Integration for a New Generation – Technological Solutions for Linking Core Functions of Teaching and Learning

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Abstract

The Teaching and Learning Group, in the Faculty of Arts, Deakin University, Australia, has successfully implemented Stage One of a Teaching and Learning Database. The database is unique in Deakin, and aims to integrate the core functions of curriculum, unit chair and assessment panel maintenance, academic workloads and quality assurance reporting for the Faculty of Arts. Stage One developments have already replaced many hard-copy forms. The following paper describes the database project, how it was initiated in the Faculty, the options considered, and an illustration of its progress to date. It will also describe the future developments planned for this project during the next six months, developments that will add capabilities to manage academic workloads.

Keywords: Systems Analysis, Design, Development, Implementation, Curriculum Issues, Database Issues, Information Management

Introduction

The Teaching and Learning Group, in the Faculty of Arts, Deakin University has successfully implemented Stage One of a Teaching and Learning Database. This database is first of its kind at Deakin, and it aims to integrate the core functions of curriculum, unit chair and assessment panel maintenance, academic workloads and quality assurance reporting for the Faculty of Arts. However, as these are central functions across all Australian, and no doubt overseas, universities, the database offers tremendous opportunities to be adapted and implemented more broadly. One of the key outcomes to date has been the reduction in academic and administrative workloads, as a result of automating the previous practice of filling out forms and paper shuffling throughout the faculty when processing Curriculum changes. It also replaces the countless hours on searching through various committee minutes; excel spreadsheets, and numerous other non-linked data sources. The resulting database provides a repository of information that can be used for operational and strategic decision making. This paper aims to describe how this database originated and the progress of this unique project. Snap shots of Stage One of the Database are also presented including its sophisticated query function, and, in doing so, illustrating its adaptability and flexibility, and potential to be used by other institutions. This is an ongoing development project, offering significant potential to further integrate continuous quality improvements through teaching and learning activities undertaken within the Faculty of Arts. Consequently, much more is planned

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during the next six months and these developments are also explained.

Background – How the Database was Conceived

A driving force behind the database project has been in response to the increasing reporting requirements being imposed on faculties by university decision makers. Quality reporting is more increasingly being sought from universities throughout Australia, as governments progressively want to see evidence of efficient and effective spending of public funds. These reports often require substantial input from Divisions and Faculties. To place the development of the database into context, some background on the Faculty is necessary.

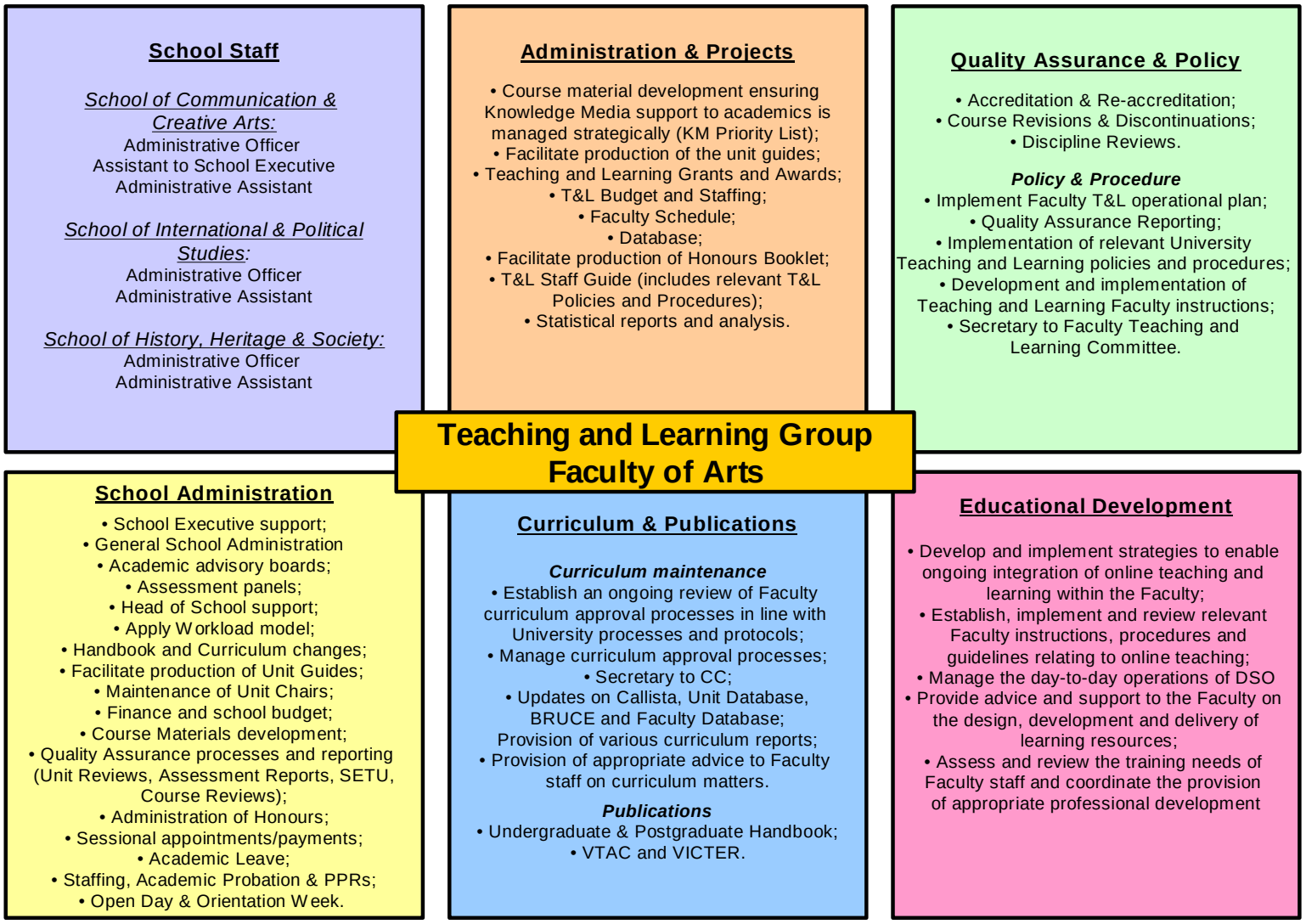
The Faculty of Arts is the second largest of the five faculties within Deakin University with over 3500 equivalent full time students. The Faculty is a major distance education provider with over 40 per cent of its enrolments being off-campus. The Faculty operates on three Deakin campuses: at Melbourne, Geelong and Warrnambool. It consists of three Schools, which are represented on all three campuses: School of Communication and Creative Arts (SCCA); School of History, Heritage and Society (SHHS); and School of International and Political Studies (SIPS). The Administrative structure is led by the Registrar, assisted by five managers, each responsible for a strategic portfolio.

