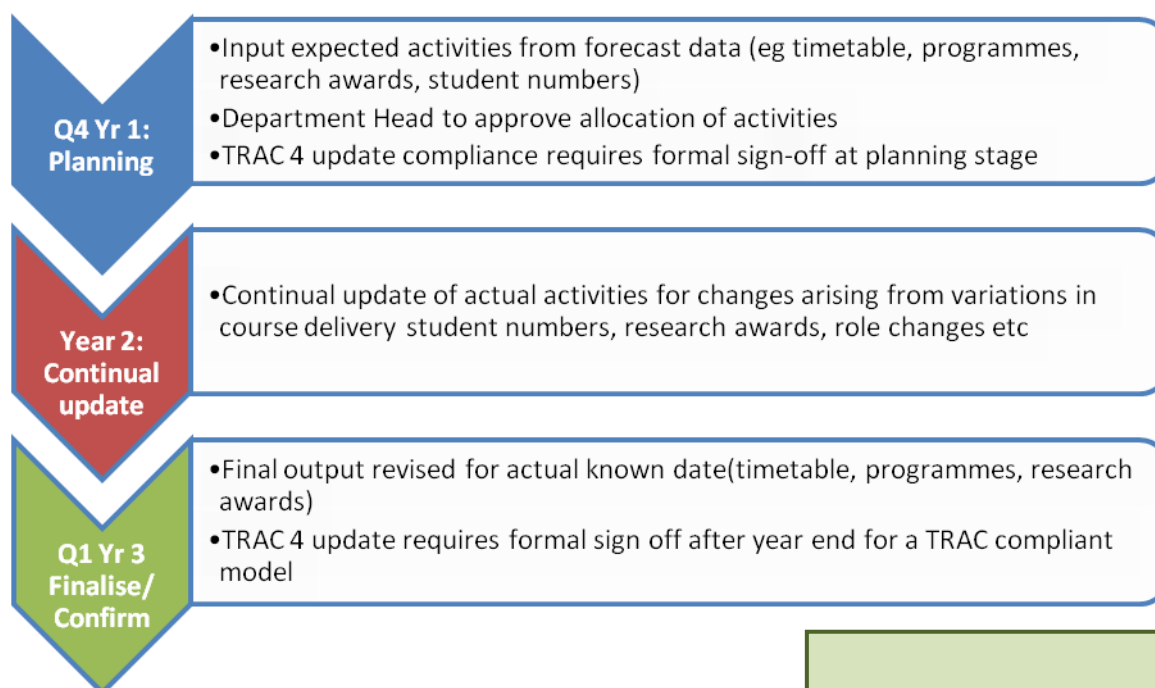
Timescales are required for providing information such as work plans and how that information is to be disseminated, for enabling updates to actual workloads during the year and finalising workloads

Case study

Edinburgh Napier University - Timescales

The WAM process spans three academic years. During the planning phase it refers to the year ahead. During the year it refers to activities undertaken during the year and results in planned activity being converted into actual activity recording.

after the year end. Note that a TRAC-compliant model includes a number of activities to be undertaken which should be built into the timetable.



Information – it is important to agree the information that management need from the workload planning system, in relation to other management information that is available. A further issue to consider is how over and under-loads will be managed.

Scope of the model – there needs to be clarity regarding the purpose and uses for the model. The model should help address equity of workloads within a school, but may only be able to influence broader issues, such as surplus / deficit school budgets set at faculty level.

Formal Verification - How and whether planned and actual hours worked are to be reconciled. If the model is to be TRAC-compliant, this will be necessary. The reconciliation can be built in to the management cycle, but can be a thorny issue, especially with regard to institutionally funded research where TAS returns can typically record very high actual workload, but planned workload may be based on a fixed allocation.

It is possible to include a period of “close down” during which no amendments are made to the model and final approvals are required before storing a final data set.

Benefits can be achieved by including formal sign-off as part of the appraisal process for planning workload and appraising performance.

Case study Formal verification

One institution includes 2 rounds of close down and formal verification during which changes to the data cannot be made and verifications obtained from academics. This is undertaken at the completion of the planned activities and completion of actual / final activities.

Key considerations that need to be taken into account are:

- **How frequently** should formal sign-off take place? Options include twice a year at planning and completion, quarterly or perhaps monthly. We believe that monthly formal sign-off would result in the process being highly onerous on the participation individuals and management. The minimum frequency would be considered annually.

- Should the sign-off process be linked into **existing processes** e.g. appraisals and other HR processes, timetabling? This is a common approach that is used.
- How should staff **evidence** formal sign-off? Electronic / email sign-off linked to the model? Paper based sign-off?
- What **percentage** of sign-off is acceptable? It is anticipated that even the best process will not obtain 100% formal sign-off. For example individuals may be on leave during the sign-off process so can the period be extended for such individuals. It is however important to set at the outset what level of formal sign-off is acceptable to ensure that the data is robust for a management tool and to inform TRAC data.
- Is the **system closed** to updates for a period to enable formal sign-off and if so how long should this period be?

Access to change data. The integrity of a workload planning model relies upon the data within the model being robust. To this end, best practice would be to ensure that only a limited number of suitable trained staff have control of the final information within the model. Possible approaches to access include:

- Full access to all relevant staff, with a review process in place. This review process should enable informed adjustment to inputs with a feedback process to the individual's whose entries have been adjusted; and
- Access limited to a select number of staff – perhaps one per department or faculty.
- Access to workload managers

Access to the data - Transparency - The key principles of any workload planning model include transparency and equity. To enable this careful consideration should be applied to who has access and at what levels they have access. In order to meet the underlying principles of equity and transparency the working group encourages a process that was as transparent as possible although the experience of some institutions favoured a phased implementation of viewing rights increasing accessibility over a few years.

There is a spectrum of possibilities for the transparency of a model. Getting the right balance is important to enable a smooth implementation and this may change as the process becomes embedded.

- **Full transparency** – all academics with full viewing rights
- **Partial transparency** – departments have viewing rights of academics within their department
- **Light transparency** – as a minimum it is thought that's heads of department should have viewing access of all academics within their department and some access (perhaps at department level rather than individual academic) for other departments

Case study

University of the West of England – Increased transparency over time.

Whilst the principle of transparency was and still is important, the initial disparities for staff across the different faculties were so large that a decision to postpone showing the data widely was taken by the project board. Faculties (and thus Departments) have been given 2 years to rebalance workloads in line with the WLM requirements.

TRAC compliance – the institution should determine whether the model is intended to meet the TRAC compliance requirements. There are a number of process requirements set out within TRAC Update 4.

Integration with other processes - Institutions may see the workload model as one part of a cohort of management information which informs a number of processes. Other than the direct use of resource planning and allocation these further processes could include appraisals, costing, key information sets disclosures and department profitability.

Guidance notes - Generally guidance notes which are written in plain English and which include diagrams rather than full narrative will be better received understood and implemented. From discussions with the working group the most common area for error is interpretation of activities – ie allocation of time between activities. To reduce error in this area these guidance notes need to be carefully documented and tested with “inexperienced” users.

Appendix 1 Full Case Studies

Case Study 1 - Case studies in workload allocation and modelling: Edinburgh Napier University.

