



FIRST YEAR COORDINATORS IN MATHEMATICS

A guide to developing the role of First-Year Mathematics Coordinators in your university











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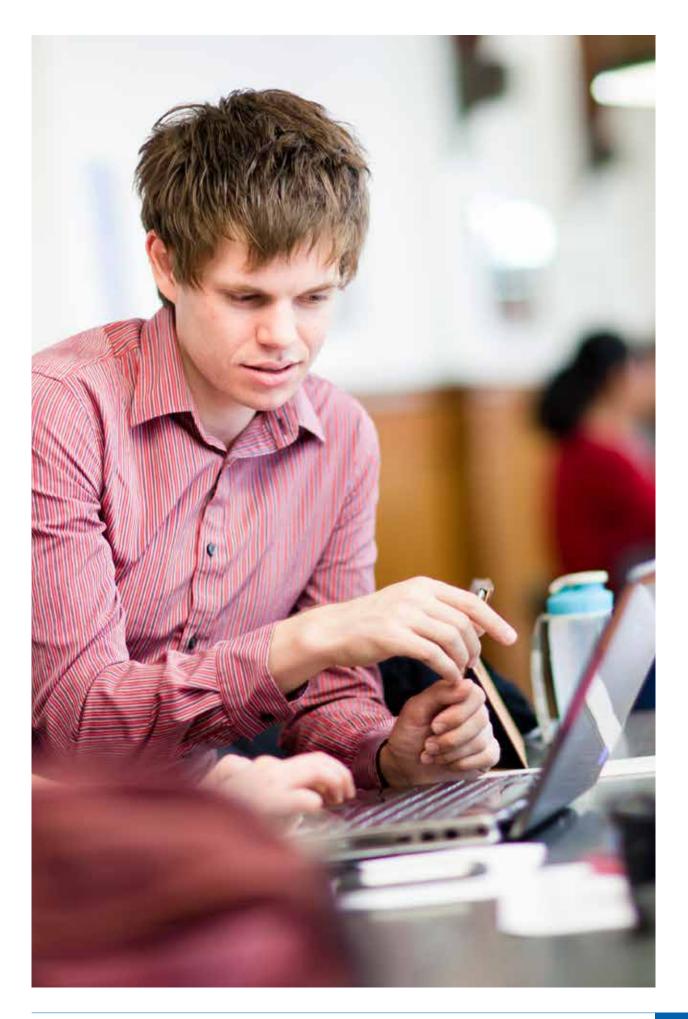
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Contents

Glossary	4
Introduction	6
Background and context	7
FYiMaths Findings	9
The benefits and limitations of a first-year coordination role	10
Designing a First Year Coordination Position	13
Key considerations	13
The Goals	13
The School	16
The Individual	17
Case Studies	19
Case Study 1 Eva	20
Case Study 2 – David	22
Case Study 3 – Mai	24
Case study 4 – Dev	26
Case study 5 - Andre	28
Resources	30
Framework for developing a first-year coordination position	31
Ste-by-Step guide	32
Job description	33
Develop your job description	35
References	36
Project team	38

Glossary

AAMT	Australian Association of Mathematics Teachers
ACDS	Australian Council of Deans of Science
AMSI	Australian Mathematical Sciences Institute
Assumed knowledge	Knowledge students are expected to have on entering a subject to facilitate understanding of the study material
Course	A program of studies required for completion of a degree
FYiMaths	The First Year in Mathematics (FYiMaths) project was funded by the Office for Learning and Teaching (2012-2014). It investigated the role of first-year mathematics coordinators, developed resources (www.fyimaths.org.au) and established a network (FYiMaths Network) of tertiary mathematics educators
Mathematics	Throughout the report mathematics is used to denote mathematics and/or statistics.
OLT	Australian Government Office for Learning and Teaching
Program	A suite of subjects offered at a particular year-level of a degree or at multiple year-levels
School	An academic department responsible for a particular discipline
SOTL	Scholarship of Teaching and Learning
STEM	Science, Technology, Engineering and Mathematics
Subject	In this document, subject means a single unit of study
Service subject	Subject taught to provide the knowledge and skills in a particular discipline area that are required by another discipline area



Introduction

The effective delivery of first-year mathematics programs offered by Schools of Mathematics involves significant educational and administrative challenges. These include the complex logistics of managing large student cohorts, meeting the needs of students with diverse mathematical backgrounds and adapting the curriculum for a wide range of disciplines through the provision of service subjects. In some institutions a First Year Coordinator or Director of Mathematics¹ has been appointed to oversee program delivery, to provide leadership in curriculum design and teaching, to create administrative efficiencies and to provide expert advice on all matters relating to first-year mathematics. Whilst the significant managerial and administrative benefits of such a role are evident and highly valued, the coordinator's expertise and leadership potential is often untapped or compromised by the unduly heavy administrative workload that is part of the role.

This Guide is intended to be a practical resource for Heads of School of Mathematics intending to establish or review a First Year Mathematics coordination role, academics in existing First Year Mathematics coordination roles or those who might be thinking of assuming such a role. It provides the wider context and rationale for the development of first-year coordination roles, an overview of the key considerations involved in designing the role and some guidance in relation to the resources required to do this effectively. The guide is not intended to be prescriptive, as each institution will have a unique set of characteristics that will shape a role suited to its needs. To facilitate the design process we have included illustrative case studies highlighting a variety of features.

The Guide has been developed from data collected in interviews conducted as part of an Office for Learning and Teaching funded research project, known as the First-year in Mathematics project (FYiMaths)² .This guide should be read in conjunction with the full report available on the website **www.fyimaths.org.au** via menu; **FYIMaths Project** > **Background**.

Four Heads of School of Mathematics and 40 academics who held program, subject or discipline coordination roles in mathematics at 26 universities in Australia and New Zealand were interviewed. Of the 40 academics interviewed, 20 individuals held an overarching coordination role for first-year mathematics, although some were not given a title that denoted this. In some institutions this individual was responsible for the coordination of all mathematics subjects offered in their School, whereas at others there were numerous coordinators, each responsible for key first-year entry point subjects.

Table 1. Types of coordination roles identified in the FYiMaths project

Types of coordination roles identified	
First Year Coordinator	7
De-facto ¹ First Year Coordinator	2
Mathematics discipline coordinator or leader ²	7
Undergraduate coordinator ³	4
Total	20

¹ The term 'mathematics' is used to denote 'mathematics and statistics'.

² The FYiMaths project (2012-2014) was funded by the Office for Learning and Teaching.

The nature of these 20 coordination roles varied according to the structure and size of the mathematics program, the number of enrolled students, the types of mathematics subjects (mainly service subjects or subjects intended for mathematics majors) offered in the School, the number of academics involved in teaching and the organisational structures of the School and Faculty. The titles used included Director of First Year Studies, Coordinator of First Year, Discipline Leader and Undergraduate Coordinator (Table 1). The academic level of the incumbents ranged from Level A (Tutor) to Level D (Associate Professor). Two individuals were interviewed who had coordination responsibilities that were not acknowledged officially with a title, but due to their role in subject coordination and teaching, were effectively 'de-facto' coordinators.

The title 'First Year Coordinator' will be used throughout this document to denote the range of roles that have significant coordination responsibility for the delivery of first-year mathematics programs.