The Teaching and Learning Group (TLG) is responsible for a broad strategic portfolio, and works closely with the School Executive and academic staff in the three Schools. The TLG's portfolio of responsibilities includes; curriculum maintenance, course development and approval, quality assurance, educational development and School Administration. Table 1 provides a more detailed profile of the TLG.

Insert Table 1

Similar to all faculties in Deakin, the Faculty of Arts performs many reporting processes manually, requiring academics and administrative staff to complete numerous hard copy forms or templates. For example, during the second semester 2005 (August – December 2005) SCCA, which consists of approximately 75 academic staff, one Administrative Officer, and two Administrative Assistants, received and processed approximately 150 minor amendment forms, all of which were subject to a lengthy checking and approval process. Academic workload submissions, unit guides, Assessment Panel forms, and Assessment and Assessor information were also sought from academics prior to the start of semester. At the end of the semester, further collection, collation and analysis of three separate quality assurance reports for each unit offered, was also undertaken. These processes are also duplicated in the two other Schools, SIPS and SHHS. In addition, Unit Chairs are expected to provide assessment information within the handbook process, unit guides, and assessor information report for both assignments and examinations, all at different times and in different formats, both electronic and hard copy. This not only results in potential inaccuracies but also becomes painfully repetitious for academics. Moreover, there exist many systems for collating data but none 'talk to each other', as there is no integration of these systems. While processes within Schools have been slightly improved through the extended use of excel spreadsheets and word documents, the initial collation of information is done through manual forms. This necessitates the re-entering of data from one information source into another data repository. Information is then stored on separate excel spreadsheets, all of which require maintaining and ongoing update of curriculum changes. This often results in errors, requiring duplicated work.

Table 1: Teaching and Learning Group Profile



It was in this context that the database idea originated. A more systematic approach was sought in the form of a database to eliminate many of these manual processes. In addition, a tool was sought to enable electronic tracking of information to and from academics. It is anticipated that the current forms could be integrated into a series of electronic forms made available on the Faculty's website. This would permit academics to submit information electronically which could then be tracked and reported electronically through the database. It is also anticipated that such a database would reduce workloads for both administrative and academic staff and provide a more efficient approach to the collation and audit of data than is currently possible. An ultimate aim is to develop user-friendly systems to promote a culture of '*Continuous Quality Improvement (CQI)*' rather than *'Compliance'*, while finding efficiencies for both academic and administrative staff.

Figure 1 provides an illustration of the Teaching and Learning Planning Cycle.