Development and Implementation

A University-wide project was initiated three years before the Workload Allocation and Modelling (WAM) system was first used. During the project's first year a working group was set up with the remit to create a set of Guidelines that could be used to manage the allocation of work. These Guidelines were to be used throughout the University. Collectively the Guidelines are referred to as the Workload Allocation Framework. The members of the working group were drawn from academics (including Heads of Schools), Faculty Managers, Associate Deans with responsibility for resource management and academic trade union representatives. There were no representatives from Finance, Human Resources or Student Affairs (Registry) although systems staff from these areas were involved in the later development of recording software. The working group reported to a Vice-Principal who acted as the project's champion across the University. The working group's underpinning philosophy was to create a set of Guidelines that would ensure equity, fairness and transparency in workload allocations. The key guiding principle was to keep the guidelines as simple as possible by not being prescriptive in their definition but by being as flexible as possible.

The Framework was intended to cover all aspects of work and to use as its basis the TRAC categories of Teaching, Research, Other and Support for defining workload categories and activities. Five categories of work were identified by subdividing the TRAC Teaching category into Teaching Delivery and Other Teaching Activities. In total the categories were subdivided into 23 activities. The Framework identified the nature of the work that was to be allocated to each activity and the manner in which the allocation was to be determined. Typical allocations were also specified.

A model based on units was developed, which were used to recognise work undertaken rather than giving remission from some notional total workload. The total allocatable workload within the model of 1300 units is less than that specified by RCUK (1650 hours pa). This was chosen so that not all possible workload was allocated, leaving some 'headroom' to take account of activities that are undertaken but which are not worth recording in a workload allocation, thereby reflecting that all academics do more than just the specifically allocated workload. The aim was to produce a model that was a reasonable reflection of the work undertaken, rather than being a precise record, which would not be possible in any case. The model was designed from the outset only to record work that was undertaken in contracted time. Any activity undertaken outwith contract was not included in the model.

As a result of previous experience, it had been decided that a system based upon spreadsheets distributed around the University was to be avoided. It had thus been known from project inception that a centralised database system was going to be built. Colleagues from C&IT Services were involved in an early stage of the project so they could be aware of the system's boundaries and requirements. An early design decision was that at no point would the WAM System record information that was already available in other University databases. Thus personnel information would be obtained from the HR system. Data pertaining to all specifically funded activities would be obtained from the Finance System and data pertaining to module delivery would be obtained from the student record system.

The largest effort necessitated defining how each module instance was delivered in terms of specific teaching and learning activities. These activities were defined in terms of whether the activity was a whole or part class activity, which in the latter case, required defining the group size. Teaching activities were defined in terms of Contact, Assessment, Module Leadership and Preparation. Contact is derived from the number of hours a student is expected to attend the module for whole and part class activities. The total contact then being adjusted for the number of groups required to deliver the part class activities to the class. The number of hours is then converted one-for-one into units. Assessment is normally 1 unit per student per 20-credit module. Module Leadership is $(15 + 0.1 \times s)$ units where s is the number of students attending the module. Preparation is normally 1 unit for every unit of Contact. The load associated with Assessment and Preparation can be adjusted as required. This work had to be completed before the WAM System could be used. New capability, in the form of new interfaces and processes had to be incorporated into the student record system (SITS), which required the use of external consultants. The WAM provides both planning for and a record of actual workload. Thus planned student numbers are inserted prior to the start of the academic year during the annual planning cycle. As students are enrolled on modules these numbers are updated. Finally, the number of students assessed on each module occurrence is also recorded to ensure the allocated workload is as accurate as possible.

C&IT Services were charged with building the underlying database to hold the allocation data, extracting data from the other University database systems and building the web interface for the system. One key aspect of the system was to incorporate a means whereby workload allocations could be sent by those who are the line managers of the academics to their colleagues for confirmation that the WAM did record a reasonable reflection of the work undertaken. This process was a built-in electronic process, totally contained within the WAM System.

Once the system had been built and tested, the training commenced for subject group leaders who are the middle managers responsible for allocating work to academic staff. The University had appointed a TRAC Academic Manager, who was responsible for training the users of the system. Each subject group is about 10 to 15 academics and a typical School will have between 3 and 6 such subject groups. In total some 50 people were trained. A key message at the training sessions was the workload allocation is a social process that involves discussions between allocator and allocatee.

The WAM was ready for use two years after the project had started but was not used until the following year. This arose due to changes in the University Organisational structure and standard module credit rating (moving from 15 to 20 credits), which necessitated changes to the WAM System. The WAM System was used for the first time in the academic year 2009-10 and it was used to create the TRAC Time Allocation Schedule (TAS) for the January 2011 TRAC return. The extraction of the TAS from the WAM took about one morning's work by the TRAC Academic Manager and a Senior Management Accountant in Finance then completed the TRAC return.

Information used within the workload planning model

The Workload Allocation Model (WAM) uses data from many of the University's key databases. Module delivery data is obtained from the Student Record System. Most importantly, as the number of students enrolled or assessed on each module occurrence changes the data extracted for WAM purposes is updated accordingly. Thus the WAM provides a true reflection of the workload associated with each module occurrence at the end of each semester.

The HR System is used to provide information on all employees that teach. Future versions of the WAM system will also include research staff, drawing details from the HR System. Data such as employee number, name, subject group and contract FTE are exported from the HR System to the WAM on a regular basis. Such data also contains information for staff employed on part-time contracts.

Data used from the Finance System pertains to externally funded activity and specific University funded activity. This is accessed directly from the WAM. The data required by the WAM is just the project code and its description. This data pertains to research and commercial projects regardless of funding source and type.

Managing research

Research falls into three main categories; externally funded research, internally funded research and T-stream allocations. Externally funded research, regardless of source, simply requires the allocation of workload units against the project code in the WAM. TRAC requires that such research funding needs to be associated with the type of funder. This information is retained in the Finance System. Thus part of the process associated with the TRAC return is to determine the funding source for each project and then to correlate this with data held in the WAM to determine how much time each academic has spent on each funding source. Internally funded research, funded as part of the Funding Council's block grant through the Research Excellence Grant, Knowledge Transfer Grant, Charitable Adjustment etc, is just a special case of externally funded research in that some academics have their time 'bought-out' against such funding. The WAM records the amount of time against each such project.

T-stream allocation results from allocation of the part of the teaching block grant to research to support research informed teaching activity. This allocation is managed by means of a central allocation to Faculties and then to Schools. The T-stream allocation is then made to specific academics by the Head of School and Research Institute Director, advised by the Faculty Associate or Assistant Dean responsible for research. This is recorded in the WAM as such. These T-stream allocations are then returned as part of the Support for Teaching TRAC Category.

Annual process

The WAM process spans three academic years. During the planning phase it refers to the year ahead. During the year it refers to activities undertaken during the year and results in planned activity being converted into actual activity recording. During the TRAC reporting phase it refers to the previous academic year.

The WAM process is closely aligned with the Professional Development and Review (PDR) Process (appraisal). Thus during the Planning Phase PDRs are undertaken so that any change in workload distribution can be planned so that allocated workload can reflect such changes. This usually takes place early in the calendar year before the start of the academic year which starts in August. During this planning phase planned student numbers for each module occurrence are input into the WAM, by rolling forward the final numbers of each module from the previous year. The planned number for new modules has to be input as part of the approval process.

