



## Leading and Managing the Development of Technology Enabled Learning and Teaching

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- Why are “leadership” and “management” important in the development of TELT?
- A conceptual framework for “leadership” and “management” of learning and teaching
- Application of this framework to an analysis of the challenges associated with leading and managing the development of Technology Enabled Learning and Teaching (TELT) in one particular institutional setting
- Reflections on the challenges of developing leaders and managers of learning and teaching in general and of TELT in particular



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- *Clarity as to how technology might contribute to learning, teaching or curricula*
  - How will the use of technology contribute to the development of graduates with qualities of the type desired by the institution/faculty/school/program?
  - Will technology make content accessible?
  - Will it provide opportunities for content to be presented in different ways (e.g via different media/simulations, etc)?
  - Will it provide opportunities for different forms of student-student, student-teacher, student-content, student-community engagement?
  - Will it support assessment and/or feedback practices?
  - Will it support formative/summative review of curricula, learning and teaching environments and resources, learning experience?
- In sum, what role will/should technology play in the curriculum?



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- *Clarity as to how staff might be prepared/developed to plan, use, support and evaluate the use of technology to enable/support learning and teaching*
  - Which staff need to be developed?
    - Teaching staff
    - Professional/technical staff
  - What do staff need to know/to be able to do, in order to plan, use, support or evaluate the use of technology to enable/support learning and teaching?
  - What strategies might an institution/faculty/school adopt to support staff development in relation to TELT?
  - Who might be involved in the development and implementation of these strategies?
- In sum, what must an institution/faculty/school do to prepare staff appropriately for the use of technology to enable/support learning and teaching



## Leading and Managing the Development of TELT

### Why is Leadership important?

Leadership provides:

- *Clarity as to how students might be prepared and supported to use technology in their learning*
- What are students' learning needs in relation to technologies to support their learning?
- How might these learning needs be most effectively and efficiently addressed?
- What types of programs, resources, learning environments need to be created to address these needs?
- Who should be involved in planning, developing, implementing and evaluating any strategies that might be put in place to address these needs?
- In sum, what must an institution/faculty/school do to prepare and support students to effectively use technology in their learning?

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## Leading and Managing the Development of TELT

### Why is Leadership important?

Leadership provides:

- *Clarity as to how an institution's organisational, administrative and IT infrastructures need to change to ensure students and staff have access to robust, reliable and appropriate technologies to support their learning and teaching needs*
- Which technologies?
- How should these technologies
  - be configured
  - integrate with other institutional technologies/systems
 to deliver the functionality required to support learning and teaching?
- Who should be responsible for the development and maintenance of these technologies?
- What role should central service units, faculties, schools have in the provision of service to support staff and students to use these technologies?
- How should an institution's/faculty's/school's organisational and administrative arrangements change to effectively enable and support the use of technology in learning and teaching?
- In sum, what must an institution/faculty/school do to create an appropriate organisational, administrative and IT infrastructure to support learning and teaching?

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## Leading and Managing the Development of TELT

### Why is Leadership important in the development of TELT?

In summary:

- Leadership:
  - Provides definition and direction
    - It is the process whereby an institution, faculty, or school:
      - determines and articulates its vision for TELT
        - what it is/it should be
        - how it looks/it should look
        - how it works/it should work
  - Engages staff, students and other stakeholders in the processes of:
    - Defining and establishing a vision or direction for TELT
    - Planning, trialing and institutionalising: curricula; learning environments and resources; the organisational, administrative and IT infrastructure to support TELT
  - Encourages, motivates and inspires staff students and other stakeholders to become and remain committed to TELT

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## Leading and Managing the Development of TELT

### Why is Management important?

Effective management resolves the dilemma:

- How will an institution's/faculty's/school's vision for TELT be realised
- That is, it resolves the issue: "How will we move from our current state of practice to our desired state?"
  - What are the specific things that need to be done in relation to:
    - Curriculum development
    - Staff development
    - Student development
    - Organisational development
 to ensure that we can realise our vision for TELT?
  - How should we schedule these activities?
  - What resources (financial, human and otherwise) do we need to realise this vision?
  - How should we access and deploy these resources?
- In sum, effective management develops, documents and communicates a plan for the development of TELT

