Final Report 2012:
Executive Summary

Lead Institution
University of Western Sydney
Partner Institutions
The Australian National University
Sustainable Futures Leadership Academy

Project Leader and Team
Geoff Scott
Daniella Tilbury
Leith Sharp
Elizabeth Deane
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Office for Learning and Teaching

Department of Industry, Innovation, Science, Research and Tertiary Education

GPO Box 9880,

Location code N255EL10

Sydney NSW 2001

<learningandteaching@deewr.gov.au>

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About this study

Higher education around the world is at a crossroad as a wide range of change forces bear down upon it. These include a complex, interlocked and rapidly unfolding set of sustainability challenges underpinned by social, cultural, economic and environmental developments. This scenario calls for higher education to take a leadership role in producing the future leaders equipped to manage them effectively.

The study which is the focus of this report recognises that universities and colleges giving consistent and productive focus to the four pillars of social, cultural, economic and environmental sustainability in their teaching, research, engagement activities and operations will not just happen but must be led, and deftly. It is this issue of effective approaches to ‘Turnaround Leadership for Sustainability in Higher Education’ that the study addresses.

The project has brought together an experienced international team to identify the:

- distinctive and complex mix of challenges facing higher education leaders as they seek to transform universities and colleges to give central focus to Education for Sustainability (EfS)\(^1\) in their curriculum, research, engagement activities and operations;
- incentives, strategies and processes necessary to address these challenges and embed EfS in our institutions of higher education;
- change-leadership capabilities needed to effectively and consistently enact this agenda;

As Albert Einstein reminded us: ‘The problems that exist in the world today cannot be solved by the level of thinking that created them’ and it is important to avoid ‘doing the same thing over and over again and expecting different results’.

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\(^1\) Education for Sustainability is a process which engages people in decision-making and action-taking for a more socially just, economically sound and ecologically responsible future.
• optimum focus for the work of EfS leaders, both centrally and locally, and the
• most productive approaches to leadership selection, support, performance management and development for the area.

Key recommendations
Ten interlaced areas of recommendation for higher education institutions interested in pursuing EfS in a more systematic way have emerged from the study:

1. Acknowledge the distinctive challenges and complexity of EfS leadership.
2. Sharpen the focus and understanding of EfS as it applies in higher education.
3. Context counts: ensure organisational integration and system alignment to support EfS and its leaders.
4. Track and improve EfS program quality more systematically.
5. Put in place the right incentives.
6. Engage the disengaged and the institution’s senior leadership.
7. Apply the key lessons of successful change management in higher education.
8. Focus on the change-leadership capabilities identified in this study.
9. Review EfS leadership position descriptions, selection processes and succession strategies in the light of the study’s findings.
10. Apply the most productive approaches to leadership learning identified in the study to the professional development of EfS leaders.

What follows summarises the study’s key findings and recommendations for action. These have emerged from a two-year research inquiry, funded by the Australian Government’s Office for Learning and Teaching (OLT). The findings have been informed by a set of preparatory workshops with 200 participants within and beyond Australia and the responses to an online survey completed in late 2011 by 188 experienced local, middle level and senior change leaders of Education for Sustainability in universities and colleges across Australia, New Zealand, the USA, Canada, the UK and the European mainland. The findings have been validated and their key implications for action identified in a series of workshops on the results involving an additional 300 key informants from 70 universities, colleges and peak bodies in Australasia, North America, the UK and Europe.

The international project team includes three leaders of EfS initiatives from Australia, the UK and the USA, and a senior university leader at Pro Vice-Chancellor level. The study has been guided by a National Steering Committee consisting of a Tertiary Education Quality and Standards Agency (TEQSA) Commissioner, a Vice-Chancellor, a Deputy Vice-Chancellor (Academic) and a Pro Vice-Chancellor (Sustainability). An independent evaluator, a former Dean of Education and Graduate Studies and a TEQSA auditor, assessed the validity and reliability of the insights generated and the follow-up actions recommended.

A turnaround moment for higher education and the need to give more direct focus to education for sustainability.

This is a turnaround moment for higher education world-wide. The traditional 19th century didactic, fixed timetable, two-semester, campus-based model of higher education is coming under increasing pressure as:

- Access to higher education is widened and institutions are confronted with the dilemmas of how best to balance growth with quality, access with excellence; and mission with market.
- Universities and colleges are subjected to funding pressures and must manage growth, costs and risk in an environment of increasing regulation and financial constraint;
- Student expectations change and they increasingly seek just-in-time support, real-world learning and placements, targeted learning assistance, convenient access and value-for-money in their
Higher education needs to transform itself if it is to assist societal transformation for a more sustainable future.

Good ideas with no ideas on how to implement them are wasted ideas.

Change doesn’t just happen but must be led – and deftly.

The key to progressing sustainability in HE is to identify and systematically build viable leadership capabilities, competencies, support systems and pathways.
Overview of Key Findings and Recommendations

Although the distinguishing capabilities of effective change leadership for EfS in higher education identified in this study generally align with those found in a suite of earlier studies, summarised in the book Turnaround Leadership for Higher Education (Fullan & Scott, 2009), what has also emerged is that leadership of EfS in higher education poses a distinctive set of challenges that extend these capabilities to the full.