One of the key findings of the FYiMaths project was that across the range of coordination roles identified above, few individuals had specific job or role descriptions that included coordination responsibilities in addition to, or instead of, the generic academic teaching and research responsibilities. This meant that it was difficult for the coordinator to evidence that they had met key performance indicators and hence cases for promotion were hard to argue. An additional consequence was that coordinators were vulnerable to the frequent assignment of additional administrative tasks, many of which were arguably peripheral to first-year learning and teaching matters. The resultant increase to their workloads (many already very high), led to a gradual erosion of available time for innovation or higher-level tasks.

This guide has three goals:

- To identify the benefits of establishing a First Year Coordinator Position
- To describe the challenges being faced by those currently in such roles
- To propose a flexible framework for designing the position that may be adapted to specific local needs and is based on examples of best practice.

Background and context

This investigation of the role of First Year Coordinator was informed by recent research and commentary on the academic workforce and the changing roles of academics in response to the many challenges facing universities.

Traditionally the standard academic role has focused almost exclusively on research and teaching. However the academic role is changing in response to new expectations, including the devolution of administrative tasks and increased managerial responsibilities. There is now a growing recognition of the wide variation in types of responsibilities that an academic has with a consequent change in the proportion of time spent on management, teaching and research (Bentley, Goedegebuure, & Meek, 2014; Bexley, James, & Arkoudis, 2011; Probert, 2013). Some argue that in order to build capacity in Australia's academic workforce, academic roles need to be reconceptualised to acknowledge a wider range of responsibilities, which encompass leadership, management, and high-level administration in addition to teaching and research (Coates & Goedegebuure, 2010a).

¹ Not officially a coordinator, but due to a combination of duties this role had significant influence across the first-year program.

² Coordinates teaching and development of mathematics subjects across the discipline and includes all levels of subjects, usually when mathematics is part of multiple Schools.

³ Coordinates mathematics program across all levels of undergraduate subjects within the School or Department of Mathematics.

The establishment of teaching-specialist or teaching-focused roles is one attempt to design a new role, which responds to the diversity in modern academic life. These roles aim to address the challenges and complexities involved in undergraduate teaching and contribute to an improvement in the quality of learning and teaching (Probert, 2013). However, there remain concerns that the responsibilities and key performance indicators for academics in these positions are not well-established and vary across institutions. As a consequence, the positions may not present a viable career path for academics (Probert, 2013). Probert's research indicates that teaching-focused positions in some institutions were being used to promote the learning and teaching agenda by supporting experts in this area, while in other institutions they were being used to protect the university's research profile by designating underperforming (teaching and research) staff as teaching only (Probert, 2013).

This discussion about academic roles raises the question of how well academics are prepared to assume new roles that have a significant management and teaching component, rather than the traditional research focus. In many institutions, research remains the primary academic promotion criteria, and so it is important to consider the impact on career progression of roles that limit research opportunities. While there are many commonalities between academic roles across the disciplines, there are discipline-specific characteristics of teaching traditions, assessment practices and student cohorts that shape the responsibilities and experiences of teaching-academics.

In addition to being a subject in its own right, mathematics is fundamental to the study of a wide range of disciplines and it is this dual purpose that makes it unlike many other academic disciplines. In most Schools of Mathematics in Australian universities the majority of students study mathematics as a 'service subject', which is required for completion of their degree in engineering, education, science, business or health sciences. These large cohorts of first-year students have a wide range of mathematical backgrounds and abilities and are not necessarily studying mathematics by choice. It can, therefore, be difficult to engage them in the study of mathematics. The teaching of mathematics as a service subject requires more contextual understanding, versatility and adaptability on the part of academics than is required when teaching mathematics students at later year-levels. Larger universities may be able to cater to diversity (in mathematical background or discipline major) by offering a range of specialized mathematics subjects. But for those institutions that do not have sufficient students or staff, teaching classes of mixed ability and variable discipline major is the only viable option.



Management of these disparate requirements is often allocated to a 'First Year Coordinator' or Undergraduate Coordinator. Academics in these coordination roles have a significant part to play in implementing transition programs, in connecting directly with students who are experiencing problems, and in mentoring the staff in classrooms (Kift, Nelson, & Clarke, 2010; Roberts et al., 2011). These coordinators are expected to exercise leadership in curriculum development, teaching and assessment, and need to have the necessary authority, resources and networks to effect change.

FYiMaths Findings

The FYiMaths project identified that existing First Year Coordinators make significant contributions to the management and leadership of first-year mathematics programs by addressing the challenges involved in teaching the increasingly diverse first-year student cohort³. First Year Coordinators' comprehensive knowledge of first-year teaching practices, curricula and student needs, enabled them to develop effective measures to improve student transition, retention and progression. However, it also found t hat the absence of explicit authority or a defined position description restricted the effectiveness of a coordinator by limiting his/her ability to effect change and prioritise responsibilities. It was also evident that incumbents in these roles had significant untapped potential leadership in teaching scholarship and innovation.

The project found that existing first-year coordination roles in mathematics had significant administrative and managerial responsibilities, with very high workloads that limited discipline research or scholarly output. Most were designated as teaching and research academic roles, with additional managerial and administrative responsibilities being partially offset by some reduction in teaching load. Of the 20 designated coordinators, ten were involved in education-focused research, with three of those also conducting research in mathematics. While most coordinators were able to maintain some research output, they described it as limited and felt that this limitation was detrimental to their promotion prospects.

While a number of universities with large mathematics programs had well-established first-year coordination roles, there were also new coordination roles that were informal or emerging. The 'shape' of these roles was determined by the needs of the School or the particular skills and background of the incumbents. These roles were usually not defined by formal position descriptions nor assessed against key performance indicators that reflected their institution's priorities. The imprecise nature and purpose of these positions meant that promotion criteria were also unclear and in many cases still relied mainly on (discipline specific) research output.

We identified commonalities in these coordination roles, the skills of the incumbents and the challenges they faced:

- The incumbent is usually an experienced academic, with a breadth of knowledge of undergraduate curricula and administration gained through years of experience in teaching and coordinating mathematics subjects.
- The incumbent is usually classified as a teaching and research academic, although an increasing number are in teaching-focused roles.
- The position always includes a significant management responsibility and is often remunerated at a higher level than standard subject coordinators and teaching academics.
- These positions do not generally have the appropriate level of delegated authority needed to allow effective implementation of decisions.

³ See final project report 'Building leadership capacity in university first-year learning and teaching in the mathematical sciences' at www.fyimaths.org.au via menu; FYIMaths Project > Background.

- The challenges of teaching student cohorts with diverse backgrounds who are enrolled in different degree programs, create significant problems in administration, curriculum development and student management.
- The high teaching, management and administrative workload make the development of new initiatives and strategies for curriculum renewal and innovative teaching difficult.

The following recommendations and suggestions are based on evidence from our research about how First Year Coordinator roles can operate most effectively.

The benefits and limitations of a first-year coordination role

A defined first-year coordination role can benefit a School of Mathematics by providing leadership, oversight and expertise in both managing and improving first-year teaching. The complex nature of most first-year mathematics programs means that a broad detailed knowledge of degree programs, teaching practices and administrative processes is essential. The role also needs clearly defined authority within the School's existing management structure and clear lines of reporting in order to lead teaching innovation, establish strategic relationships and effect change.

The benefits of having a First Year Coordinator were clearly identified in our data. They were highly valued:

- By Heads of School for their oversight of curricula and quality control.
- By colleagues in their Schools as the 'go to' person in the School with a broad knowledge and expertise in first-year teaching and administration.