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## Leading and Managing the Development of TELT

### Why is Management important?

Effective management resolves the dilemma:

- How should an institution/faculty/school resource and organise itself to ensure that it can effect the changes necessary to develop, implement and institutionalise the use of technology to enable/support learning and teaching
- How will the change process be managed? Who will be involved?
- What type of organisational arrangements need to be established to coordinate and facilitate the work that needs to be done?
- What are the tasks that need to be done?
- How do these tasks align with current roles and responsibilities within the institution/faculty/school?
- How can responsibility for these tasks be effectively allocated amongst the existing staff and organisational units of the institution?
- Where do we have gaps in the expertise required to fulfill these tasks?
- How should we recruit/employ staff to support the development of TELT?

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## Leading and Managing the Development of TELT

### Why is Management important?

Effective management resolves the dilemma:

- How should an institution/faculty/school monitor the process of change to ensure that it is achieving what it has set out to achieve in relation to TELT
- How will the process of change be governed?
  - Who will be responsible for:
    - monitoring and overseeing the change?
    - ensuring the change process is realising its intended outcomes in relation to TELT?
  - How will the process of change be monitored?
    - What strategies, processes, indicators, measures, standards will be used to evaluate progress?
- How will changes be made to planned strategies when they are found to be wanting?
  - Who will be involved?
  - What will be the process?

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## Leading and Managing the Development of TELT

### Why is Management important in the development of TELT?

In summary:

- Management:
  - Provides a plan for action
    - It is the process whereby an institution, faculty, or school:
      - determines and articulates how it is going to achieve its vision for TELT
  - Establishes an organisational/structural environment in which the work that must be done to realise the vision for TELT can (a) be managed and (b) take place
  - Defines and establishes roles and responsibilities for staff, students and contractors within this organisational structure that assist them and others to understand the nature and relationship of their contributions to the change process in relation to those of others
  - It inspires confidence by ensuring that the process of developing TELT remains "on track" through ongoing monitoring and problem-solving

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## Leading and Managing the Development of TELT

### A Conceptual Framework for Analysis

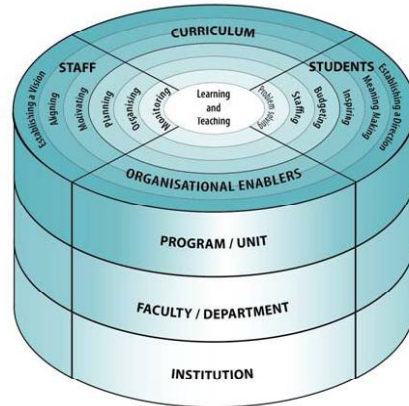
- Four principal *domains* of leadership and management practice in relation to learning and teaching (L&T) development:
  - Curriculum
  - Staff (Teaching)
  - Students (Learning)
  - Organisational Enablers
- Three *aspects* of leading L&T:
  - *Envisioning* a future for L&T
  - *Aligning* stakeholders with this vision
  - *Motivating and inspiring* commitment to this vision for L&T
- Three *aspects* of managing L&T:
  - *Planning* to realise this vision for L&T
  - *Organising and staffing* to realise this vision for L&T
  - *Monitoring and problem-solving* to ensure alignment between vision and practice

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## Leading and Managing the Development of TELT

### A Conceptual Framework for Analysis



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## Leading and Managing the Development of TELT

### The process of Leading and Managing the development of TELT



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## Leading and Managing the Development of TELT

### Potentially, who are our Leaders and Managers of TELT?

### Why is their involvement important?

- Academic Leaders and Managers
  - VCs, DVCs, PVCs, Directors L&T
  - Deans, Heads of Department
  - Program Directors, Course Convenors
  - Innovative staff (early adopters)
- IT Leaders and Managers
  - Directors of IT offices
  - Managers of Learning Portfolios within IT offices
  - Faculty/Dept based IT staff
- Administrative Leaders and Managers
  - Directors of Administrative offices
  - Faculty/Dept based Admin staff
- Students
  - PG, UG, Domestic, International, Internal, External

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## Leading and Managing the Development of TELT