During the year the data held in the WAM is converted from planned activity to actual activity. This is based on actual student numbers for teaching activities. For all other activities it is based upon the work that has been undertaken.

Once the academic year has finished, the workload for the previous year is sent to each academic by their subject group leader for confirmation. This process allows academics to make any changes they feel need to be made to the data held in the WAM, in consultation with their subject group leader.

During the period September to the Christmas vacation data from other sources is obtained and integrated with the WAM data to create the overall TRAC TAS. In particular, data is obtained from HR that gives information for people who have either left or started during the year. Data for people who have had periods of recorded long-term absence are also obtained. This data is used so the

available workload that should be undertaken by each academic can be calculated. Thus a person who starts half way through the year on a full-time contract can only be expected to contribute half the workload. The same is true for people that have left and also those that have been absent. Thus at the end of this process we have an indication of the workload each person could have contributed to the University. This is then correlated with the workload actually undertaken.

Once the TRAC return has been completed a wealth of management information can be extracted from the WAM. The academic trade unions have been supportive of the development of the workload system throughout, seeing it as a means to ensure transparency and equity in the allocation of work. Management reports from the WAM can be used to assess the equality impact of workload allocation, seeking to identify any patterns of concern in relation to workload allocation by, for example, age, gender, ethnicity or disability. The information is valuable in resource planning to assess the balance of use of staff resource across the University. This supports the University's strategy and resources group in achieving the University's strategic objective of highest organisational standards.

Case Study 2 Academic workload balancing and TRAC at University of Salford since 2000

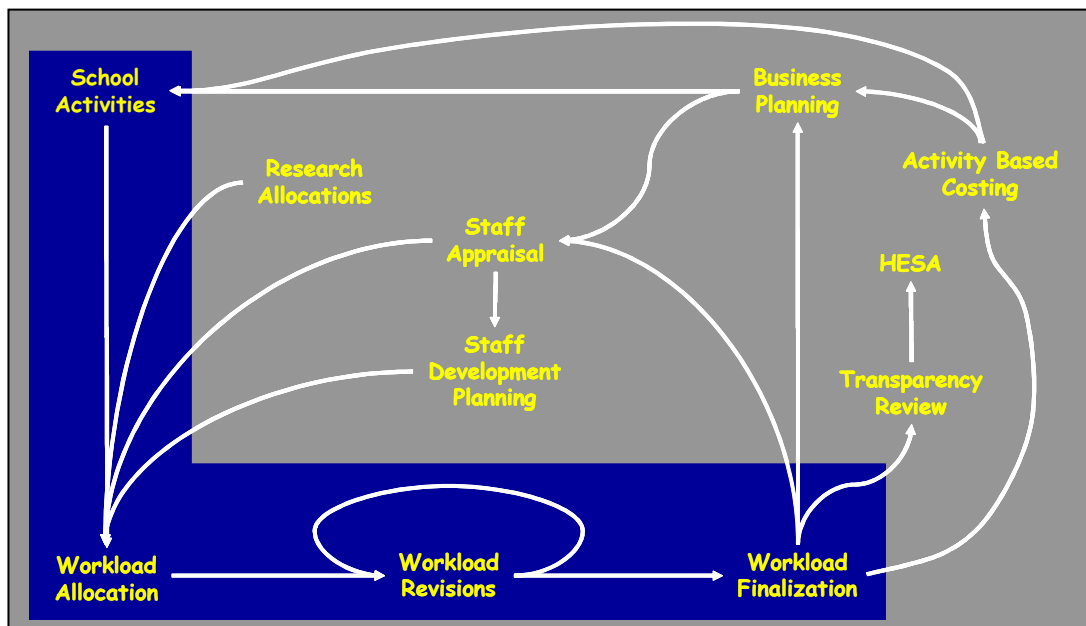
Initiation Phase

A major reorganisation at University of Salford in 1998, which resulted in a significant consolidation of schools and faculties, prompted the development academic workload balancing. Within the new Faculty of Business and Informatics a decision was taken to work to achieve consistency across the new schools, all of which had up to then used very different approaches. It was decided to do this by identifying a common stance on basic principles and then using existing good practices to design a shared system. This was led by the Dean and the Head of School in the Information Technology Institute (ITI) in the faculty⁸.

A working party was established with representation from all parts of the Faculty: Academic Staff, Heads of Schools, Dean, and inputs from Finance, Personnel and the Trade Union. The initial question was centred on how best to manage workloads, with an emphasis on: Aims/policy, model and methods, norms, tools and support. By May 1999 the aims of the joint effort had been establish as:

- Equity in workloads
- Acceptable spread of workloads amongst academic staff, initially within each school, but ultimately across the whole faculty.
- Targets of acceptable variation:
 - School: 10% variation, moving to 5% variation
 - Faculty: 15% variation, moving to 10% variation

Almost as importantly it was decided that the workload balancing model and process introduced would be seen in the context of other systems. See Fig 1.



¹ The Dean was Professor Peter Barrett and Professor Grahame Cooper was Head of School in the Information Technology Institute (ITI) in the faculty

Figure 1: WLB in the context of other University systems (fig credit: G Cooper)

So whilst the workload balancing model and process would explicitly *not* try to take on the purposes of these other processes, it would be open to their influences in an open systems sense. At least in terms of ultimate goals (but admittedly not initial actions) it was borne in mind that the workload balancing model and process should relate to activities such as academic planning, staff appraisals, activity costing and TRAC. As a consequence it was assumed that workload allocations would be the outcome of both objective assessments, but also social / managerial pressures. For example, actual allocations would be made by Heads of School in the context of financial pressures that would provide downwards pressure on over-allocations and quality procedure that would counter against under-allocation.

Development

The resulting approach was the outcome of collaborative working to find a solution that provided a consistent framework visible across the faculty (driven by the faculty), whilst allowing a high degree of local autonomy (driven by the schools). The practical solution was to use spreadsheets owned by the schools, but which reconciled with a faculty database. The spreadsheets had a common architecture, and provided automatic calculations of common activities such as teaching, but allowed Heads complete freedom to change allocations based on their local knowledge. After much experimentation it was also decided to focus on output measures (eg x credits of education delivered to y students) and to deal in workload units, all balanced around the median load for a given school. The implementation process was dynamic including using surveys to establish coefficients for the default calculations and experiments with selected staff to reality check the outcomes. The technical model used was a development of the ITI approach. This was adapted and extended to reflect the consensus needs of the faculty. The basic configuration was individual spreadsheets for each school that gave the Head of School flexibility to “own” and experiment with allocations. These spreadsheets were then reconciled to a central database, which provided enhanced reporting facilities and allowed back-office activity costing, service teaching payments, etc.

In 2000 the Dean was made responsible for the University's response to the Government's Transparency Review (TR) for research. This demanded an assessment of the allocation of staff time to research and so it was agreed at University level to extend the approach in the Faculty of Business and Informatics to all four faculties of the university. The argument was strengthened by the notion of dealing with the demands of the TR, whilst at the same time gaining extremely useful activity costing data and not having to institute sample surveys just for TR. This argument was successfully made with academic managers via Fig 2.