It's absolutely invaluable to us... to have someone who is responsible not just for coordination, which is operational, but to maintain quality, to ensure consistency.

Head of School, University J

- By students and central administration as the single point of contact for enquiries and requests for information in relation to first-year mathematics subject selection, entry requirements and degree structure.
- By other faculties as the key liaison contact for information regarding service subjects, curricula and student learning.

While many of the First Year Coordinators did not see themselves as leaders, there was a significant element of leadership evident in their roles. Examples are:

- Ensuring consistency and quality in delivery of first-year subjects through broad oversight of curriculum, assessment processes, teaching practices and course materials.
- Driving change, improvement and innovation in teaching, providing direction and vision, with a strategic focus aligned to the long-term goals of the School.
- Establishing and maintaining relationships with staff in other faculties.
- **Providing guidance and encouragement to lecturing staff** to apply for internal and external grants to develop innovations or refresh teaching and subject delivery.
- **Promoting excellence in teaching**, facilitating adoption of new teaching and learning practices using a range of methods such as instigating teaching and learning discussion groups, seminars, training programs, mentoring, team-teaching, professional development.

- **Representing the mathematics discipline perspective** to external groups such as academic program committees and external bodies.
- **Providing leadership in researching current practices** in teaching undergraduate mathematics by attending relevant conferences, seminars and meetings and sharing this with staff. Topics include online learning, flipped classrooms and assessment.

However, these Coordinators were limited in their capacity to achieve their desired goals by a range of factors. We identified the most common limitations as:

- A lack of positional authority. This often meant that coordinators did not have the power to direct staff, implement change or make decisions, even on minor matters.
- An unrealistic workload. The inadequacy of traditional academic workload models in allocating sufficient weight to managerial and administrative responsibilities led to unrealistic expectations regarding research output and teaching commitments. The time allowance for administration was underestimated in most existing roles.
- A lack of formal position description. The responsibilities of the roles were almost always unclear and additional responsibilities were too easily attributed to the role without consultation or negotiation with the Head of School (or the incumbent).
- An ambiguous career path. The workload and type of responsibilities reduced research capacity, which meant that this position was not seen as a positive career step by many and therefore was often avoided by well qualified candidates.

These limitations are not a surprise, but reflect the growing awareness of problems in traditional academic roles and career paths and the need to recognize the increasing requirements within Schools for expert academic managers (Coates & Goedegebuure, 2010b; Probert, 2013). A first step in addressing these limitations is to design a role that not only meets the needs of the School and University, but considers the career path and professional development of individuals that may fill the role.



Designing a First Year Coordination Position

Key considerations

As with any position, the processes for designing a first-year coordination position, will be determined by the size and needs of the School, the strategic goals to be achieved, the existing management and staffing structure and any particular local challenges in the design and delivery of subjects. The position's responsibilities and level of remuneration will need to be aligned to institutional and departmental key performance indicators, performance appraisal processes and academic promotion criteria. This includes articulating expectations of research output and addressing the impact this position will have on the future research aspirations of the incumbent through appropriate time compensation, for example, provision of time release from teaching to engage in research after leaving the role.

The individual selected for the position will also influence how the role develops over time, as they use their existing skills and expertise, and develop new skills in response to the challenges they encounter.

'A job consists of a related set of tasks that are carried out by a person to fulfil a purpose.....A role is the part people play in carrying out their work... Roles are therefore more about people than jobs and this means that the extent to which a role can be 'designed' may be limited or even non-existent where flexibility and growth are important'

- Armstrong & Taylor, 2014, pp. 327-328

In this section we will outline the key steps in developing a new First Year Coordinator's position, or in reviewing an existing one.

- 1. Clearly articulate the purpose (goals) for establishing this position.
- 2. Determine the skills and background required to achieve these goals.
- 3. Develop the job description.
- 4. Determine the level of authority and relationship with existing School management structure.
- 5. Develop appropriate performance indicators and promotion criteria linked to institutional policies to ensure appropriate career path and professional development for the incumbent.

The Goals

First-year coordination roles are generally introduced to ensure consistent approaches in the curriculum, course advice, teaching and administrative management of first-year teaching programs, and to address specific issues or challenges in the School. The expertise and broad view of undergraduate teaching that these roles afford also means that they have significant potential to provide leadership in teaching innovation, mentor teaching staff, conduct research in mathematics education and initiate outreach with schools.

Key responsibilities may include:

- Introducing innovation and driving change in teaching practices.
- Introducing administrative efficiencies, given the complexity of administering large numbers of first-year mathematics programs.
- Monitoring consistency and quality in curriculum and teaching materials.
- Supervising a large tutor or demonstrator workforce.
- Implementing new technology.
- Conducting research and supporting initiatives in scholarship of teaching and learning.
- Mentoring new lecturers and tutors.
- Developing outreach activities in local secondary schools and with mathematics or education organisations, for example, Australian Mathematics Teachers Association (local chapters) and programs like CSIRO Scientists and mathematicians in schools.
- Establishing university mathematics extension programs.

Coordinators' roles will have multiple areas of focus and shifting priorities, reflecting changes in casual staffing, subjects, School structure or teaching requirements. To facilitate management of these, reporting lines should be made clear, with the First Year Coordinator and Head of School regularly reviewing workload. While flexibility is important in responding to emerging challenges, ensuring that the focus of the role remains on the key priorities is essential.

While the initial reasons for appointing a First Year Coordinator may be clear, over time it can be difficult to ensure that the identified goals continue to take priority. As the scope and potential of the role is realized it can accumulate additional administrative and management responsibilities. While most of these new responsibilities sit logically with the coordinator, it can result in an unmanageable workload and make it difficult for the coordinator to give appropriate attention to more strategic issues. A regular reassessment of workload and priorities is important to identify needs for additional administrative support or creation of a deputy coordinator's role.

First-year coordination roles need to focus on a small number of the following areas at any given time:

- Administration and logistics Coordination of complex administrative processes ensuring efficient administration of subjects including management of student enrolments, timetabling, tutor allocation and processing student results.
- Management Coordination of the range of first-year subjects to ensure consistency of approaches to teaching and administration, also identifying problems and developing solutions through consultation and investigation, demonstrating leadership in School forums, managing staff, assessment processes.
- Teaching innovation and quality control Evaluation and oversight of teaching quality in relation to pedagogy and curriculum, production of teaching materials, mentoring new staff. Maintaining awareness of initiatives and trends in the sector and inspiring innovation in teaching to improve student engagement and outcomes. This can include being active in scholarship of learning and teaching, developing local initiatives and establishing connections with national projects and other Schools of Mathematics.

- Curriculum design and review Regularly reviewing curriculum content and ensuring it meets the needs of students and other disciplines and that it addresses relevant academic standards and reflects current developments in the field of mathematics. This could involve revision of lecture content, tutorial exercises and course materials informed by senior secondary mathematics curricula and benchmarking against similar tertiary programs.
- Liaison Formal and informal communication with client Schools in relation to service teaching curricula and student outcomes.

In developing or reviewing a first-year coordination role, a useful starting point is identification of the key issues to be addressed in your School:

- Do you want to develop teaching practices and introduce innovations in teaching?
- Do you need to ensure curricula are regularly reviewed to meet requirements of majors and service subjects?
- Do you want to ensure operational management of subjects, students and teaching is efficient and consistent?
- Do you want to have a single point of contact in the School for all issues relating to first-year?
- Do you want a manager to coordinate staff?
- How much decision making authority should be delegated to the First Year Coordinator?