### Roles for Academic Leaders and Managers – Institutional Level

VC, DVC, PVC, Directors L&T

	Leadership	Management
VCs	• Communicate the value and importance of TELT to their institution's overall strategic objectives	• Ensure that their university's business structures and processes effectively support the governance, management and funding of TELT
DVCs	• Envision and articulate their institution's strategic framework and organisational infrastructure for learning and teaching in general and TELT in particular	• Establish, monitor and maintain the university's business structures and processes to support the governance, management and funding of TELT
PVCs	• Oversee the development of a vision for TELT within their institution in alignment with institutional goals and priorities	• Oversee the development of (a) faculty strategies in response to their institution's vision for TELT; (b) their institution's IT, curriculum and staff development infrastructures to support TELT
Directors L&T	• Advise and assist their VC, DVCs, PVCs and other key institutional stakeholders to develop institutional understanding of and commitment to TELT	• Advise and assist their university to develop the necessary organisational, IT, staff, and academic development policies, procedures and infrastructure necessary to enable and support TELT

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## + Leading and Managing the Development of TELT

### Roles for Academic Leaders and Managers – [Faculty/Dept Level](#)

Deans, HODs, Program Directors, Course Convenors, Early Adopters

	Leadership	Management
Deans	<ul style="list-style-type: none"> <li>Oversee and champion the development and adoption of a vision and strategy for TELT within their faculty</li> </ul>	<ul style="list-style-type: none"> <li>Oversee the establishment, monitoring and maintenance of their faculty's organisational and IT infrastructure for TELT</li> </ul>
A/Deans (L&T)	<ul style="list-style-type: none"> <li>Assist the Deans, HODs and other staff to develop a faculty vision and strategies for TELT</li> </ul>	<ul style="list-style-type: none"> <li>Monitor and evaluate the success of the faculty in achieving its strategic goals for TELT</li> </ul>
Faculty Manager Educational Development	<ul style="list-style-type: none"> <li>Assist staff to envisage models of curriculum, learning, teaching and organisation to enable and support TELT</li> </ul>	<ul style="list-style-type: none"> <li>Assist staff to implement, monitor, evaluate and revise these models of curriculum etc to enable and support TELT</li> </ul>
HODs	<ul style="list-style-type: none"> <li>Build commitment for a vision and strategy for TELT within their department</li> </ul>	<ul style="list-style-type: none"> <li>Establish, monitor and maintain their department's infrastructure for TELT</li> </ul>
Program Directors Course Convenors	<ul style="list-style-type: none"> <li>Assist teaching staff to develop a vision for how technology might enable/support L&amp;T in the particular programs/courses for which they are responsible</li> </ul>	<ul style="list-style-type: none"> <li>Coordinate the planning, integration and adoption of technology to assist L&amp;T in their programs/courses</li> </ul>
Early Adopters	<ul style="list-style-type: none"> <li>Showcase their use of technology to enable /support L&amp;T to their peers</li> </ul>	<ul style="list-style-type: none"> <li>Assist others to develop plans, strategies, and evaluation processes for TELT in their programs/courses</li> </ul>

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### Roles for IT Leaders and Managers

	Leadership	Management
Directors IT	<ul style="list-style-type: none"> <li>Oversee the development of a vision for an institutional IT infrastructure to support TELT</li> </ul>	<ul style="list-style-type: none"> <li>Ensure that their university's IT Plan includes appropriate goals, strategies, budgets to support the development of the TELT IT infrastructure</li> </ul>
Managers of L&T Portfolios in IT Offices	<ul style="list-style-type: none"> <li>Develop strategic and operational infrastructure for learning and teaching in general and TELT in particular</li> </ul>	<ul style="list-style-type: none"> <li>Establish, monitor and maintain the business structures and processes to support the governance, management, funding and support for the university's IT infrastructure for TELT</li> </ul>
Faculty IT Managers	<ul style="list-style-type: none"> <li>Support the development of a vision for TELT IT development within their faculty which aligns with institutional goals and priorities for L&amp;T and IT development</li> </ul>	<ul style="list-style-type: none"> <li>Oversee the development, maintenance, and review of their faculty's TELT IT infrastructure to ensure that it coheres with faculty and institutional goals and priorities for L&amp;T and IT development</li> </ul>
Faculty/Dept TELT Administrators	<ul style="list-style-type: none"> <li>Advise and assist faculty staff to access and effectively use the appropriate technologies, applications, systems to support their learning and teaching goals</li> </ul>	<ul style="list-style-type: none"> <li>Establish, monitor and maintain the IT service and support structures to enable staff and students to readily access and use the appropriate/desired technologies, systems, applications in L&amp;T</li> </ul>