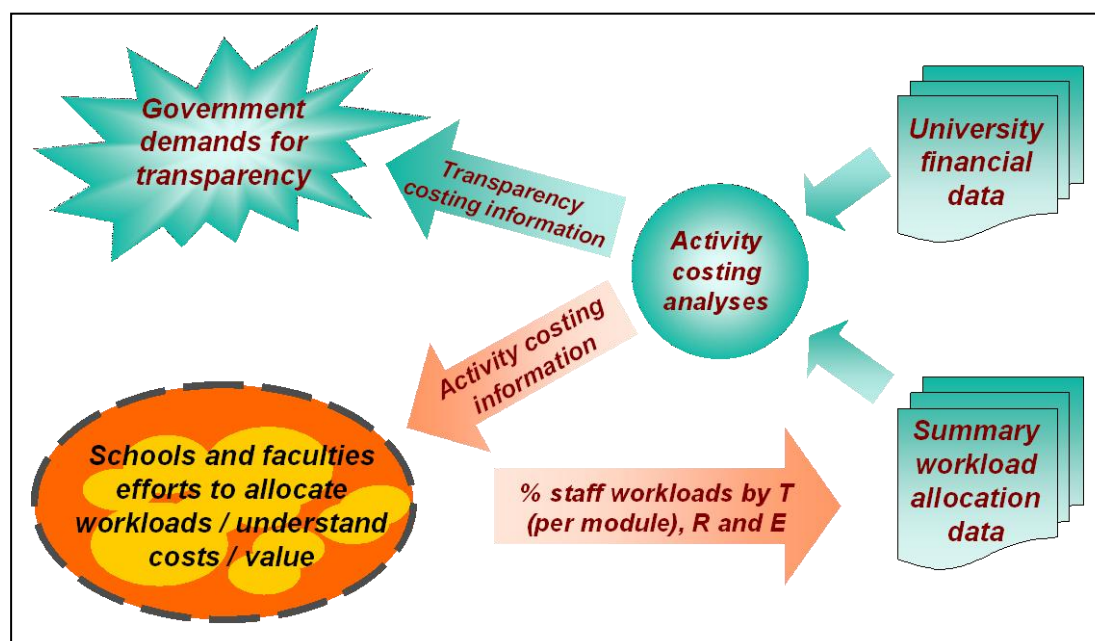


Figure 2: Linking WLB and TRAC (fig credit: P Barrett)

This radical extension of the faculty work was implemented using the five-year framework of the TR to progressively engage each of the faculties. This was achieved by initially identifying a school in each of the remaining three faculties that was keen to get involved and then supporting them with buddying, practical advice and of course the availability of the established systems from the initial faculty. From this position other schools were progressively added. The basic system of school spreadsheets reconciling with a central database proved scalable though this transition, although some refinement was necessary to support more levels of access and reporting. Salford was the only university to take this approach and never used sample surveys, but were audited each year and had to introduce a retrospective check to validate any changes from the planned workloads.

By the end of 2005 all schools in the University were engaged, albeit some more effectively than others, reflecting a maturity progression over around three years for each school. Typically a school would: engage in principle, then populate the model, then act to deal with the consequences of explicit data on comparabilities across staff workloads, then start to address these and, finally, begin to use the process proactively, and, progressively, in concert with planning and appraisal processes. This quite slow process reflected the practical challenge of implementing the “model”, but also the creation of consensual management processes within which it could be used.

Maintenance

Since this time the university-wide workload balancing model and process at Salford has continued. To move it from a faculty solution driven across the University by a TRAC imperative to a stable, basic activity of the University, it was arranged that the Personnel Division would “own” it and that

the Information Systems Division would provide technical support. In addition a Steering Group was created at University level to meet once a year, sign-off the TRAC report and receive issues etc from a User Group that meets more often and to put in place improvements as appropriate. The User Group involves the people in the schools who actually do the workload balancing work, sometimes Heads, or senior colleagues. The Steering Group has some overlap with the User Group, includes senior representatives from Finance, Personnel and the academic union UCU.

In practice maintenance of the use and progressive improvement of the workload balancing model and process across the University has proved quite challenging. There has probably been insufficient dedicated resource to implement all the desired finessing. Further, changes in Heads at school level have caused some problems of knowledge and commitment eroding without a very active effort to re-enthuse those involved.

Having said that the unions have been a driving force behind the proper and consistent use of the workload balancing model and process as have Finance, in the latter case so that the TRAC return is sound. Full access to the data within each school has been agreed, but the information proactively pushed to individual staff has been simplified to reduce a growing mentality of counting workload units if anything new is proposed, which can lead to inflexibility. Improvements have been made in the available reports and the standard coefficients used have been adjusted (slightly) in the light of experience.

In 2009 as part of a review within the context of the Managing Academic Workloads network, it was realised that owing to its bottom up growth the Salford system, although fully implemented across the whole university for several years, lacked a formal University policy statement. This did exist by implication in various discussion documents, but to formalise the situation and make it less dependent on particular individuals, a formal policy was created that gave shared ownership of the academic workload balancing system to HR and Finance, with technical support from ISD (information systems), all to provide support to the Heads of School in their allocation of workloads to staff. This is mirrored by a training programme delivered as part of HR management support.

Looking back this process has taken place progressively over many years. The original concepts have passed the test of time. However, it has become clear that the transition from a bottom-up initiative to a stable university system is difficult, but absolutely necessary, in order to achieve a robust, but dynamic university-wide system.

Categories of work in the workload balancing system

General School / Univ Work	g
General Admin / Management	ga
Teaching (Undergraduate)	tu
Teaching (Postgraduate)	tp
Teaching Admin/Management	ta
Student Recruitment	tr
Teaching Development	td
Research	r
Research Admin/Management	ra
Research Student Supervision	rs
Research Projects	rp
Enterprise	e
Enterprise admin/Management	ea
Commercial Consultancy	cc
Commercial Teaching	ct
Knowledge transfer / partnerships	kt
Staff Development (General)	dg
Staff Development (Teaching)	dt
Staff Development (Enterprise)	de
Staff Development (Research)	dr
External Professional activities	ex
Others	o

The above categories are provided to code each line of the school workload balancing spreadsheets. Thus the ordering of the activities can be kept flexible to suit the Head of School, but through the above coding, all activities can be articulated to the TRAC categories.

Teaching calculation

This is based on a connection to outputs, ie a module of y credits being delivered to x students. There is a fixed and variable part, relating to preparation / lecture delivery and tutorials / assessment respectively. The fixed aspect is driven by the credit weighting and the variable aspect by student numbers (but also scaled by credit size). Typical proportions of an annual workload were elicited for delivering education via various modes, based on questionnaire surveys of samples of academics. It was found that generally the amount of time was relatively constant irrespective of mode of delivery, with the exception of intensive group work, as might typify MBA work.

Using this information and the principles above, coefficients were calculated for the fixed and variable aspects to create formulae that produce default credit-based calculations for modules of teaching activities, drawing simply on their credit weighting and the numbers of students studying them. The standard fixed coefficient emerged as 0.5 and the variable coefficient as 0.005. For the “intensive” style of teaching the latter was doubled to 0.01.