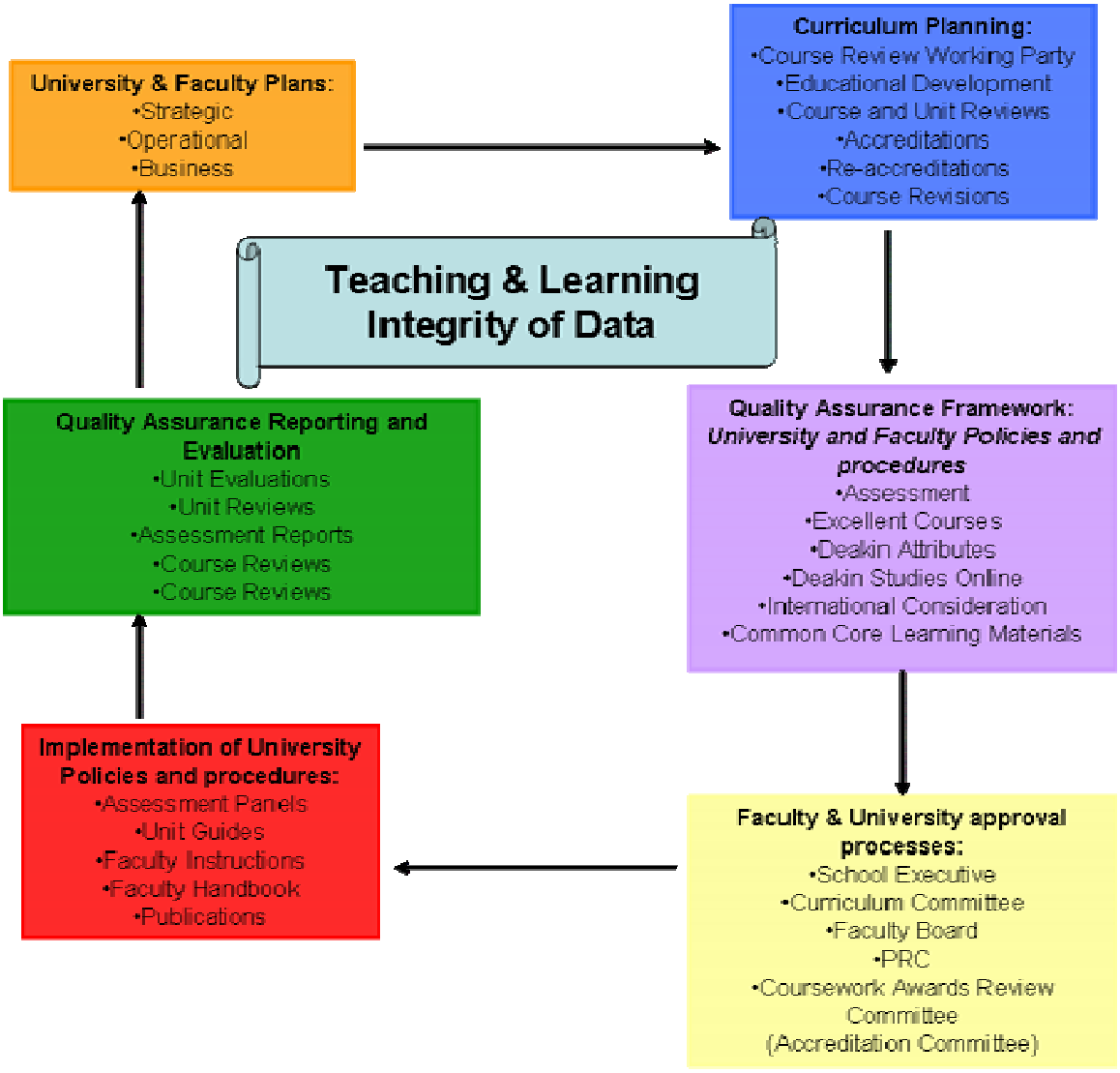


Figure 1: Teaching and Learning Group Planning Cycle

Getting It on the Go

The first task involved seeking approval from Faculty management. This was sought through a written proposal. The proposal was based on data collected during the first quarter of 2005, when a comprehensive needs analysis of the TLG was completed. This incorporated all of the core functions undertaken by the TLG, together with the related academic responsibilities, such as production of unit guides, review and maintenance of relevant curriculum, educational development, and regular quality assurance reporting. A major requirement of all stakeholders was the gathering, analysis, extraction and reporting of information. The University has had Executive Information Systems that provide a range of readily accessible reports on courses, faculty student load trends, admission and selection reports, and course profiles for some time. Unit and/or Discipline information has historically not been as readily accessible and is stored in many different local databases (spreadsheets), all of which are maintained by staff within the TLG. The review highlighted the need to provide a tool to store, analyse and report on Unit (Subject) information eliminating duplication of data maintenance.

Funding was also sought from Faculty management to hire an experienced consultant from the initial stages of the project. The aims and objectives of the project were identified as: sustaining excellence through Quality Assurance and Continuous Quality Improvement; developing an 'Innovative' solution to the increased teaching and learning demands on academic and administrative staff; finding efficiencies through the use of technology; eliminating the duplication of maintaining multiple spreadsheets; providing easy access of information at the Unit, Discipline and School level; and centralising core Teaching and Learning functions within the Faculty and Schools.

A development team was subsequently established in May 2005. It comprised of me, the Manager of Teaching and Learning, two Administrative Officers, Tamara Harvey and Di Johnson, and the Consultant, Dr. Peter Huf. The team decided that a flexible structure was a key ingredient to the achievement of the project objectives and overall success of the project. It was further resolved to focus on building integrated systems for the following core functions (Table 2).

Table 2: Core Functions of the Database

1	Academic Workload Model	Application of the faculty's workload model. A formula used to allocate academic staff teaching load and determining sessional staff entitlements taking into account staff research profiles, along with other academic and administrative responsibilities.
2	Academic Staff Leave	The maintenance of academic staff leave is extended to electronic tracking of submissions, approval of appropriate replacement arrangements, and ultimately linked to the academic workload model. Final approval is processed through the university 'Staff Connect' system which is the official source of final approvals of all standard leave.
3	Assessment Panel Maintenance	As part of the CQI process an assessment panel, comprising of the unit chair and at least one other staff member, is established for each unit offering. Membership is recorded, amended, and reported each teaching period. The Assessment Panel has reporting responsibilities which requires approval of the first and second member.

4	Curriculum development and maintenance	Management of the faculty's curriculum development and maintenance through a web interface' electronic tracking of approval processes and a flexible reporting function with direct links to other core teaching and learning functions. The unit offering instance is the 'unique' field that links to all other modules.
5	Educational Development	Project management of educational development activities within the faculty including online and other forms of course material development and delivery.
6	Quality Assurance Reporting	Implementation of the university's CQI processes in the form of a web-based interface that provides an accessible and user friendly tool with the aim to significantly decrease academic and administrative staff workloads, and providing an effective quality reporting mechanism.
7	Query function and Reporting	A menu of standard pre-set queries available within each module. Selected queries made available in a report format.
8	Unit Chair Maintenance	A Unit Chair is required for each unit (subject) offered during a teaching period. The Unit Chair is also the Chair of the Assessment Panel. The maintenance of unit chairs module is comprehensive as it has a direct relationship to all other teaching and learning core functions, in particular, academic staff leave assessment panel maintenance, quality assurance and the academic workload model. This module will provide a systematic means of maintaining unit chairs with built in quality checks. Access to current unit chairs to be accessible through the use of a 'View' and 'Query' function.
9	Unit Guides	A Unit Guide is produced for each unit offered each teaching period. It contains important information specific to the unit including the unit outline, content, and assessment. Unit Guides are distributed to students in the form of a PDF file through the university's online learning system, Deakin Studies Online (DSO), two weeks prior to the relevant teaching period. A faculty template is used to ensure relevant policy and procedures are adhered to.
10	Unit Profile	Accessed through a 'View' and 'Select' form, with ability to 'Print'. The culmination of the selected unit information recorded and stored on the database. Key selections include: curriculum offering, discipline; school; mapping to major sequences, specialism', and courses; current and historic enrolments; and selected information from other modules. Model to be adopted to extend to 'Discipline' and 'School' profiles.

Three options were considered by the development team. Each was analysed with key stakeholders, including staff from the university's central Information Technology Division, and colleagues from other faculties, to determine advantages, disadvantages and potential outcomes of each option (Table 3).