Defining a focus for the role is the starting point for developing the range of responsibilities, but it is also important to identify how the role will fit into existing organizational structures in the School.



The School

The management structure, allocation of responsibilities and lines of reporting in Schools of Mathematics depend on a number of factors, including the number of staff, number of subjects offered and size of enrolments, as well as the related structure in the faculty and institution. In many Schools there are a range of coordination roles, such as Honours Coordinator and Undergraduate Coordinator, which may include responsibility for overseeing the curriculum and student results. These roles are largely advisory and consultative, with no direct supervision of staff. They are often held for a limited period, with the expectation being that the additional duties be accommodated within the usual service component of the academic's workload allocation. However, First Year Coordinators roles generally have higher levels of responsibility, some of which would normally sit with the Head of School, including staff management, administration of student enrolment, progress and results, and high level management tasks that impact on the successful running of the mathematics program. The complexity and scale of the role means that First Year Coordinators need time to adjust when starting in the role and remain in the position for a number of years; long enough to implement and review policies and processes.

The creation of a first-year coordination role may involve delegation of some responsibilities normally held by the Head of School, such as allocating teaching to academic staff. It is essential that the coordinator's responsibilities are formalized in a position description, with clear reporting lines and with the appropriate level of authority, as without this it can be difficult for the coordinator to effect change.

In order to determine how the role of First Year Coordinator will fit into the School management structure, the following questions should be considered:

• How is the management, administrative, teaching and research workload determined?

We found in our study that the management responsibilities of the role were underestimated. The administrative workload for most First Year Coordinators was overwhelming and significantly impacted on their ability to give appropriate time to higher level tasks or to conduct research. To avoid this, administrative workload should be carefully defined and appropriate administrative support should be provided when required. It is important to ensure that First Year Coordinators are not unduly engaged in significant amounts of data entry, typesetting, photocopying or other low level, time consuming tasks. If administrative tasks require no academic judgement, they may be more appropriately assigned to administrative staff.

While the normal rhythm of teaching academics' workloads varies according to the time of semester, the workload associated with first-year coordination is unrelenting due to additional tasks like overseeing extra examinations, class planning, special consideration requests, review of unsatisfactory progress, casual staff recruitment and training, mid-year student enrolments and approval of subject changes. Such tasks require ongoing attention through non-teaching periods and make it difficult to allocate time for research or scholarship. If the First Year Coordinator is expected to engage in research, it is important to support this by allowing some flexibility in teaching load, or by appointing a deputy coordinator, in addition to providing administrative support to assist with some tasks.

• What is the appropriate academic level for the First Year Coordinator?

The academic level and experience of the coordinator may be an important consideration when the individual has responsibility for implementing change and overseeing activities of colleagues, for example, allocating teaching workload, supervising casual staff or introducing new teaching or assessment practices.

• Who will the First Year Coordinator supervise directly? Responsibility for managing staff needs to be clearly identified in terms of lines of reporting and authority. If the First Year Coordinator has delegated authority for appointing and training casual

lecturers and tutors, or has managerial responsibility for any aspects of continuing staff's tasks or performance reviews, this should be made clear.

- What existing roles and committees have responsibilities for first-year subjects? First-year coordination roles need to have clear connections with existing management structures within the School. Membership of committees responsible for undergraduate studies provides an effective communication channel for the First Year Coordinator in relation to implementing changes to teaching practices and reviewing curricula.
- What level of responsibility will the Head of School invest in the First Year Coordinator? Where the Head of School has delegated decision making authority to the First Year Coordinator it is important to clarify the level of that authority, both for the incumbent and broadly within the School. If the First Year Coordinator does not have delegated authority, then it should be made clear that the role is advisory only. If authority is not directly devolved, the Coordinator's ability to manage change will be limited. The position needs to have the support and endorsement of the Head of School to ensure staff respond appropriately.
- How does this role fit into the career path of a teaching and research academic?

The career path for First Year Coordinators is an important consideration when establishing such a position within the School. The position needs to support an incumbent's progress, whether that is to a teaching-focused role (education focused research), to other management roles or to return to a teaching and research role (discipline focused research). If research activity, in either mathematics or scholarship of teaching and learning, is a criterion for promotion, the incumbent must be given time and opportunity for that research. If the incumbent is not expected to participate in research while they are First Year Coordinator, provision should be made to support their return to research when they leave the position. One option worth considering is to provide

a semester free of teaching at the end of the incumbent's time as First Year Coordinator. If the role is seen as a temporary position for permanent staff, it is important to ensure succession planning and acknowledge the impact on research output.

Ideally the role would provide incumbents with the opportunity to build those management skills that will benefit them in future more senior roles. This requires a job design that involves appropriate tasks and responsibilities for the academic level of the incumbent, and the opportunity for professional development if required and a clearly defined pathway.

The Individual

Since the role of a First Year Coordinator encompasses a broad range of responsibilities it may be the case that you do not have an academic staff member with an appropriate skill set. Advertising the position externally can be an effective way to meet your needs and bring 'fresh eyes' to your situation. If the appointment is internal, thinking about professional development opportunities and mentoring becomes more important. Either way, the appointee's particular background and expertise will influence how the role evolves.

The research interests of the incumbent are an important consideration. If the First Year Coordinator is responsible for promoting teaching quality and innovation, this can provide an opportunity for the incumbent to initiate research in teaching and learning. In this case 'teaching scholars' or 'teaching focused' roles can provide a career path for the individual by recognizing education focused research that aligns with the focus of the role in managing teaching quality. If the incumbent's research interest is mathematics, then this needs to be accommodated in the workload.

In developing the role it is important to identify those skills that an academic could reasonably be expected to already have and those that the individual has potential to develop. The key skills and background that are advantageous for coordinators to have or develop over time are:

- Significant experience in teaching mathematics and/or statistics in first-year and higher level subjects, including subject coordination.
- Good knowledge of university rules and processes for student enrolment and progression.
- Understanding of, and empathy for first-year students' transition issues, such as adapting to new styles of learning, isolation and financial pressures.
- Self-motivation and confidence to initiate change and address challenges.
- Good communication, negotiation and interpersonal skills.
- Sound knowledge of mathematics and/or statistics curricula and service subject requirements.
- Understanding of senior high school mathematics curricula and awareness of issues and trends in secondary mathematics education.
- Time management and organisational skills.
- Managerial experience or aptitude to develop managerial expertise, in an academic setting.
- Some experience in **staff supervision**.
- A broad understanding of national/international **undergraduate mathematics education issues**.

A program of **professional development** should be initiated for each incumbent to address their needs and be adapted when new responsibilities are added to the coordination role. For example First Year Coordinators may be responsible for performance reviews, financial matters and using new student management software. Formal training should be arranged in these cases. Professional development opportunities are also important elements in developing a future career path for coordinators. In addition to formal training programs, supportive mentoring by an academic manager or senior academic from outside the School, is an effective way of supporting the First Year Coordinator both with practical advice and the development of managerial skills.