So the standard formula used was:

WLU = fixed + variable

WLU = [0.5 x No. credits] + [(0.005 x No. students) x No. credits]

Or simplified to:

WLU = No. credits x [0.5 + (0.005 x No. students)]

Research

The research allocation for an individual entered into the model was a single figure that represented a percentage of the median workload units of the staff in a given school. This single figure did in fact emerge from a deliberate peer assessment process of individuals' research performance over the previous year tempered by plans for the coming year. This process was calibrated by discipline across a portfolio of four research activity areas, the 4Ps: projects (or pounds), postgraduates, papers and presence. This calibration was encapsulated in discipline-specific tables giving indications of levels of performance for the 4Ps, ranging from international (5), to national (4), to sub-national (3), finally to "getting started" (2). These levels broadly reflected the then RAE categories. Analyses of the norms from previous RAEs was used to provide calibration for the specific activities.

Research active staff (members of research institutes) were annually asked to: provide information on their outputs, to give an indication of plans for the future year and to provide an assessment of their level of performance in the context of the relevant table for them. These self-assessments were then considered by panels of senior colleagues in each research institute and in the vast majority of cases were found to be a reasonable assessment, but in say 5% of cases they underestimated the individuals' performance and in just a few cases they over-claimed. Once the level of activity had been agreed, including factoring in plausible plans, this was translated into a "research report" that had two elements: a set of agreed targets across the 4Ps and an allocation of time for research. The targets varied depending on an individual's strengths and inclinations, but the research institute worked to arrange for the members' collective efforts to be synergetic. This could mean changes in emphasis at different phases of the RAE / REF, maybe with Projects being more heavily emphasised towards the start for some and Papers being highlighted for others if there were gaps towards the end of a cycle. The allocation of time was kept simple by just multiplying the individual's research rating (5-2) by 10 to give allocations in a range of 50-20%. This approach applied to all academic staff and, in addition to possibly sustaining an allocation, it could represent a rise or fall in research workload depending on the individual's level of success compared with the previous year.

The "research report" acted as a mini-research appraisal and preceded, and was fed into, the school appraisal and general workload allocation process as a first call on staff resources. Where it could not be accommodated for practical reasons, eg specialist teaching demands, then each exception was highlighted and fed back to the research institute and, on the rare occasions a reduction in a allocation proved unavoidable, the individual's targets would be reduced to match the time actually given.

This approach endeavoured to broadly reflect variation in levels of staff performance, without trying to be unrealistically accurate. It also set out to encourage a balance of activities, including longer-term, speculative efforts as well as short-term tangible achievements. Research institutes achieved a range of levels of performance including, for the institutes that had used this approach for longest, achieving and maintaining the highest ratings at successive RAEs, be that 5 or 5*, etc. Overall the university's research efforts represent a level of performance in the top third of UK universities. An independent financial benchmarking comparison by Tribal indicated that compared with sector norms this managed approach to research activity resulted in a +2.5% contribution, compared with -42.6% for the sector generally and -21.1% for a more closely focused on a set of comparator institutions.

Case Study 3 - Designing and implementing a university-wide academic workload model – A case study of the University of the West of England (UWE)

Designing an academic workload model is relatively straightforward. Implementation is where the hard work comes in. There are many examples of academic workload models (WLMs) operating at various levels in HEIs. Most operate at Department or, at best, Faculty level. In the UK, University-wide models are rare. In terms of success - the most important thing to note is that there has to be visible “buy-in” from the senior team – so for a Faculty-wide model the Dean must be seen to support the project and likewise if the project is University-wide the VC and DVC(s) must be sponsors. What follows is a potted history of the design and implementation of the University of the West of England workload model.

In November 2008 UWE senior managers were reassessing their WLM project. To that date it had been a stop-start affair for over 12 months – led largely by a colleague that was developing a resource-based model. The basis of the calculations was difficult to understand and the model did not appear on the surface to match the stated aims and objectives. Most importantly the proposed model did not meet the principle of equity between staff. In that resource-based model a colleague teaching on a high income course would have received a higher weighting for his/her one hour of teaching than a colleague doing the same hour on a less profitable course. Clearly the principle of equity between colleagues would have been breached. It was at this point that we learned our first lesson – don’t push on with a model that cannot be defended against agreed aims and objectives. That sounds obvious but the politics involved in restarting a big, visible, University-wide project with many vested interests are huge.

A different senior academic was appointed as project “owner” and over the following 5 months he worked with senior representatives from each of the faculties in co-creating a new WLM and project governance proposals. The latter has proved critical to the success of the project. On the 1st April 2009 the project owner presented the core aspects and principles of the new model to the Trades Union (UCU). That meeting marked the start of regular consultation meetings between the UCU representatives and the project owner. It is worth noting that these meetings have not always run smoothly and UCU and UWE are still “in suspended dispute” over the introduction of the model.

The governance of the WLM project has involved a project board chaired by the DVC – meeting quarterly from December 2008 to date; a WLM Design Group (WLMDG) chaired by the project owner and consisting of all Associate Deans as the project had teaching and learning as well as resource implications – met monthly from December 2008 to September 2009; a WLM Governance Group again chaired by the DVC with a membership of the Deans and project owner – meeting from September 2009 to date; a WLM Implementation Group (WLMIG) consisting of Associate Deans (Planning and Resources) and the faculties’ administrator responsible for oversight of the WLM – meeting monthly from September 2009 to date. The overall timeline has been dotted with training days for Heads of Departments, presentations to all academic staff and smaller group discussions often at the invitation of a Head of Department with his/her staff.

Running in parallel to the academic side of the project has been a technical stream developing robust data and a spreadsheet application that allows as much automation of the completion of the WLM as possible.

The project board has taken the strategic decisions. The WLMDG established the basic principles and parameters of the model. Where a variation to the standard resource has been requested by a faculty the Dean has been asked to present a case to the other Deans in the WLMGG.

The UWE WLM applies to all academic staff. This includes Lecturers, Senior Lecturers, Principal Lecturers, Readers, Professors, Research Associates, Research Fellows, Senior Research Fellows and other locally agreed roles within this grade range.

The first purpose of having an open and transparent academic staff WLM is to help ensure that all members of staff are treated in a fair and equitable manner consistent with contractual obligations. Importantly, in order to establish transparency and equity across individuals in the University, the WLM recognises that similar activity across the University generates the same WL requirements. The second purpose is to ensure that the University operates within a financially sustainable framework.

In order to evidence and demonstrate the principles of fairness and equity, the WLM adopts a common currency (workload “bundle”) which is transparent and easy to understand and one that recognises the professional nature of the work undertaken across the full academic role comprising some combination of teaching and teaching related (including supervision), research, knowledge exchange and development activities. Each activity maps to one of the 15 TRAC categories and thus output from the WLM will form the basis of the University’s next TRAC submission.

Choosing a common currency is difficult yet essential. The table below shows how hours can be mapped against credits/bundles and can relate to the post 92 HEI staff contract of 550 teaching hours or the notional hours capacity of staff on less well defined contracts (assuming a 37 hour week).