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### Roles for Leaders and Managers of Administrative Offices

	Leadership	Management
Directors Academic Administration	<ul style="list-style-type: none"> <li>Develop a vision for how institutional/faculty academic administration systems need to be developed to ensure effective integration with the institution's suite of L&amp;T technologies, systems and applications</li> </ul>	<ul style="list-style-type: none"> <li>Oversee the development, implementation and evaluation of the university's academic administration systems to ensure they appropriately and effectively integrate with the university's suite of L&amp;T technologies, systems and applications</li> </ul>
Directors Student Administration	<ul style="list-style-type: none"> <li>Develop a vision for how institutional/faculty student administration systems need to be developed to ensure effective integration with the institution's suite of L&amp;T technologies, systems and applications</li> </ul>	<ul style="list-style-type: none"> <li>Oversee the development, implementation and evaluation of the university's student administration systems to ensure they appropriately and effectively integrate with the university's suite of L&amp;T technologies, systems and applications</li> </ul>
Directors HR	<ul style="list-style-type: none"> <li>Develop a vision for how institutional/faculty HR systems need to be developed to ensure effective integration with the institution's suite of L&amp;T technologies, systems and applications</li> </ul>	<ul style="list-style-type: none"> <li>Oversee the development, implementation and evaluation of the university's HR systems to ensure they appropriately and effectively integrate with the university's suite of L&amp;T technologies, systems and applications</li> </ul>

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### Roles for Students

	Leadership	Management
UG Student Representative	<ul style="list-style-type: none"> <li>Engage their fellow students in any institutional/faculty/department debate regarding the development, use, evaluation of TELT</li> </ul>	<ul style="list-style-type: none"> <li>Establish and maintain appropriate organisational arrangements to ensure that they are able to effectively:                             <ul style="list-style-type: none"> <li>engage</li> <li>represent</li> <li>communicate</li> </ul> </li> </ul> <p>with the student cohort that they represent</p>
PG Coursework Student Representative		
HDR Student Representative		
International Student Representative	<ul style="list-style-type: none"> <li>Effectively communicate and make meaning of institutional/faculty/departmental plans for the development, use, evaluation of TELT</li> </ul>	

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## Leading and Managing the Development of TELT

### Leadership and Management of TELT:

#### A Summary

- Is a whole of enterprise endeavor
- Those needing to contribute to the leadership and management of TELT are:
  - Large in number
  - Located at multiple levels and in multiple organisational units throughout our institutions
  - Diverse in the contributions that they need to make
- Their motivation, visions, values, beliefs for adopting and utilising technology in learning and teaching are diverse
- They possess/need different:
  - knowledge, skills and capabilities
  - capacities to influence and effect change

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## Leading and Managing the Development of TELT Typical Knowledge Domain Profiles of Leaders and Managers of TELT

	Learning & Teaching	Curriculum & Ed Design	On-line Learning	Staff Development	Educational Leadership	Educational Management	Educational Change	Project Management	Learning Technologies	IT Systems & Technologies	Org Leadership	Org Management
VCs							✓	✓			✓	✓
DVCs					✓	✓	✓	✓			✓	✓
PVCs					✓	✓	✓	✓			✓	✓
DirLT	✓	✓	✓	✓	✓	✓	✓	✓	✓			
AcDev	✓	✓	✓	✓	✓	✓	✓	✓	✓			
Deans					✓	✓	✓	✓			✓	✓
ADEs	✓	✓	✓	✓	✓	✓	✓	✓				
FEDM	✓	✓	✓	✓	✓	✓	✓	✓	✓			
HODs					✓	✓	✓	✓			✓	✓
DirIT								✓		✓	✓	✓
MLTP								✓	✓	✓	✓	✓
FITM								✓	✓	✓	✓	✓
FTAd								✓	✓	✓		
DirAA								✓		✓	✓	✓
DirSA								✓		✓	✓	✓
DirHR								✓		✓	✓	✓