Table 3: Options for Database Development			
Options	Advantages	Disadvantages	Outcomes
1. Develop an integrated university database that builds on other university systems and links to the university student system, Callista.	Resourced by University; Corporate system integrated with Callista, the university's student database and the unit and course database; Longer-term solution to link current unit and course database to Callista, which currently have limited integration with student database; Use of central staff expertise.	No university resources available until 2007 at the earliest; No short-term solution available.	Developed proposal to be considered as part of the 'Future Development Strategy' for 2006/7.
2. Develop a shared database with four other faculties	Shared risk and resources; Broader skill base of staff; Sharing of idea's and solutions; Shared cost.	Additional complexities involved in meeting broader key stakeholder needs; Some faculties had commenced development of local databases for different functions; Different structures in other faculties, more decentralised approaches; Very different approaches to managing academic workload models and sessional staff budgets.	Faculties not prepared to take on project of this size without central ITS support.

Options	Advantages	Disadvantages	Outcomes
3. Develop an 'In House' database	Ownership within the Faculty; Ability to develop in stages; Meets short-term needs and can be the platform for longer-term needs; Teaching and Learning group includes key staff with necessary skills; Easily adopted by other faculties and/or organisations; Availability of suitable consultant to build database; Locally developed database is both affordable and the most economical solution.	No shared risk or cost; No direct link to Callista or unit and course databases; Reliance on skills and expertise from Teaching and Learning Group staff; Reliance on external consultant to build the database.	Sought and received financial support for Option 3. Option 3 was adopted.

Option 1 required long term planning and investment of university resources. The faculty recognised that this option has the potential to provide a more sophisticated system, linking directly to other corporate databases, such as Callista the University's Student Management System, as well as meeting the needs of faculties at the unit and course level. Other benefits included: the potential to store, amend, track, and update key curriculum information on the University web handbook and other related publications. The faculty will continue to canvas support from other faculties and the central University Divisions to develop a proposal to be considered as part of the 'Future Development Strategy' for 2007/8.

Option 1 and 2 were not considered viable options at that time.

Work subsequently commenced on designing and building an in-house database, with the potential to be used as a prototype in the future development of a corporate system.

The Design of the Database

The database system consists of an access database with a web based user-interface. The database contains all of the standard data structures for educational courses, including all course and unit details, histories, enrolments, administration, messaging, and management. The database is completely self-contained and may be transferred easily if required for further off-line analysis. There are various levels of control of the structure of data, and the database to give flexibility to the system for the users and administrators. A comprehensive query system is set up based on the SQL (Structured Query Language) protocols. The users may access the system from anywhere on the internet although data integrity is protected using security at several levels of the system. The current version runs on a windows server but this will soon also be available on Unix systems.

The database is built around a series of modules covering Academic Leave; Assessment Panels; Curriculum Amendments; Database Administration; Educational Development; Quality Assurance; Unit Chair Maintenance; Unit Guides; and Workload Model. All modules are linked

through the Unit and Unit Offering fields. Figure 2 is an image of the database front page which displays each of the modules.

TEACHING & LEARNING DATABASE
FACULTY OF ARTS

Fostering Student and Graduate Success
Equity and Access
Sustaining Excellence through Quality Assurance and Continuous Quality Improvement
Recognising Excellence and Innovation
Promoting Innovation through Online Teaching and Learning

(Faculty of Arts 2005 Operational Plan)

Curriculum Amendments	Academic Leave	Workload Model
Assessment Panels	Database Administration	Unit Guides
Educational Development	Quality Assurance	Unit Chair Maintennance
	Unit Information	

Figure 2: Teaching and Learning Group front page

All of the core functions are linked to curriculum, specifically the unit and unit offering, and as a result the *Curriculum Maintenance* module was developed first.

Before any programming could begin, a comprehensive set of documentation was created and used to illustrate more clearly the 'User' needs. This was done through a series of workflows, or forms, which mapped out each step of the process, highlighting information gathering requirements, quality checks, and approval steps and reporting requirements. Figure 3 illustrates the change of semester workflow.