Description	Weeks	Hours	UWE WL Bundles
Whole Year	52	1924	n/a
Holiday and closure	9	333	n/a
Available time	43	1591	654
Post 92 HEIs national contract (research/scholarship/admin)	7	259	104
Workload “time”	36	1332	550

By piloting the WLM and the parameters during the academic year 2009/10 the project team was able to consider the resource requirements and to take stock of the implications of the use of the WLM for various parts of the University. Whilst the principle of transparency was and still is important, the initial disparities for staff across the different faculties were so large that a decision to postpone showing the data widely was taken by the project board. Faculties (and thus Departments) have been given 2 years to rebalance workloads in line with the WLM requirements. The UWE WLM went live for 2010/11.

UWE is committed to reviewing the WLM and its governance on an annual basis. The terms of reference for the reviews will always seek feedback from users, UCU and senior management. The first review has just been completed and whilst it has rightly highlighted areas for further consideration and potential developments, it concluded that:

The UWE implementation of its WLM system is ambitious. It is still rare for UK universities to have moved to university-wide WLM approaches. Further, over the last year UWE has moved very quickly, by the standards of the sector, to a point where in that year, from a zero base, 18 out of 19 departments are now using the same system. This is a significant achievement.

This case study shows the enormity of the project of designing and implementing a University-wide WLM. It has been achieved through much determination and visible support from the highest levels in UWE. The project has undoubtedly used considerable staff time and resources but it is already proving to be very powerful. In the first application of using the data UWE managers were able to compare and realign every academic management role across the University. Standard roles of

course management for example now receive equal resource for equivalent roles. This resulted in a saving of approximately 40 FTEs (approximately £2.5m pa).

TRAC definitions

The following is the TRAC definitions guidance document used by UWE

Allocation of academic time is central to TRAC and relates to the activities that are being carried out, and NOT when that they are carried out. It is therefore important that the time recorded by academic staff should relate only to those activities which are considered as essential to the mission of the university i.e. activities that are carried-out for “personal rather than institutional benefit” or are not seen by managers as “essential to the mission of the institution” should not be recorded. Although it is not an exact science due to the overlapping definitions of activities – scholarship and research for example, care is necessary. There is a concern that some staff have in the past charged professional activity as research when it has no external sponsor, is not part of a scheduled project, and has no research outputs. Work which is ‘Scholarship’ is a Support activity that is supporting both Teaching and Research but is significantly a cost to Teaching and should **NOT** be classified as Institution/Own funded research. The result, of course, of overstating the time spent on research is to reduce the reported costs of teaching. A further concern is that staff may be allocating time to Support for Teaching when it should in fact be directly attributed to Teaching **a.1** or **a.2** (see Teaching definition above). If in doubt please contact your Department Head or the TRAC Project Manager.

TRAC definitions	
TRAC - TEACHING DEFINITION (T) – a.1 or a.2 - all levels of teaching - sub-degree/degree/post-graduate teaching but not post-graduate research - higher education, further education, teacher training, NHS (nursing) etc - holding lectures, seminars, tutorials - project, workshop and laboratory supervision - preparing materials for lectures, tutorials and laboratory classes - preparing materials for an agreed new course - editing and updating course materials - organising and visiting placements, fieldwork - supervision/contact time relating to projects, dissertations and assessment - other student contact time relating to educational matters including remedial classes - preparing and marking examination papers, including re-sits - oral examination/viva - reading and assessing student dissertations, reading and marking essays and other student work - invigilation of examinations including external examinations - mentee meetings - outreach where T is the underlying activity	PUBLICLY FUNDED (PFT) – a.1 - Time taught teaching all students on award/credit bearing courses should be allocated to Publicly Funded Teaching in the first instance. A high level adjustment will be made centrally where overseas and privately funded students are a material proportion of the student population on UK based courses - all teaching activities like ESF, Erasmus, Tempus
	NON PUBLICLY FUNDED (NPFT) – a.2 - short courses (full cost short courses; non credit/award bearing courses; overseas courses and other NPF commercial teaching) - teaching carried out through trading units/commercial companies

TRAC - SUPPORT FOR TEACHING DEFINITION – a.3

- timetabling
- examination boards
- preparing prospectuses
- interviewing students, admissions and induction
- management & administration of teaching activities
- course and other committees relating to teaching
- schools liaison
- pastoral support (outside timetabled tutorials), counselling
- initial course development (where the future of the course is not certain; preparing materials for an agreed new course is T)
- module reviews (but subsequent updating and editing etc is T)
- scholarship and professional development relating to teaching including reading literature, attending professional conferences, maintaining professional skills, acquiring new skills, writing books and other publications
- secondment to/academic exchanges with other universities for teaching activities
- publicity for teaching facilities and opportunities

TRAC - RESEARCH DEFINITION (R) – b1 to b8

Staff time classified as Research in TRAC should have an external sponsor, or is expected to lead to a tangible research output, or involves the training or supervision of PGR students. Research is to include research and experimental development.

The definition of research, below, is taken from the 1993 Frascati Manual:

"Research and Experimental Development (R & D) comprise creative work undertaken on a systematic basis in order to increase the stock of knowledge of man, culture and society and the use of this stock of knowledge to devise new applications. R & D is a term covering three activities: basic research, applied research and experimental development."

Basic research is experimental or theoretical work undertaken primarily to acquire new knowledge of the underlying foundation of phenomena and observable facts, without any particular application or use in view.

Applied research is also original investigation undertaken in order to acquire new knowledge. It is, however, directed primarily towards a specific practical aim or objective.

Experimental development is systematic work, drawing on existing knowledge gained from research and/or practical experience that is directed to producing new materials, products or devices, to installing new processes, systems and services, or to improving substantially those already produced or installed.

Research can be a specific project, or blue skies/speculative in nature. It may or may not have a defined output/sponsor.

Routine testing is excluded from R & D and should be reported as Other activities.

In addition, research comprises the following related activities:

- fieldwork, laboratory, studio, classroom work
- management of projects, informal discussions, progress reports etc
- recruitment and supervision of research staff
- attendance at conferences, seminars and society meetings that are directly connected with specific research projects
- production of research reports, papers, books
- training and supervision of PGR students including training in research

RESEARCH CATEGORIES

- **b.1** all training and supervision time relating to Post Graduate Research students irrespective of their funding source
- **b.2** institution own-funded or Funding Council funded work where there is no external sponsor commissioning the work, including speculative research undertaken to investigate the potential of ideas before preparing grant or contract bids, or for publication, but there are research outputs. If there are no research outputs then the time has to be reported as Scholarly activity and included under Support – either a.3 or b.9 It should only be reported as support for research if it will later lead to tangible outputs or meets the criteria set out in b.9 below.
- **b.3** Research Councils
- **b.4** UK-based Charities
- **b.5** UK Central Government/Local Authorities/Health and Hospital Authorities
- **b.6** UK industry, commerce & public corporations
- **b.7** European Government bodies including Commission
- **b.8** EU Non Government bodies & Other Overseas (Charities, Industry and Other)

methodology/review of drafts and preparation of thesis, and external examining

- collaboration with other departments or institutions in any of the above
- outreach where Research is the underlying activity (i.e. research carried out through a Knowledge Transfer Partnership or Teaching Company Scheme)