First Year Coordinators often require professional development in the following areas:

- **Training in management and supervision**, particularly in relation to building personal confidence in developing new administrative processes, performance development reviews, resolving disputes with staff, identifying efficiencies in administrative processes.
- Leadership training in evaluation, conducting organization reviews, change management, workflow and staffing.
- Time management and administrative skills, particularly in university specific processes and reporting requirements.
- Developing scholarly approaches to teaching (if research in this area is required) by being involved in active scholarly networks and keeping abreast of latest developments in mathematics education. Support should also be provided to staff interested in initiating research activity in scholarship of teaching and learning, such as training in research methodologies and writing articles for publication and attending national and international conferences in tertiary mathematics education.
- Human resource policies and procedures relating to appointing and managing staff, including staff appointment, performance management and finance processes.

CASE STUDIES

The case studies of current first-year coordination roles are based on interviews conducted with academics in Schools of Mathematics in Australian universities. These case studies describe real positions and illustrate the differing backgrounds of the individuals in them together with the variety of responsibilities they hold. The names of the coordinators and some details have been changed to ensure anonymity.

CASE STUDY | EVA



'It's like a machine here. You've got to have somebody who's looking after the machine and cranking the handle at the beginning of the session, getting it going and keeping it going.' - Eva

'I regard it as absolutely essential and one of most important roles in the school...it's absolutely invaluable to us, to have someone who is responsible not just for coordination... but to maintain quality, to ensure consistency, not just across one year and different people involved in teaching, but across several year (levels).' - Head of School Eva is a First Year Coordinator of mathematics in a large metropolitan university. The School of Mathematics has over 3,000 students enrolled in a range of subjects, including several very large subjects. The School caters to the needs of a wide range of science, engineering and business degree programs, as well as to a mathematics degree. Eva has many years of teaching experience in the secondary and university sector, has an extensive knowledge of mathematics curricula and contributes to mathematics texts through external bodies. She also has extensive experience coordinating undergraduate mathematics subjects, supervising casual academic staff and managing large cohorts of students.

Her main responsibilities involve overseeing the mathematics curricula, undergraduate mathematics teaching and student administration related to first-year mathematics subjects. Eva has published a small number of papers in recent years, and while the First Year Coordinator's role is not designated as teaching focused, it is generally 'understood' that the incumbent will not have much time to do research. A recent internal review has identified the need to appoint a deputy – coordinator to assist with Eva's high workload and for succession planning. There is also some administrative support available to the role.

Eva feels that the First Year Coordinator's role creates significant efficiencies for the School by providing oversight of complex administrative processes and consequently relieves other academic staff from this responsibility. Her extensive experience in teaching and curriculum development informs her approach to the management of the teaching operation including the administration and coordination of a large number of students and teaching staff, organization of the casual tutor workforce and the quality control of curricula and teaching materials. For these reasons, the role is highly valued by the Head of School who also sees the role as providing an important and visible connection between the School and external stakeholders, such as other university faculties, secondary schools and the state curriculum authority.

Overall, for this School the main benefits of the First Year Coordinator role are the:

- efficiencies it creates in administration of students and staff across all first-year subjects,
- quality control of teaching practices, curriculum and assessment,
- central contact point it creates for students and staff, and
- communication established with internal and external stakeholders.

Eva's Key Responsibilities as First Year Coordinator

1. Program Management and Administration

- Assisting the Head of School in forward planning for staffing and resource allocation.
- Timetabling lectures and tutorials, casual staff allocation, checking enrolment data and negotiating teaching allocations, monitoring class sizes and modifying enrolments for streaming, room bookings.
- Student administration, including direct communication with large numbers of students for course advice and subject selection.
- Assessment preparation, including liaising with relevant subject coordinators on preparation, finalization and submission of examinations to central administration.
- Coordination and management of assessment, including the marking of examinations, allocation of permanent and casual staff for marking and liaising with staff on marking schemes.
- Providing quality control and consistency across all aspects of first-year administration, staffing, enrolment, assessment and teaching materials.
- Negotiation of administrative deadlines with central student administration.

2. Staff supervision

- Negotiating teaching allocations for lectures and tutorials with discipline coordinators, lecturers' workloads and responsibilities.
- Selection of tutors, including the interviewing and vetting of potential tutors, providing orientation and training sessions, and providing mentoring for new tutors in the first weeks of teaching.

3. Curriculum development

- Quality control of teaching materials, including review of first-year subject teaching materials, lecture content and assessment tasks. This involves checking teaching materials for errors, ensuring examples and content are clear and easy for others to teach.
- Liaison with teaching staff on curricula and subject materials.
- Liaison with relevant Schools regarding content for service subjects.

Eva's Key responsibilities as part of the Standard Teaching, Research and Service

Eva is passionate about teaching and takes on a larger teaching load than her colleagues teaching first-year. She also teaches higher-level undergraduate mathematics subjects.

She is involved in developing online lectures and video consultations. She conducts some research in mathematics and mathematics education.

CHALLENGES

At Eva's university there are no mathematics prerequisites for entry, which creates challenges in managing student enrolments in first-year subjects. Students seek advice regarding enrolment and make their own decisions regarding their eligibility to enrol in particular subjects. Many students over estimate their capabilities and choose subjects they do not have the background for. This can result in a significant amount of administration in managing class sizes since numbers fluctuate in the early weeks of semester as students move between subjects. Eva's workload is high and often requires her to work longer hours, particularly during examination periods. Eva is also a key contact for students experiencing personal difficulties that affect their studies, and often needs to assist students to access counselling or make important decisions about their enrolment. There is no position description for the role, which means that the responsibilities tend to be negotiated by each appointee and are dependent on their particular skills and interests, creating some discontinuity between incumbents

CASE STUDY DAVID



'I have to show leadership and demonstrate whether [new ways of teaching] can be done in mathematics.'

- David

David is the First Year Coordinator at a metropolitan university, where the School of Mathematics offers a wide range of service subjects for engineering, science and business to a large student cohort. The first-year coordination role is new for this School and David is a mid-career academic with experience teaching and coordinating first-year and later year subjects. The role is still evolving in response to many changes at this university, and has a strong focus on developing and supporting the adoption of new teaching practices across the first-year program.

It is expected that David will soon assume a mentoring role for teaching-focused academics to assist in the development of learning and teaching initiatives within the school. This means a further increase in workload.

David sees the key benefits of his role are in the oversight of student administration, curriculum development, support of reflective teaching practices and mentoring new staff. He has detailed knowledge of curricula and degree program structures, gained through a departmental review in recent years. He is a single point of contact for enquiries from student administration, other schools and staff teaching in first-year mathematics and is valued by colleagues for his depth of knowledge and approachability.

Overall, for this School the main benefits of the First Year Coordinator role are the:

- efficiencies afforded by the oversight of administration of students across all first-year subjects,
- expertise in first-year teaching and detailed knowledge of curricula and degree structure that informs teaching,
- reliability and efficiency created by the central point of contact for students and staff and effective liaison with all stakeholders, and
- coordinator's ability, experience and skills in mentoring new tutors.

David's Key Responsibilities as First Year Coordinator

- 1. Program Management and Administration
 - Student administration, including monitoring enrolments and reviewing student study plans.
 - Providing a single point of contact for all undergraduate enquiries from central student administration.
 - Advising students during enrolment period on choice of subjects, including assessing student background and liaison with student administration centre.
 - Counselling 'at risk' students.

- Developing, revising and checking clash free student sets for timetabling.
- Examination and marking coordination across all first-year subjects, including coordinating student results and special examinations.
- Participating in orientation week activities with new university students (giving presentations and running workshops).
- Attending committee meetings (to review student progress and status) across different departments and Schools.