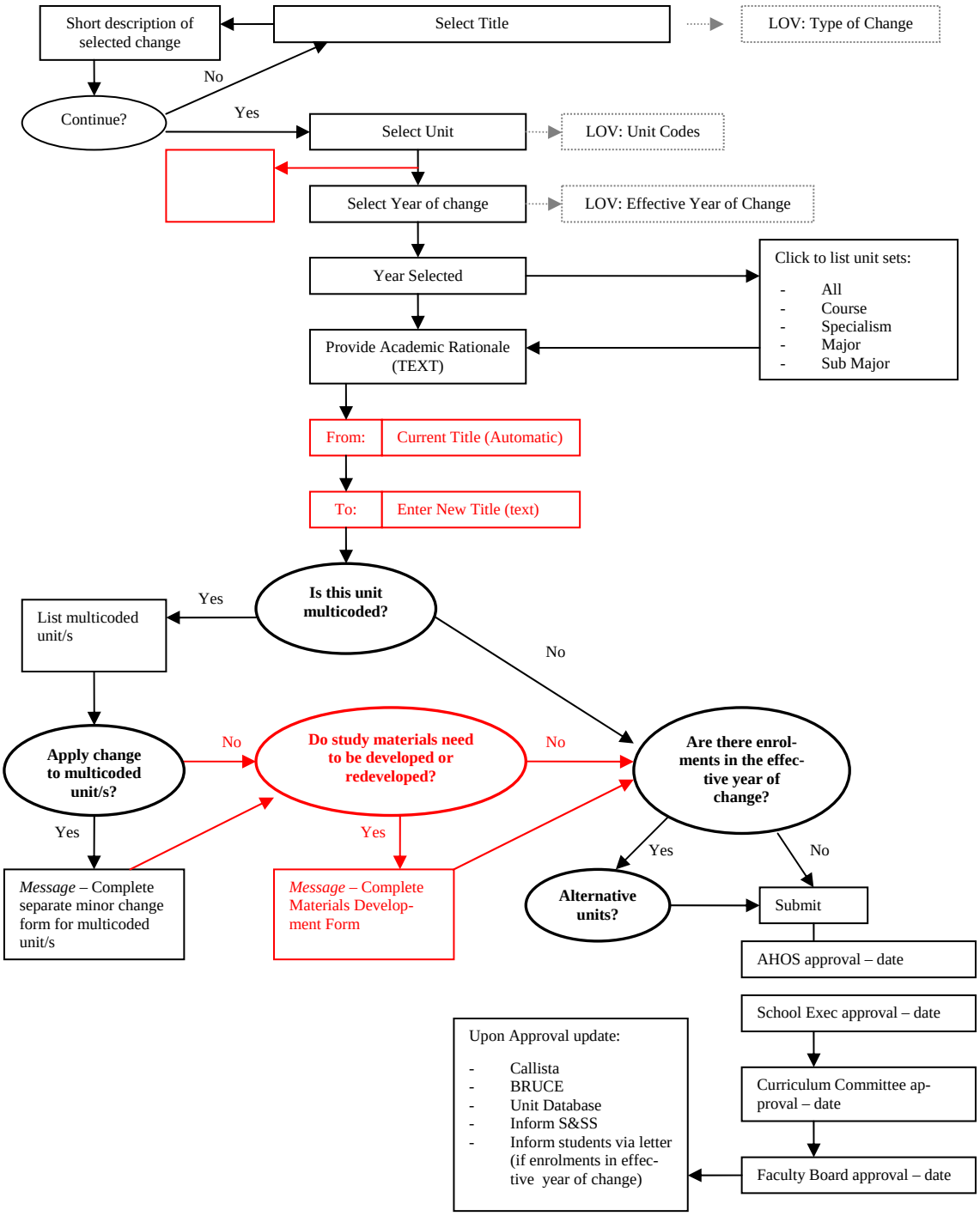


Figure 3. Change of Semester Workflow

Snap Shots of Stage One – The Curriculum Maintenance Module

The Curriculum Maintenance module is integral to all other modules and was the first to be designed and built. The curriculum information stored and recorded through this module is exten-

sive and comprises of a mix of data sourced from Callista and information stored and maintained locally in the relevant School or centrally by the Faculty.

All proposed changes to curriculum are recorded, tracked, and if approved, amended on the database through the curriculum module. All approved changes are then reflected on the University's handbook. Within this module each unit is mapped to a Discipline (Public Relations, History), a major sequence or specialism if valid, and a list of unit offerings.

This module is made up of a series of forms that are similar in nature but contain different fields and quality checks as appropriate. These forms incorporate unit level changes including assessment, content, delivery mode, unit rules, and adding/deleting units of study. From the Users perspective, all requests to amend curriculum are submitted through the same web-based form, which they choose from a selection of options.

The integrity of data is maintained by the extensive use of List of Values (LOV's) which are maintained by the Administrator. Built in quality checks have been incorporated in the design of the forms, for example, a request to delete a Unit with current enrolments will be rejected, and a pop up message displayed. If the unit is a core unit, a warning message will be displayed with an option to view additional unit information.

A simple example of how a minor change to curriculum can be made commences with selecting the Curriculum Maintenance Module, followed by a prompt to enter a password. Provided a correct password is entered, various options are then presented to the User in the form of a List of Values detailing the types of changes available. There is also an option to request multiple changes for the one unit (for example, a change of semester, unit title etc.). The User selects the types of change and proceeds. In this example, change of semester and title were selected. Figure 4 illustrates the Users view of options when first selecting 'Multiple change options'.

Figure 4. The Users view upon selecting 'Multiple change options'

The next prompt provides a LOV's from which to select the relevant unit, followed by the display of valid unit offerings. The User then selects the year of change. The database checks if the unit has students enrolled, if yes, a warning is displayed and the User cannot proceed, if no, the User proceeds to entering the request. Figure 5 illustrates the Users view of the 'Enter Request' screen.

Figure 5. Users view of the 'Enter Request' screen.

When the User submits the request, the database checks that all fields are completed, if yes, confirmation that the request was successfully submitted is displayed.

The approval of the request is prompted by a series of e-mails to selected staff. The Edit Function enables the administrator to view and update the status of the request, which in turn may prompt another e-mail. The staff member submitting the request is informed via e-mail of the outcome at each stage of the approval process. In its simplicity, the above example illustrates how manual tracking of forms was eliminated; quality checks provided an 'initial screening process'; and communication of outcomes was made easy. A practical illustration of the database would demonstrate many other examples including the intricacies of the system.

The communication to and from academic and administrative staff was considered an essential part of the 'success criteria'. Figure 6 illustrates the flow of communication upon submitting a minor amendment to curriculum. This workflow was developed in response to a common complaint from academic staff that they were often not informed of the outcome of their request after its initial submission.