This is because EfS redefines effective change leadership and management for higher education – it requires leaders who can facilitate a complex process of transformation – not only in the core higher education activities of learning and teaching, research and engagement but also in how the university operates, in its culture, governance, structure and how it positions itself and supports staff and students. And it is this complex and comprehensive focus on transformative rather than adaptive oversight, including a move from a single disciplinary focus to an interdisciplinary one in our institutions of higher education that makes leadership of EfS so challenging, multifaceted and distinctive.

The study shows that, given the above context, what is needed is not only higher education leaders for today but for tomorrow – people with a vision for higher education capable of tackling the challenges of the 21st century and of producing graduates with the capacity to make it happen.

Ten key recommendations for acting on the results of this study have emerged. These have been identified and endorsed by over 500 HE leaders from across the world who have been involved either as a respondent to its online survey or as a participant in the workshops organised to prepare for the study and test the veracity and implications of the results. It is important to note that the 10 areas for action are interrelated. This means that the actions recommended below should be taken synergistically if EfS is to be effectively embedded, led and scaled up in our universities and colleges.

1. Acknowledge the distinctive challenges and complexity of EfS leadership.

A range of contextual challenges found to face higher education leaders in earlier research have also been identified in this study (see recommendation area 3). However, the study has revealed additional, distinctive challenges that make the job of EfS leader particularly testing.

These include a focus on:

- **Transformation not adaptation**: EfS requires a reorientation of existing curricula and pedagogy rather than the adaptation of proposed courses or content to current educational structures, systems, processes and objectives. That is, change leadership in this area requires a focus not only on curriculum change but also on the gradual transformation of the overall way in which our universities are structured and operate. And, as noted already, it is this which makes the role particularly complex.

Leadership in this area, therefore, goes beyond producing work ready graduates or delivering education about sustainability to developing ‘future ready’ graduates using new knowledge and learning experiences that build every graduate’s commitment and ability to engage productively with the unfolding challenges of social, cultural, economic and environmental sustainability in their chosen profession and more broadly (see Box 1).
Box 1: A new focus for Learning Outcomes in HE

EfS seeks to introduce a quite different set of graduate attributes and outcomes – for example graduates who are sustainability literate, collaborative, focused, systems thinkers; who are change-implementation savvy, have an interdisciplinary perspective and who have come to a considered position on the key, tacit assumptions about what constitutes ‘progress’ and a ‘productive’ nation and society (assumptions like ‘growth is the key’, ‘consumption is happiness’ and ‘technology is the answer’).

Seeking to make this shift in focus creates significant tensions in a context where consumer demand for job-focused degrees, filling quotas, high fees and policies focused on producing predominantly ‘work ready’ graduates are given priority.

Future not present: Leadership of EfS is thus not limited to addressing current issues but seeks to construct and implement an alternative more positive future for people and planet. This, in turn, requires leaders who are adept at building a relevant, desirable, clear, future-focused vision and strategy for university transformation which is both owned by those who are to implement it and feasible (achievable). It calls on higher education to be more socially, culturally, economically and environmentally responsible in its policies and practice and to model the desired future in its day-to-day operations, programs and behaviour.

Inter-disciplinary and inter-portfolio: To enact this agenda EfS leaders must work across disciplinary silos, divisions and organisational tribes to integrate the efforts of a wide variety of players at every level from academia, operations and administration, and help reshape unsupportive or unaligned systems, structures, funding mechanisms, leadership roles and performance indicators.

The fundamental problem faced in meeting the goal of education for a healthy and sustainable society for all students is that the existing curriculum in higher education has not been developed to examine how we shape a sustainable world. Much of the curriculum has been developed to provide students with an increasingly narrow understanding of disciplines, professions and jobs and is focused on specific knowledge and skills employed in the given area. (AASHE, 2010: 2)

As one member of the project’s National Steering Committee observed, leadership in this area requires the ability ‘… to work in multi-functional environments with everyone from the gardener to the VC… this is not leadership based on specialist knowledge of one functional area but of how to productively bring together people from many different backgrounds’. The analogy from one of the study’s respondents that ‘being a leader of EfS is like trying make a quilt’ captures the distinctive nature and complexity of this challenge.

The study has found, therefore, that the interlaced and complex nature of this transformation agenda requires leaders with highly developed and nuanced capabilities, including the ability to work with diversity and foster change, a high level of emotional intelligence, a capacity for systems thinking and collective vision-building and a highly developed ability to accurately ‘read’ (diagnose what is going on in) the complex situations and dilemmas of daily practice and ‘match’ a uniquely suitable response.