2. Staff supervision

- Recruiting and inducting new tutors and casual academics, including mentoring new tutors and casual academics, providing guidance on teaching practice and assessment.
- Supporting staff to introduce changes in teaching formats, including organising staff training and development in teaching and learning.

3. Curriculum development

- Conducting major reviews and ongoing monitoring of mathematics curricula, subject content and program structure.
- Liaising with other discipline areas on content of service subjects.
- Chairing the School's Teaching and Learning Committee, acting as representative on the Teaching and Learning and First Year Experience committees

David's Key responsibilities as part of the Standard Teaching, Research and Service

David teaches and coordinates two subjects (14 contact hours a week) consisting of six hours of lectures and eight hours of tutorials. He prepares, photocopies and distributes all tutorial materials and assessment tasks for these subjects. He is available for student consultation whenever he is in his office, but finds that the majority of students don't access this and most will email him for assistance (averaging 10-12 enquiries per day). David manages all administration associated with subject coordination, involving record keeping and management of student progress, enrolment decisions, assessment results, attendance and enquiries. He also undertakes weekly tutoring in the mathematics support unit.

David's research interest is in scholarship of teaching and learning and in the near future intends to support other staff within the School in initiating and collaborating on education focused research. He is also the School's OHS representative and committee member (which involves attending OHS training and meetings), the Faculty's Academic Misconduct Inquiry Officer and works with the outreach team in developing and running activities for secondary school students.

CHALLENGES

The role of First Year Coordinator is not yet clearly defined by a formal position description and therefore attracts additional responsibilities. This has often resulted in significant work out of hours to complete routine tasks, particularly managing time consuming administration. David has also found that he is given additional responsibilities that are not acknowledged in his workload allocation, such as OHS representative and Open Day responsibilities.

CASE STUDY | MA



Mai is a First Year Coordinator of mathematics at a medium sized metropolitan university, overseeing the teaching and assessment of all first-year subjects. The majority of first-year mathematics subjects taught at this university are designed for engineering students. Mai has been involved in coordinating and teaching mathematics subjects for nearly ten years, and has been First Year Mathematics Coordinator for three years. As First Year Coordinator, Mai acts as the subject coordinator for most of the first-year subjects. The focus of Mai's role is the management and administration of the large number of students enrolled in first-year mathematics subjects.

Mai sees her role as having the potential to provide leadership in the design of first-year curricula and the adoption of innovative teaching practices to improve outcomes for students, however time consuming administrative tasks and other duties have limited her opportunities to do this. The School has appointed

a deputy-director to assist Mai with her workload. She can delegate some tasks, but she is not the deputy-director's line manager.

Mai feels valued by colleagues as the role provides efficiencies in the administration of first-year mathematics subjects and also provides a single point of contact for students and staff enquiries. Mai identifies the key parts of her role as curriculum development and the interactions with colleagues in other science disciplines on matters related to service teaching.

'the management academics of the school recognise the importance of the role ... most of my colleagues that are teaching in first-year appreciate all of the stuff they don't have to deal with that they currently deal with for other courses that they teach. They can tell the difference.' - Mai

'the previous director was pretty crushed by the workload, I think, and they were very sympathetic to that... trying to be supportive and find ways t o help decrease that and help me focus on the more important aspects (of the role).' - Mai

Overall, for this School the main benefits of the First Year Coordinator role are:

- the efficiencies in administration created by having a single point of contact for students and staff,
- having a designated staff member to liaise with other disciplines in relation to service teaching, and
- the coordinator's expertise in first-year teaching that informs curricula development.

Mai's key Responsibilities as First Year Coordinator

1. Program Management and Administration

- Student administration, including management of the enrolment process, credit transfers, student advising, checking and enforcing of subject prerequisites, student progress tracking and fielding large numbers of student enquiries.
- Managing and overseeing all first-year subject assessments, including quality control of examinations written by other academics, coordination of marking and finalising results.
- Assessing applications for special consideration.
- Oversight of academic dishonesty cases.
- Liaison with science faculty colleagues on curricula issues and student progress.
- Serving on various committees within the School and the broader university community.

2. Staff supervision

- Advising the Head of School on workload allocation for lecturers and administration and management of students.
- Working with the Deputy Director of First Year on recruitment of casual lecturers and tutors, including providing advice on selection of tutors.
- Coordinating tutor training.
- Delegating some responsibilities and tasks to the Deputy Director.

3. Curriculum development

- Leadership in curriculum development.
- Evaluation of subject materials including assessment items.
- Assessing alignment between current offerings and the national secondary mathematics curricula.

Mai's key responsibilities as part of the Standard Teaching, Research and Service:

Mai coordinates and teaches the majority of first- year subjects, with the amount of teaching fluctuating each semester. She coordinates the administration of results, enrolments and assessment for these subjects and manages the School's online assessment program (Maple TA). Mai is involved in vetting senior secondary examinations for the state curriculum authority. Her research interests are in mathematics and scholarship of teaching and learning.

CHALLENGES

Mai has felt the pressure of a high workload with short deadlines related to student administration and teaching schedules. She has difficulty in achieving some goals, such as conducting major reviews or curriculum change. It is also difficult to find time for research activities.

CASE STUDY DEV



Dev does not hold an official role as First Year Coordinator of mathematics, but currently coordinates and teaches the majority of firstyear subjects in the School of Mathematics at a large metropolitan university. The majority of first-year mathematics students at this university are headed for pathways other than mathematics, the largest group intending to study engineering. Dev's role as subject coordinator has expanded over time to include some overall coordination responsibilities in recognition of his knowledge and experience in teaching first-year mathematics.

Dev's expertise and understanding of firstyear mathematics teaching acts as a driver for broader adoption of innovative teaching

practices and improvements to assessment practices. Dev sees this as the main benefit of his first-year subject coordination role. His extensive experience and recognition as a teacher, through awards for teaching excellence and high student ratings, means that other staff look to him for advice. His involvement in a number of teaching initiatives and research in undergraduate mathematics education also informs his mentoring of teaching staff and enables him to identify existing challenges in mathematics teaching in his School and propose innovative solutions.

'if someone wants to talk to someone about first-year mathematics they come to me.' - Dev

Overall, for this School the main benefits of the First Year Coordinator role are the:

- coordinator's expertise in first-year teaching and curriculum development, and
- efficiencies created by having a single point of contact for enquiries and liaison. •

Dev's key Responsibilities as (unofficial) First Year Coordinator

1. Program Administration and Liaison Responsibilities

- Providing a key contact for most first-year mathematics enquiries from School staff, student centre staff and external requests.
- Liaising with the School of Engineering regarding their curriculum requirements.
- Participating in the School's Teaching and Learning committee.
- Encouraging colleagues' interest in teaching innovation and in trialing new initiatives.
- Organising regular mathematics teaching seminars.

2. Staff supervision

- Mentoring new lecturers in the School, including offering guidance on teaching practices, sitting in on lectures and offering feedback.
- Monitoring performance of new tutors and providing feedback to the coordinator of tutors.

3. Curriculum development

- Contributing to reviews of curricula as part of the School's working group.