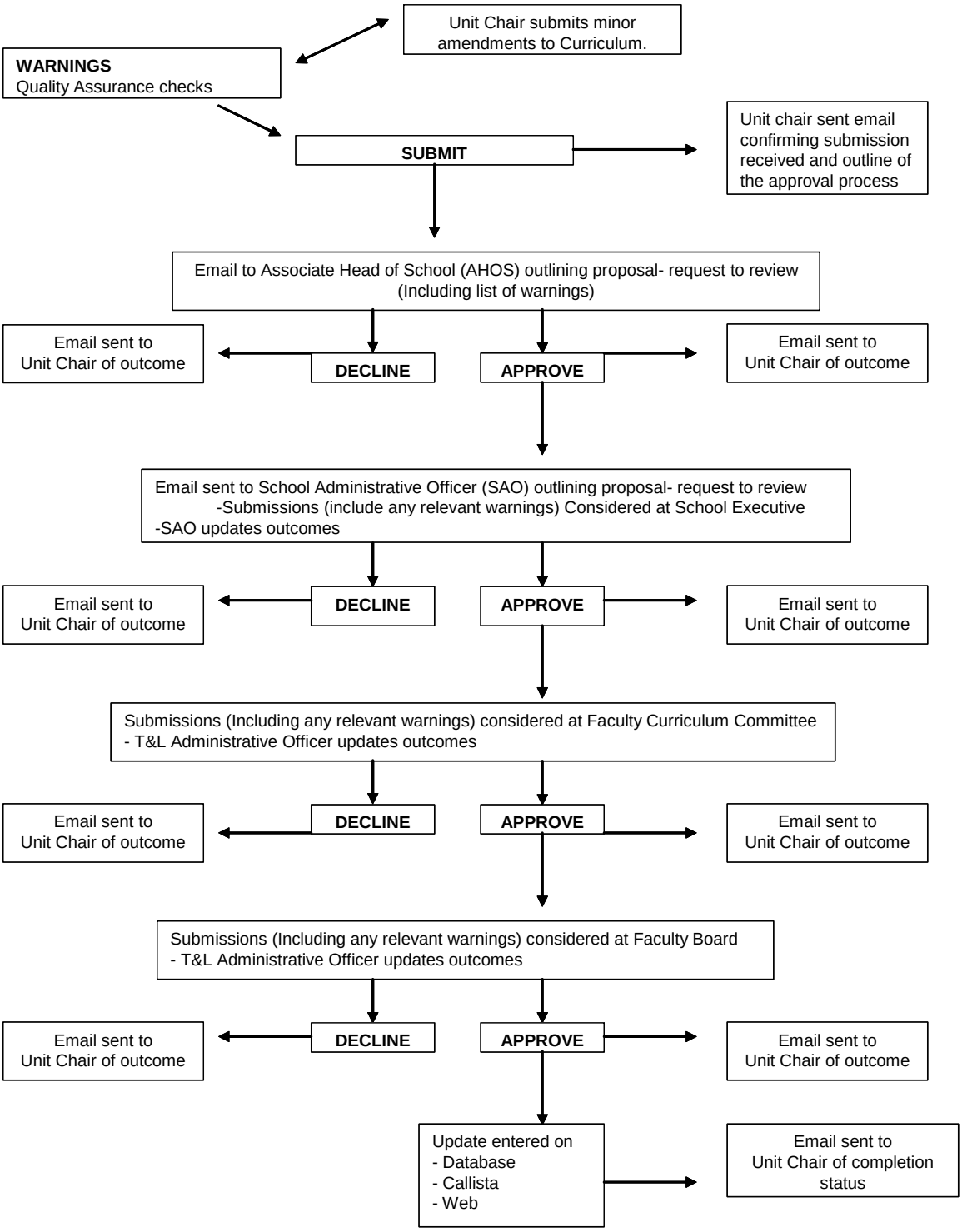


Figure 6. Cycle of the Curriculum Approval Process

Development and approval of new units are managed through this module. A proposal for a new unit is processed through the 'curriculum amendment' function. Critical information is sought, and the approval process tracked and communicated as illustrated above. Further work is planned

to enhance this form, including the addition of further information requirements and approval processes.

A key feature of the Curriculum Module is the development of a unit profile which is a collection of information related to a specific Unit. This includes the unit offering, relevant discipline, major sequence or specialism, funding cluster as well as current and historic enrolment trends. This is a very powerful tool and has the potential to be duplicated as a discipline profile or school profile.

It is the Query Function that complements the key features of this module. Queries can be developed from nearly any composition of fields and can be saved as electronic files, such as excel. Many standard queries have been developed which are readily available to the User and further queries can be built on a needs basis.

The Query Function is also used extensively for performing numerous data integrity checks. This function is used to perform regular updates of enrolment data as well as providing a means of reconciling current curriculum offerings recorded on the database with the University's Student Management System (Callista). Anomalies are listed which can then be thoroughly checked and amendments made if appropriate. This function is performed by an Administrative Officer at least once a week.

Although the Curriculum module is a work-in-progress, it is currently being used within the TLG with a proposed release to all staff during 2006.

Work in Progress

With Stage One completed, Stages Two and Three of the project are intended to continue throughout 2006 as further database modules are developed and released. In Stage Two, feedback will be sought from Users and Database Administrators. The Curriculum module will require some fine tuning as other modules are currently being enhanced and implemented.

Initial feedback from Users of the Curriculum module has identified some key improvements which are either in progress or planned for the immediate future. These include:

- In various scroll bars are relied on to 'view' and 'edit' the information displayed. It is planned to create a more friendly display which can be seen page by page, and in some cases, allow a print option.
- The database was initially structured to enable each proposed amendment to have one entry point. In most cases this has been restricted to a unit, and at times a unit offering. The faculty has numerous multi-coded units (a unit offered at different levels), and at times, a proposed change may need to be applied to more than one unit, or unit offering. To avoid repetition, a functionality to enable amendments to be applied to more than one unit or unit offering is currently being built.
- Adding some historical data such as previous unit titles. These can then be incorporated into the relevant curriculum change forms.
- Future development to the 'New Unit' form will seek further information and approval with regard to resource implications. In the longer term, this form will link relevant information to the production of unit guides and the educational development activities.
- Further development of the unit profile to include pertinent information from other modules.

The other modules being developed include: Academic Leave; Assessment Panels; Quality Assurance; and Unit Chair Maintenance. These modules are work in progress and are based on the same principles underpinning the Curriculum Maintenance module, web-based forms with integrated quality checks, common use of List of Values and User prompts, together with electronic

tracking of status and comprehensive query functionality. All forms are linked through the Unit and Unit Offering fields.

Figure 7 illustrates how the core teaching and learning functions are linked directly to curriculum and in most cases to the workload model, with indirect links to the university's corporate systems such as Callista. Modules are separate in nature but have both direct and indirect links to each other, depending on the activity being undertaken and the timing of the activity.