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## Leading and Managing the Development of TELT

### Implications of Differences in Domain Knowledge, Skills and Experience amongst potential leaders and managers of TELT

- Leadership and management for the development of TELT must be a joint responsibility of a variety of academic, administrative and professional/technical staff
- Typically higher education institutions use a form of Project Management involving a matrix structure as a means of organising to support the development of TELT
- In the context of an overall plan, teams of specialists from a variety of different organisational units across an institution (e.g., from faculties, L&T Support Units, IT Departments and the like) are formed to address and realise specific aspects/goals in the overall plan

	Faculty/Dept	Acad DevUnit	On-line Learning Unit	IT Department	Academic Admin	Student Admin
Business Rules Project	✓	✓	✓	✓	✓	✓
Tech Integ Project			✓	✓	✓	✓

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### Strengths of Matrix Structures as a Form of Organisation for Development of TELT

- They allow for appropriate *differentiation* (specialisation) of the work that needs to be done to develop TELT
  - Business Rule Development
  - IT Infrastructure Development
  - Systems Integration
  - Staff Training and Development
  - Curriculum review and redevelopment
- They allow for appropriate *integration* and *coordination* of staff and expertise
  - They do this via the establishment of multi-disciplinary project teams to achieve each of the goals associated with developing TELT

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## Leading and Managing the Development of TELT

### Weaknesses of Matrix Structures as a Form of Organisation for Development of TELT

- Members of Project Teams:
  - Have *Multiple managers*:
    - their Project Team Manager (e.g., the Manager of the Business Rules Project)
    - their Organisational Unit Manager (e.g., the Manager/Director of IT)
  - Approach their work from *different paradigmatic perspectives* (i.e., some see the task of defining business rules as a technical exercise based on principles of good practice, while others see it as a task of satisfying staff and student needs for particular functionality)
  - Utilise their own discipline specific languages (where the same word has multiple and different meanings)

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## Leading and Managing the Development of TELT

### Possible Consequences/ Outcomes of Project Management and Matrix Structure Approaches to the Development of TELT

- Wasted activity/effort
- Wasted resources
- Wasted time
  - while Project Teams goes through the usual stages of:
    - *forming*,
    - *storming*, and
    - *norming*
  - before they get to the position of being able to
    - *perform effectively*

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## Leading and Managing the Development of TELT

### Implications for how we should approach the Development of TELT

- Treat the development of TELT as an *ongoing process and part of core business* and not as an *event*
- Ensure the development of TELT is *articulated and understood to be a key strategic priority*
- Embed periods of *major review and revision of curriculum* and upgrade of the *technology platform* and *IT infrastructure* to support TELT, in *ongoing strategic cycles* of development
- Ensure institutional *business processes, staffing and organisational arrangements* are *appropriate* to support the *ongoing* development of TELT
- Develop and maintain a *permanent matrix structure* to enable the wide ranging aspects of development that need to be undertaken to develop and maintain institutional capacity for TELT

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## Leading and Managing the Development of TELT

### Implications for how we should approach the Development of TELT

- Establish, maintain and nurture *regular fora* in which members of multi-disciplinary project teams can:
  - *share their own understandings* of the tasks they face
  - develop a *common understanding* of, and *vision for*, the work that they must collectively accomplish to appropriately contribute to the development of TELT
  - develop *principles, values and strategies* that they can use to guide their work
- Include the *building of institutional capacity and individual capability* for effective *leadership and management* of these *multi-disciplinary project teams* into the institution's overall leadership and management development strategy

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## Leading and Managing the Development of TELT

### Implications for how we should approach the Development of TELT

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## Leading and Managing the Development of TELT

### Implications for how we should approach the Development of TELT

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- Ensure that Project Team leadership for the development of TELT is appropriately recognised and rewarded in HR policies and processes (i.e., to ensure that these positions are attractive – particularly to the academic staff whose involvement is essential to the success of developing TELT)
- Ensure that ongoing leadership and management development for Project Team leaders is:
  - a feature of any TELT development strategy
  - focused on developing a shared understanding amongst Project Team leaders of *both the pedagogical and technological issues* associated with the development of TELT **and of the implications of each for the other**