Dev's key responsibilities as part of the Standard Teaching, Research and Service:

Dev coordinates and teaches the majority of the first-year subjects (3) and one postgraduate subject. This is a higher allocation than usual in his School due to his reduced research requirement. He also manages all student enquiries in these subjects and oversees the assessment, marking and compilation of student results for them. Dev assists at the weekly drop-in session at the mathematics support centre. He organises a range of outreach activities such as the Science Experience and National Science week and runs workshops for secondary school mathematics students. He has been involved in the development and implementation of an online diagnostic test and has collaborated on mathematics education research projects with colleagues from other universities.

CHALLENGES

Dev's coordination role has no official standing as First Year Coordinator, but he is seen as a source of information and guidance on first-year matters due to his experience in teaching firstyear subjects and research interests in mathematics education. However his influence is limited to the subjects he is directly coordinating and his informal role means he is unable to initiate and drive change across all first-year subjects.

CASE STUDY ANDRE



'(the role) is vitally important for quality of teaching... someone with an overview of that and keeping that quality as high as possible, year after year. Because a Head of School can't be across all of those things, for a large department it is too much, and you can't expect stream coordinators or subject coordinators to always be looking back with that oversight over a longer period of time.' - Head of School

'It's a tough job but when you get the program right, students really value the effort. Students often say they will do more maths because we are so well organised.' - Andre Andre is the First Year Coordinator of mathematics at a large metropolitan university. The School has a large number of first-year students, of which a significant proportion will progress to a major in mathematics or statistics. The role of First Year Coordinator has existed for over 20 years in this university, evolving over time in response to the different requirements of the School and the particular interests and skills of the various incumbents. The position includes high-level managerial tasks, curriculum development, staff supervision responsibilities, committee membership and student administration functions, all of which have significant time requirements.

Andre sees his expertise and experience in firstyear teaching and management as very important for informing policy decisions and processes within the School and across the Faculty. His involvement with curriculum and assessment design for the state secondary curriculum authority provides insight into the background preparation of incoming students and informs the development of first-year curricula in his School. The Head of School sees the first-year coordinator's role as important both for ensuring efficiency in the management of the casual tutor workforce and in the quality and consistency of mathematics curricula and teaching. He sees the role as providing a broad view of first-year teaching, bringing together input and feedback from a range of sources (staff, students and other disciplines) and providing specialized knowledge and experience to develop appropriate innovations and solutions to problems within the School.

Overall, for this School the main benefits of the First Year Coordinator role are:

- the coordinator's expertise in first-year teaching and curriculum development,
- the leadership it provides in teaching and learning practices informed by research activities,
- the efficiencies it creates in the management of large cohorts of students and staff involved in firstyear teaching, and
- the ability to exercise quality control of teaching materials and practices.

Andre's key Responsibilities as First Year Coordinator

1. Program Administration and Management Responsibilities

- Managing student administration and enquiries in relation to enrolment, subject changes, unsatisfactory progress, credit transfer, special consideration.
- Timetabling and class allocations.
- Contributing to faculty-level programs, including transition programs.

2. Staff supervision

- Supervising a team of teaching-focused academics, including managing workload and performance review.
- Supervising a large team of casual tutors, including interviewing, training and mentoring.
- Managing human resource responsibilities, including casual tutors employment contracts and staff performance.
- Workload allocation for tutorial program.
- Appointing sessional lecturing staff.

3. Curriculum development

- Conducting reviews of first-year subject curricula.
- Developing teaching materials for small group teaching.
- Participating in School and Faculty teaching and learning committees.
- Developing teaching and learning innovation, including facilitating adoption of new teaching practices and mentoring staff.
- Overseeing examination development.
- Liaising with first-year leaders across the Faculty.

Andre's key responsibilities as part of the Standard Teaching, Research and Service

Andre has extensive experience in teaching and coordinating mathematics subjects and usually teaches two subjects each year (this represents a reduction in the normal teaching load to offset the additional administrative load). His standard teaching commitment involves lecturing, conducting weekly tutorials,

marking weekly assignments, setting and marking examinations and overseeing results for the subjects he coordinates. He is also involved in the regular review and updating of the curriculum and development of the teaching materials in the subjects he coordinates. Andre is involved in a range of outreach activities including community engagement and working with secondary schools and curriculum authorities. He is an active researcher in mathematics and undergraduate mathematics education, including conducting research projects, writing articles, presenting research at conferences and applying for grants.

CHALLENGES

Andre's role has a high administrative workload due to the combination of overall first-year coordination, subject coordination and the competing demands of research and teaching priorities within the School. At times the fuzzy boundary around his role intersects with the responsibilities of his colleagues and this can cause tension. It is also difficult to effect change and implement new initiatives when designated authority to do so is not explicitly stated. However, the biggest challenge is the relentless cycle of the academic year, which means that taking leave or attending conferences is difficult.

RESOURCES

The following resources have been developed to assist in the process of establishing a new First Year Coordinator role, or reviewing an existing one.

- 1. A framework for developing a first-year coordination position.
- 2. A Step-by-Step Guide that summarises previous sections and highlights key decision points in designing a new position.
- 3. A Job Description framework that provides numerous templates of standard academic roles, which can be modified to create a First Year Coordinator's role that suits your needs. These templates are based on the types of roles we identified in our research, and provide a basis for selecting appropriate responsibilities when developing a new role.

Framework for developing a first-year coordination position

A decision framework for developing or reviewing a first-year coordination position that reflects the key research findings of this project.



Step-by-Step guide

- 1. Deciding on the focus of the role involves identifying how it will meet the needs of the School, what responsibilities it will have, the skills and knowledge required, what the appropriate workload is and how it will relate to other roles in the School.
 - a. Is it a purely administrative role, or is there significant management responsibility?
 - b. Does it involve leadership in curriculum development?
 - c. What are the goals of the job? If the role is intended to address multiple issues, make sure the scope and limits of the First Year Coordinator's responsibilities are clear.
 - d. How will the Coordinator's workload be calculated? What will be expected in terms of teaching responsibility and research output? How will the administration and management component of the workload be recognized?
 - e. What skills are required to carry out the role? This will depend on the particular focus of the role, but generally the role requires a broad range of skills and aptitude for management.
 - f. What professional development is required to ensure that the coordinator can develop the expertise needed to be successful?
 - **g.** What will the appropriate reporting lines be? What authorities will the Coordinator need to do the job effectively?
- 2. Relationship with existing School management structure.
 - a. Review current roles in the School such as Undergraduate Coordinator, Discipline Head, and committee structure, and identify how the proposed first-year coordination role intersects and complements these.
 - b. Review existing School administration processes to identify potential stress points in administration, such as student enrolment, assessment and marking processes, to create efficiencies. Consider delegating some tasks to other academics or increase administrative support.
 - c. Consider appointing a deputy coordinator to provide support, cover during leave, as professional development and succession planning.
 - d. Consult other academic staff. Canvas academic staff on the design of the role (and deputy role if relevant) and the development of a position description through an open consultation. Use the process to establish clear responsibilities between existing coordination roles.
- 3. Writing a job description that prioritizes the issues you want to address in the School. Consult your local human resources adviser to ensure that the position description meets your institutions' requirements.
 - a. What category of academic role should it be? Teaching-focused or teaching and research academic?
 - b. What are the key personal qualities and skills needed?
 - c. What is the ideal academic and teaching background?
 - d. What is the proposed academic level and remuneration? Is it appropriate to provide an allowance for higher duties?
 - e. Determine the workload ratios for teaching/research/administration based on priorities of the role.