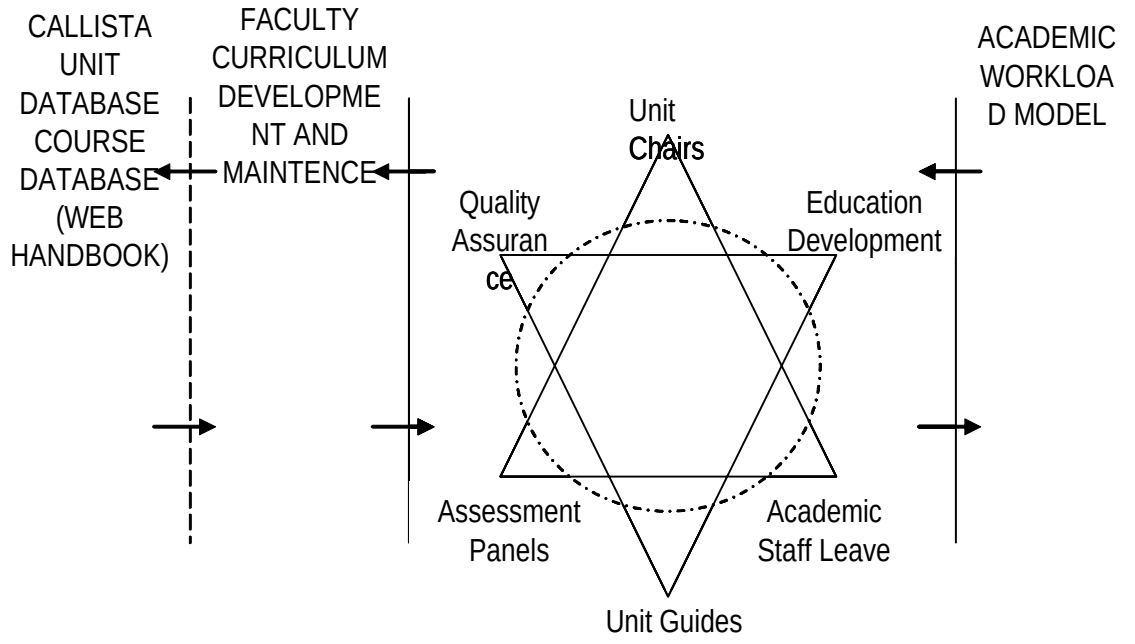


Figure 7: Linking of Teaching and Learning Core Functions

These additional modules will further enhance our data management and both operational and strategic planning.

The Academic Leave module complements a centralised university 'Staff Connect' system which records standard leave types such as sick leave, recreational and family leave. Leave types including, research and conference leave have historically been recorded and processed through a separate system. This module is focused around the implications of an academic taking leave, such as Unit Chair and/or Assessment Panel member replacement arrangements and will initially link directly to the unit chair, assessment panel and quality assurance modules. In the longer term it will also feed into the academic workload model.

It is planned that the Academic Leave form will become the initial point for academic staff to submit a request for leave. They can do this through the main menu of the database. A LOV's is displayed, from which the relevant staff member's name is selected. The academic leave form pops up and displays the staff member's details. The staff member then selects proposed dates of leave and the type of leave sought. Figure 8 illustrates the Users 'view' of the academic leave form.

TEACHING & LEARNING DATABASE
FACULTY OF ARTS

Administration

Academic leave

Staff member name	test test	School	-
Staff member type	-	Discipline	
Start date	9 / 3 / 2006	the first day absent	
End date	9 / 3 / 2006	the last day absent	
Leave Type			
Unit chair of	TTT111 TTT112	the units chaired by this staff member if leave is greater than 7 days then a replacement must be selected from the drop down box	
Replacement details		if required	
Comments		optional	

Submit Leave Request | Reset

Figure 8. Academic Staff Leave Form

The integrity of the data is maintained through invisible systematic quality assurance checks. For example, if leave is requested within a set teaching period, the selected replacement staff members are checked against the academic leave table to ensure availability. Upon approval of the leave by the Head of School (HOS), relevant staff are informed of the outcome through an e-mail.

In the case of standard leave, the staff member will be requested to also submit the request through ‘Staff Connect’. This duplication can only be avoided through development of a corporate system that integrates all leave types and associated implications.

It is planned that a selection of standard queries be developed to be available in both electronic and print format.

The Assessment Panels and Unit Chair Maintenance modules provide a simple solution to keeping track of the ongoing changes to Unit Chairs and Assessment Panel members resulting from long and short-term academic leave, as well as the changing demands on academics. Numerous quality checks are included in these modules to ensure adequate replacement of staff while on leave, and that amendments to academic workload is made where appropriate.

The Unit Chair Maintenance module is based primarily on the administrative processes and the needs of the Administrators responsible for this activity. The development of this module has resulted in some immediate efficiencies for administrative staff.

The Assessment Panel module on the other hand, is driven largely by university policies and procedures and faculty instructions. Assessment panels consist of at least two academic staff members, one of whom is the unit chair.

The faculty has an additional requirement for units that have at least five student enrolments from the Institute of Koorie Education (IKE). In this case, an IKE staff member is also to be included on the Assessment Panel.

This module will record and maintain assessment panel membership in line with quality assurance requirements. It is intended to link directly to the quality assurance and academic staff leave modules. The assessment panel membership is attached to a unit; therefore the most current membership will be carried forward to the next valid offering of that unit, limiting duplication. Similar to the modules outlined above, LOV’s are a main feature of this module, as well as other checks such as ensuring an IKE member is on the panel if required by the relevant Faculty rule. An appropriate approval process will be built into the system, along with standard queries and reporting templates.

The Quality Assurance module is also driven by the university’s CQI process.

At this stage there are four different quality assurance reports which are accessed through this module and completed on either a semester or annual basis. Input from the User is limited as relevant information previously stored on the database is readily displayed for the User to access. Where a second electronic signature is required, an e-mail is sent to the relevant academic requesting that they complete their responsibilities.

It is also planned to establish suitable monitoring and reporting mechanisms, such as automated reminders to staff with outstanding responsibilities, as well as reporting and analysis of forms received. This module has the potential to incorporate a pre-determined CQI reporting schedule prompting relevant staff members to undertake responsibilities as appropriate. Future development is planned to enable the Administrator to amend key fields and tables within the quality assurance forms, which often results from ongoing review and amendments to relevant policies and procedures. This development would provide considerable enhancement to this module empowering the Administrator to build and amend forms, in replace of hard coded forms developed by the Programmer.