TRAC - SUPPORT FOR RESEARCH DEFINITION – b.9

- drafting and redrafting proposals for new work and supporting bids to external bodies
- refereeing papers
- maintenance and advancement of own personal knowledge and skills related to research (reading literature, attending professional conferences, maintaining professional skills, acquiring new skills **for the purposes of research**) Other activity will normally represent support for teaching
- unpaid work advising government departments or committees, professional bodies or agencies in relation to research matters
- institute and department committee work supporting research
- block time in other institutions on research exchange schemes
- publicity for research facilities and opportunities

TRAC – OTHER ACTIVITIES DEFINITION (T) – c.1

- consultancy (excluding private) i.e. that is contracted to the institution and carried out in institution time; including advisory work, journal editing, evaluation, feasibility studies
- other services rendered, including testing and non-R clinical trials
- work carried out through trading units/commercial companies that is not teaching or research
- technology transfer work if remunerated through the university
- outreach (where the outreach activity is not teaching or research)

OTHER SUPPORT – c.2

- drafting and redrafting proposals for new work and supporting bids to external bodies for consultancy and other services rendered activities
- negotiating contract terms and conditions with external bodies

TRAC – GENERAL MANAGEMENT & GENERAL COMMITTEE WORK – d.1

(Not attributable to Support for Teaching **a.3**, Research **b.9** or Other **c.2**)

- general management and administration
- including membership of/participation at faculty boards, institution committees etc **not** included under either teaching or research
- management duties such as deans, heads of admissions, associate deans etc
- staff management; appraisal
- publicity; representative work on behalf of the institution or department
- careers advice
- information returns
- quality assurance
- contribution to sector e.g. (unpaid) committees; secondment to RAE panels
- secondments, exchanges all other tasks not attributable to other categories

Case Study 4 – Implementation of academic workloading - University of Sunderland

Introduction

During the Summer of 2010 the Senior Management of the University had been looking at the different ways in which it requested and utilised a range of costing and staff resourcing data as well as its requirements to report against TRAC. A small working group consisting of colleagues from Human Resources, Planning and Finance with the support from Academic Managers was formed to review existing processes and to develop a response to these discussions, and the project's initial main objectives were:

- To **co-ordinate** into one fully functional process, the collection of data produced via Academic Workloading (**planned activity**) and that collected through TRAC (**actual activity**) which meets the requirements of TRAC reporting (as **efficiently** and **accurately** as possible) while identifying and matching the **costs**, leading to a fully integrated process which more effectively supports the management and deployment of University staffing resources.
- To provide a retrospective review of planned and actual activity that informs the following years plans, which also includes academic staff costs.

This work began in August 2010, and began with a review of the existing mechanisms which were currently in place and included:

- Its current Academic Workloading mechanisms, which had been completed in a consistent manner since the introduction of a newly agreed Framework for Academic Workloading in 2008/09.
- The supplementary Guidance on Academic Workload Categorisation and Allocations, which specified specific tariffs for specific pieces of work
- The collection of data using Time Allocation Questionnaires

Findings

The Working Group spent much of its time in the early weeks consulting and engaging with a number of Academic Managers from across the four Faculties, and understanding their requirements and the difficulties they encountered in both the current operation of the Academic Workloading process and the University's response on TRAC.

The working group appointed an independent consultant and software developer with a good understanding of the Higher Education sector and TRAC. A detailed specification which included Human Resource data, General Ledger data and Academic Module data was collated for the bespoke system to be developed as effectively as possible.

The system uses interfaces with the Human Resources database and the SITS student records system, allowing for accurate staff and module data to be entered into the system via a series of

drop down menus, meaning that the system is quick to use and there is less need for free form text, which can lead to errors or miscoding.

The system has proved to be simple to use, and will lead to a number of improvements in the understanding of academic workloads across the Faculties, ensuring fairness of allocations, but will also allow for instant and detailed analysis by Academic Managers, allowing them to maintain and improve on the flexibility they already have within their teams. It will also automatically record the data required for TRAC purposes and has negated the use of Time Allocation Questionnaires.

Throughout this process Academic Managers were constantly briefed and consulted on the progress of the project, and their feedback was important to the continued development of the project.

By November 2010 a first version of the newly developed system was available, and a pilot process was launched which gave over 25 Academic Managers across the four Faculties an opportunity to view and use the system. Feedback was again collected after this pilot, and has been subsequently incorporated into the updated version.

Early in 2011 the Deans of Faculty were provided with a detailed demonstration and an update on the projects progress, which was then followed by a briefing to the University's Executive as well as a separate briefing for members of UCU's branch committee, all of whom viewed the project and the speed of its delivery as a positive forward step.

By the end of February 2011 the outline of the final version of the software was made available to Academic Managers who were invited again to comment on the software but also the implementation plan.

The system went live on 4th April 2011, and training was provided the following week for all Academic Managers.

Following successful launch in April, there are already plans for further enhancements and developments to the software, often driven from the users, but as a consequence of seeing the advantages of collecting this type of data and potentially opening up its use to other staff groups.

The outcome of this project will allow the University to no longer collect data using the TAQ methodology, and move to a process which will more accurately reflect the workloads of our Academic resources. Further to this, it will allow a much more efficient, flexible and timely process for individual Faculties and their Academic Management teams to plan, allocate and deploy academic resources in a fair and transparent manner.

Case Study 5 - Workloads model case study – research – Cardiff University

Some background:

Cardiff is a Russell Group University with an exceptionally flat structure. It has 27 schools, loosely clustered to work with a link pro-vice chancellor reporting to University Board and the Vice Chancellor. Heads of School are the budget holders and there is no intermediate faculty structure between schools and senior management.

Over the past twelve months we have done a lot of preparation for the development of the university workloads framework. This work is led by the PVC Staff and Diversity and the Director of Human Resources (Staff and Development).

The first part of the project was to review the nomenclature used for our career pathways and to write a set of role expectations⁹ for each grade/level on the Teaching and Scholarship and Teaching and Research Pathways.¹⁰ Both pathways now allow progression/promotion from Lecturer (through probation) to Grade 7, Senior Lecturer, Reader and Chair.¹¹

The Task and Finish Group which worked on these was led as above and included four PVCs, and five heads of school (including the Chair of the Heads of Schools Meeting).

The new pathways and role expectations were agreed by a joint meeting of university board and the VC's Heads Advisory Group and successfully presented to the UCU last week. They will be discussed at the Heads of Schools meeting in the week beginning 7th March.

In parallel with this work, the PVC Staff and Diversity was present at 27 meetings between Finance and Heads of School to discuss the 2009-10 TRAC returns for each school. These occurred between December 2010 and early February 2011. This provided the additional opportunity to systematically ask Heads whether they were currently using a workloads model in their school and to collect copies of these where they existed. Follow up meetings have also been held in a number of schools to explore the way these models are working in practice.

The current situation

The results of this work have shown that we have currently 16 workload models in use, 4 more being developed, and seven schools where there is no formalised workload model.

Of the 16 in use, only ten make some attempt to include research in their inputs. Two of these (in two of our larger schools) have done a good deal of research on workload planning, reading the Barrett LFHE report among other things, and considering the TRAC implications of their models by ensuring that the categories they use will map on to TRAC categories.