JOB DESCRIPTION

The development of a job description will be dependent on your own institutional requirements. The following templates represent the three roles that commonly overlap to create first-year coordination roles; teaching and research academic role, subject coordination role and First Year Coordinators role. These are based on the work of the Office for Learning and Teaching project, Clarifying, Developing and Valuing the Role of Unit Coordinators as Informal Leaders of Learning in Higher Education (Roberts, 2011)



Responsibilities of a Teaching and Research Academic Role

Teaching

- Teaching face to face in large lectures, practice classes or tutorials
- Writing teaching materials, developing online resources and subject note
- One- to- one student consultation and advice
- Marking assignments, tests and exams
- Supervising postgraduate students
- Professional and community activities.

Research

- Conduct research projects, write papers and publish in refereed journals
- Apply for grants
- Keep up to date with current literature.

Responsibilities of a Subject Coordination Role

- Lead a unit of study in at least one program
- Liaise, collaborate and network with senior academics and peers in the program and discipline
- Develop and maintain unit curricula and resources that reflect a command of the field of learning
- Employ scholarly teaching practices that influence, motivate and inspire students to learn
- Maintain and continually improve on quality benchmarks
- Locate, coordinate and manage sessional staff, including transnational staff
- Comply with student administration requirements.

First-year Coordination Role

Leadership

- Identify key challenges and possible solutions across a range of first-year subjects
- Represent the interests of the mathematics discipline in key university decision making committees and forums
- Review subject structure and curriculum of all first-year subjects
- Trial and implement new initiatives in teaching, curriculum and assessment.

Management and Administration

- Oversight of administrative processes and deadlines for all subjects
- Staff management, which may include selection and training of tutors and advice to Head of School on allocation of teaching responsibilities and workloads
- Oversight of student enrolment, satisfactory progress, academic misconduct special consideration requests
- Exam coordination, weekly assessment, coordination of marking and results submission.

Liaison

- Representative on School and Faculty committees for teaching and academic programs.
- Liaison with other schools and faculties in regard to service teaching
- Outreach and secondary school liaison

Additional duties

• Define any additional duties that involved representing the discipline on committees, coordinating school or discipline input or responses to queries in the absence of other managerial level staff.

Develop your job description

Responsibilities of Teaching and Research Academic

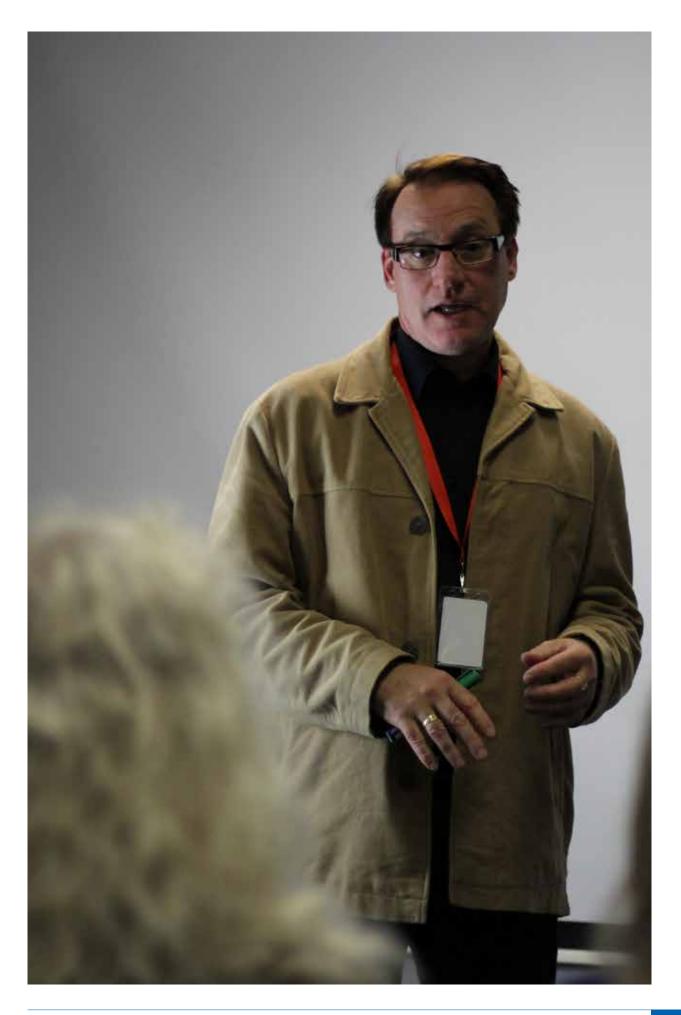
Responsibilities of Subject Coordinator

First Year Coordination Role

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References

- Armstrong, M., & Taylor, S. (2014). Armstrong's handbook of human resource management practice: Kogan Page Publishers.
- Bentley, P., Goedegebuure, L., & Meek, V. L. (2014). Australian Academics, Teaching and Research: History, Vexed Issues and Potential Changes. In J. C. Shin, A. Arimoto, W. K. Cummings & U. Teichler (Eds.), Teaching and Research in Contemporary Higher Education (Vol. 9, pp. 357-377): Springer Netherlands.
- Bexley, E., James, R., & Arkoudis, S. (2011). The Australian academic profession in transition. Canberra: Department of Education, Employment and Workplace Relations, Commonwealth of Australia.
- Coates, H., & Goedegebuure, L. (2010a). The real academic revolution: why we need to reconceptualise Australia's future academic workforce, and eight possible strategies for how to go about this Research Briefing: LH Martin Institute.
- Coates, H., & Goedegebuure, L. (2010b). The real academic revolution: why we need to reconceptualise Australia's future academic workforce, and eight possible strategies for how to go about this.
- Kift, S., Nelson, K., & Clarke, J. (2010). Transition pedagogy: a third generation approach to FYE: a case study of policy and practice for the higher education sector. The International Journal of the First Year in Higher Education, 1(1), 1-20.
- King, D.M., Catlin, J. & Ward, J. (2015). Building leadership capacity in the university first year learning and teaching in the mathematical sciences, Final Report, Office for Learning and Teaching.
- Probert, B. (2013). Teaching-focused academic appointments in Australian universities: recognition, specialisation, or stratification? Canberra, Australian Government and the Office for Learning and Teaching.
- Roberts, S. (2011). Booklet of proformas pertaining to the role of unit coordinator. Sydney: Australian Learning and Teaching Council.
- Roberts, S., Butcher, L., Brooker, M., Cummings, R., Schibeci, R., Jones, S., & Phillips, R. (2011). Clarifying, developing and valuing the role of unit coordinators as informal leaders of learning in higher education: Strawberry Hill, NSW: Report for Australian Learning and Teaching Council.



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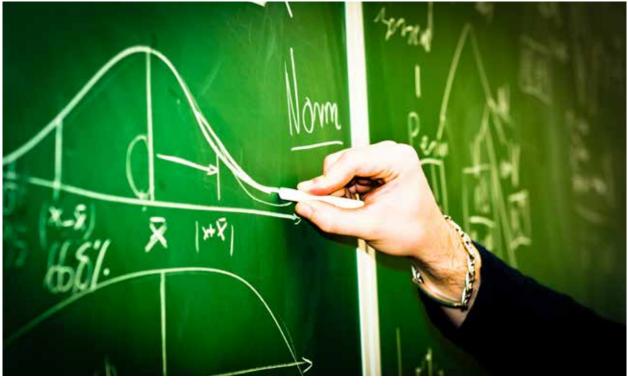
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