This module will replace the plethora of hard copy forms currently completed and submitted by academic staff, along with the extensive administrative process to record, monitor and report on compliance. It is expected that the development and implementation of this module will result in considerable savings to administrative and academic staff workloads. In the longer term, it is

planned to include the student evaluation of teaching and units, along with a more systematic means of reporting outcomes.

It is planned that Stage Two of the project will be completed by the end of June 2006. Some of the modules are currently being tested by Administrative Staff, with the view to release progressively to academic staff, depending on the result of further development and initial testing.

What's in Store for the Future?

Stage Three of the project is planned to be partially completed by July 2006. This stage will encompass the design and development of the three final modules, Academic Workloads, Educational Development and Unit Guides.

The Academic Workload module will link academics teaching, research and administrative responsibilities to the other modules, but specifically to the current curriculum offerings, academic leave together with the quality reporting requirements. This module will facilitate the application of the faculty's academic workload model. The model is used to allocate academic staff teaching load as well as determining sessional staff entitlements taking into account staff research profiles, along with other academic and administrative responsibilities.

It is expected that the academic workload module will need to be quite flexible and adaptable to enable it to cater for the potential implications from the proposed changes to the allocation of research funding to Universities. It is anticipated that the academic workload model applied within the faculty will progressively change with the expectation that academic staff will be classified as teaching intensive, teaching and research, or research intensive. Each type will have different workload allocations and workload discounts, which may vary from time to time.

The Educational Development module will facilitate the project management, monitoring and reporting of the educational development activities within the faculty. The faculty's operational plan has established targets for further integration of on-line learning through Deakin Studies Online (DSO), the University's corporate online delivery system. The University requires every coursework unit offered to have at least a 'Basic' online presence. Units offered within the Faculty of Arts, range from Basic to wholly on-line, with many variations in between.

The educational development related activities undertaken within the TLG include the review and update of units, through further integration of DSO and, where appropriate, the production of other materials (CD-ROM's, hard copy study guides and readers), as well as the allocation of resources, material delivery, and quality assurance reporting. The focus of this module will be on the effective administration of these activities. In the longer term, this module has the potential to also incorporate professional development activities for academic staff.

The final module to be developed is the Unit Guide module. A Unit Guide is produced for each coursework unit and updated every teaching period. It contains particular unit information such as aims and objectives, content, assessment regimes and marking criteria, together with more general information. The development of this module is two fold, the facilitation of the relevant administrative processes as well as integrating pertinent University policy and procedural requirements.

The development of this module will replace the current system which relies on complex spreadsheets and considerable editing and formatting of a faculty 'Unit Guide Template' maintained in a word document. The task of producing a unit guide has become quite cumbersome and time consuming for academic staff in particular. Requirements within the University's Assessment (Higher Education) procedure have considerable implications to the information provided to students within the Unit Guide. These include:

- Students should be advised of all the requirements of assessment at the beginning of each semester
- Each piece of assessment should be accompanied by clear assessment criteria, which are effectively communicated to students and assessors
- All descriptions of units in the Handbook shall contain a statement of assessment requirements, including hurdle requirements in the form of a list of items and their percentage weighting. In unit guides, students shall be informed of other details including topics, dates by which assignments must reach the faculty, word limits and requirements for presentation. If there is provision for some negotiation of assessment tasks (for example allowing students to nominate topics), the procedures for this negotiation shall be clearly stated.
- Faculties shall determine and publish their rules on submission, including hurdle requirements, covering such matters as extensions, penalties for late submission and final submission date.
- Assessment tasks should only be set when the assessment panel has ascertained that essential texts or learning resources are available at the time of setting the task

Some of the information within the Unit Guide will be sourced from the University's web handbook, much of which is text based, with the Unit Chair providing the balance. Faculty templates will be provided within the Unit Guide form where appropriate.

This module has the potential to decrease academic workloads considerably, thus fostering the implementation of the various aspects of the procedural requirements in a more positive way.

The development and implementation of the modules outlined above will provide the faculty with an invaluable tool to assist with operational and strategic planning. The limit of the database capability is driven primarily by the availability of resources. With appropriate funding, the database could be extended to include course information which could incorporate the administration of Academic Advisory Boards, accreditation and reaccreditation of courses, along with other course related information currently maintained by faculties.

In the medium to long term there is the potential to use the database as a prototype for other faculties. This could also lead to support from the University to fund an inter-relational database that will link to the University's core system (Callista), as well as other corporate systems including the Unit and Course database which in turn link to the University web handbook. The utopia of all systems would be the development of a corporate database that included all of the core activities of the central Divisions and the Faculties.

Conclusion

This paper has described the initial development of a Teaching and Learning database project that is set to alter traditional practices within the Faculty of Arts in meeting quality reporting, and in integrating other core teaching and learning activities such as curriculum maintenance and academic workloads. The local development undertaken by the faculty thus far can already be contributed to savings to academic and administrative staff workloads. Further development and implementation of the database has the potential to further enhance teaching and learning administrative processes, while providing a prototype for the University that may be used to design and develop a corporate system that meets the needs of other faculties and the University. In addition, it has potential to be implemented by other universities, which perform similar functions, since the design and development of the software can be adapted by other organisations.

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Biography

Kathy Connoley has worked in the Higher Education Sector for nearly fifteen years. Previous to her current role, she worked within the central divisions where she held various positions in the areas of admissions, enrolments, examinations and student load planning. Kathy is currently employed by the Faculty of Arts as the Manager, Teaching and Learning Group. This position manages the activities that relate to the Faculty's curriculum and academic programs, publications, academic administration, teaching and learning and quality assurance, so that processes and systems have a high level of quality and consistency. The role facilitates an effective link between the Teaching and Learning Development Plan and academic staff.