⁹ These are closely linked to our existing academic promotion guidelines.

¹⁰ These role expectations are currently footnoted to say that the allocation of load in relation to T and S, T and R and Knowledge Transfer/Engagement will be specified in the workloads framework.

¹¹ Previously the Teaching and Scholarship Pathway was called Professional Tutor and allowed promotion from Grade 7 to 8 but not beyond.

The models vary between using contracted hours across a year (e.g., 1509.9), to some form of points system which is roughly linked to hours (e.g., one uses 'time units' of 125 hours, with approx. 12 time units in a full-time year).

Most have a notional percentage based allocation of time between Teaching and Administration and Research, although the details of the input categories vary. E.g., one model suggests that the Teaching and Administrative load should be 40% while the Research should be 60%. Another, admittedly very different kind of discipline, expects 25% research (if HEFCW funded = TRAC university funded) and gives 'discounts' for externally funded research. Another allocates 35% to Teaching and Teaching Admin, 55% to Research, Innovation and Engagement and professional activity, and 10% to general administration, leadership and management.

All seem to recognise already the difference in workload between the Teaching and Scholarship and Teaching and Research pathways. E.g., one school suggests that T and R staff should spend 45% of their contracted time teaching, 45% on research and 10% on admin, while T and S staff should spend 70% on teaching and 30% on admin. Another large school puts teaching and admin at 60% and Research 40% for T and R staff, with 85% teaching and admin and 15% scholarship for T and S staff.

Of the ten models which include research as a percentage, only 5 attempt to name and quantify it in detail.

The models in this group which do not input research specifically, do input Teaching and Admin and allocate workload to leave the appropriate bundle of hours in the year for the percentage of research activity specified by their model.

Among the five which input research:

PGR supervision and what the RAE used to call 'esteem factors' are the categories which do not seem to be agreed as 'research'. The first sometimes turns up as Teaching and the second (e.g., peer reviewing, membership of professional organisations or research councils, invited lectures/plenaries, external examining) is e.g., sometimes not included, sometimes called administration/management.

The models give workloads allocation to the following research categories:

- the writing and submission of grant applications;
- the management of research grants or commercial contracts;
- annual external grant income, and (in one case) FeC days per annum;
- main conference organiser, conference committee;
- invited international lectures/plenaries/keynotes;
- PhD/MPhil supervision, PhD examination;
- government working groups etc;
- refereed journal papers/book chapters/patents;
- refereed conference papers/major reviews/research abstracts; and
- monographs.

In each of these five cases, what seems to happen is that the workload model is populated at a given point in time in the academic year from data held centrally in the school, and then circulated to staff for approval or updating. Workload is also reviewed in probation or appraisal meetings.

In all five of these cases, it is made clear that academic staff on the T and R pathway should all contribute to teaching and administration in addition to their research activity. Several models mention explicitly that teaching cannot be traded against research activity. At more senior levels additional leadership and management roles as well as research excellence are stressed.

In three cases, teaching and admin load is calculated for the current academic year, as are some research categories (e.g., managing teams) but research outputs (publications) and research income are calculated in relation to the previous calendar year.

Conclusion:

We clearly have a long way to go in pulling all of this together into a university framework. We also plan to use the Salford and Edinburgh/Napier models as we move forward: and we will need to keep the TRAC categories in mind throughout so that whatever guidelines we produce are able to be easily coded by Finance to TRAC.

Case Study 6 Contribution mapping – a brief overview.

Contribution Mapping (CM) seeks to increase the relevance and effectiveness of Performance and Development Review (P&DR) and to be a central element in the creation of a high performance culture.

P&DR focuses on the objective-setting aspects of performance and development and the evaluation of achievement of those objectives. This can be referred to as a person's **output**. CM focuses on the relative effort a person is putting into all the different aspects of their role or **input**. By looking at how well input is converting into output (or 'effort' into 'achievement'), it is easier to assess whether the person is using their energies effectively, or whether these should be rebalanced for improved overall fulfilment of the role and personal aims.

CM is not however a tool designed simply to make people work harder. At the heart of this approach is regular reference to the person's overarching career aims (are we moving towards achieving them?) and playing to the person's strengths – seeking where possible to enable people to do more of what they are best at. This is different from many appraisal schemes which concentrate on identification and resolution of 'weaknesses'. This function is still an element of CM, but not its main focus.

Definitions are agreed for all of the main areas in which a role (or group of roles) may require input. These are called CM **Headings**. For each Heading there is a list of **Components**. These are more specific 'inputs' (frequent things that effort may be put into) which will be the building blocks of the person's CM map, and 'outputs' which will be the things which result from the effort and which will be covered in the more familiar part of P&DR – objective setting and review.

With CM the first part of the P&DR process is to prepare an individual contribution map which identifies the **relative** effort put into the different aspects of the role. Because the maps show **relative** effort, everyone's map will add up to 100%, whether they are part time or full time, workaholic or lazy!

A contribution map is a very simple pie chart showing the effort going into the different areas of the role. The figures used to generate the map are intended to be based on personal *estimation* of relative effort.

One of the 7 main Headings for CM for academic staff is Research. Indicators of some possible types of contribution are shown overleaf.

RESEARCH Research activities (including support of Faculty research)	
CONTRIBUTION (input) This column contains <u>prompts</u> to help you estimate your contribution	PERFORMANCE AND DEVELOPMENT REVIEW (output) This column contains <u>prompts</u> to help you quantify your output. Your outputs should be entered on your P&DR form

Funding (Research Councils and Charities. Excluding Industrial & Follow-on funding) Grant submissions	<i>Grant awards</i>
Personal Fellowships Fellowship submission	<i>Fellowship awards</i>
Supervision/Sponsorship PhD Masters by Research (MRes) Vacation studentships Research group (postdocs/techs etc.) Visiting scientists/students Sponsorship of Research Fellows Research group management	<i>You could include detail such as:</i> <i>PhD awards</i> <i>MRes awards</i> <i>Report to funder; data/papers</i> <i>Data/papers</i> <i>Data/papers</i> <i>Fellowship awards; data/papers</i>
Publications (submission) Primary research papers Review articles (invitation/peer-reviewed etc Conference proceedings Book chapters Conference abstracts/posters	<i>Acceptance/publication</i> <i>Acceptance/publication</i> <i>Publication</i> <i>Publication</i> <i>Publication/Talk chosen from abstract</i>
Collaborations Local National International Project Management (e.g. Strategy/planning meetings/visits for collaborative grants)	<i>Grant submissions/awards</i> <i>Papers submitted/published</i>
Conferences Invited presentations (plenary/symposium) Submitted presentations	<i>Invited presentations (plenary/symposium)</i> <i>Submitted presentation</i>
Invitations Seminars Named lectures Research visits Workshops Site visits Hosting seminars	<i>Seminars</i> <i>Research visits</i> <i>Workshops</i>

Hosting research visitors	
Infrastructure Health & Safety Ethical permission Animal licensing P&DR of research team	
Support of Faculty Research PhD Advisor Continuation Reports (examiner, chair) Internal PhD/MSc Examiner Internal peer review of grants/papers	
Management of internationally important research centres as judged by external peer review	
Research awards and visiting research positions	