The study invited respondents to propose analogies to describe their day-to-day experience of being a sustainability leader. Box 2 gives indicative examples. They provide an insider’s perspective on the challenges EfS leaders face:
Box 2
Typical EfS leader analogies
For me, being an EfS leader in my higher education institution is like:

‘herding cats’
‘swimming against the tide’
‘building a plane whilst you are flying it’
‘waving a flag from the back of the crowd’
‘conducting an orchestra’
‘quilting’
‘learning Spanish but finding myself in China’
‘being a competitor on American Idol’
‘being Stephen Bradbury winning gold at the Winter Olympics’
‘trying to pin jelly to the wall’
‘being asked to make trifle with no bowl or ingredients and a constantly changing recipe’

These analogies capture the complex, constantly shifting, diverse and loosely coupled nature of the world of EfS change leaders in higher education. The analogies of more senior leaders (e.g. ‘conducting an orchestra’ or ‘making a quilt’) indicate a greater sense of efficacy than those of local leaders (e.g. ‘swimming against the tide’, ‘waving a flag from the back of the crowd’ or ‘being a competitor on American Idol’). All of the analogies confirm that change in this, like all areas of higher education, is always a function of being able to work with a diverse and constantly shifting range of change forces, many of which are beyond the control of the individual but can be negotiated and others which are amenable to personal influence and can be reshaped to be more supportive. It is important to note that participants in the study emphasised that, despite the many challenges faced, there are many satisfactions and that, if leveraged, these foster wider engagement and commitment.

2. Sharpen the focus and understanding of EfS in higher education

Participants in the study consistently reported having to deal with widely varied and often confused understandings of what EfS in higher education entails. They also regularly reported having to tackle misperceptions that a commitment to EfS is synonymous with being a ‘greenie’ or is simply about greening campus operations.

They noted that, if terms like those listed in Box 3 are not clarified at the outset to ensure that everyone is using them with the same meaning, the change process can stall because people will find themselves talking at cross-purposes.

Box 3
Check everyone is using key terms in the same way


Underpinning the use of these terms are different ways of knowing, engaging and responding to the EfS challenge: rarely are words used with identical meaning.

The way in which these terms are used in the present study is given in Attachment One of the main report. The study’s participants noted that working with the university community to identify and discuss successful examples of what EfS looks like in the specific context of each institution would provide further clarity and understanding.

A 2010 national stocktake of sustainability programs in every Australian university gives one operational picture of the range of options underway at that time. The many examples of successful practice documented in the interactive website
developed in this project can be used to further assist this process of clarification.

3. Context counts: ensure organisational integration and system alignment to support EfS and its leaders

This study, like all the studies of change in higher education that have preceded it, demonstrates that context counts – that turnaround leadership for sustainability in higher education needs an amenable operating context and environment and that, at the same time, effective leaders can help reshape this context to be more supportive. As one respondent put it: ‘At the moment there is a conceptual and emotional mismatch between sustainability leaders and the context they are trying to work in’. The study has found that:

- It is the combination of the right leaders and the right institutional context that optimises successful change in this area.
- As in the earlier Learning Leaders in Times of Change study (Scott et al 2008, ALTC), our EfS leaders need ‘room to lead’ – that they can be faced with an endless round of unproductive meetings, administrative processes that do not demonstrably add value or manage risk, and a continuous bombardment of ad hoc demands that do not have a clear outcome.
- An application of systems thinking and proven approaches to quality management and improvement, along with targeted support for EfS initiatives in higher education are necessary. The key strategies that underpin this approach have been endorsed by the participants in this study and are outlined below.
- Appointing a critical mass of leaders with the attributes and capabilities identified in this study will, in its own right, help reshape the context.

The study has found that transforming the operating context of our universities to more systematically support EfS and its leadership involves shifting EfS from being a fringe activity to embedding it into all aspects of the university system.

During the study it became clear that there are various effective ways in which this can be achieved. Participants in the study recommend these now be linked, leveraged, up-scaled and more consistently embedded within and across institutions. These proven solutions can be continuously updated and disseminated via the well-developed EfS networks now operating across the world. In addition to effective approaches to building EfS into the curriculum, they include productive strategies for engaging staff, students and employers, embedding EfS into the university’s strategic plan, targeted funding and resourcing, aligned operations, KPIs, governance and administrative structures, central and local leadership processes and associated accountabilities, as well as into the key activity areas of research, teaching, operations and engagement.

In summary, the study has found that it is important to build EfS into what the UK Higher Education Academy (Ryan: 2011) refers to as ‘the institutional mainframe’ if staff beyond the already committed are to engage and commit to the EfS change agenda.

To achieve this, the participants in this study recommend that the following specific steps be taken:

**Engagement**
- Institute processes that engage all key players (including the university executive and staff, students and employers) with the EfS agenda.

**Alignment**
- Ensure that the institution’s vision, structure, resources, performance plans and key performance indicators are all aligned towards a focus on EfS. This would include ongoing allocation of relevant human and non-human resources to the area; targeted staff development programs to share good practice; carefully managed and evaluated pilot programs to identify what works and what does not; and
clear senior and local performance targets and accountabilities for the area.

- Demonstrate that such a focus aligns not only with the mission and core values of the institution but also with national policy requirements and local and international peak body commitments in order to achieve further buy-in.
- Align staff selection, performance review, tenure, promotion and recognition processes with the institution’s EfS goals and priorities; and remove disincentives in these areas.

**Governance and Management**

- Ensure EfS leadership is centrally located in the *management and governance structure* of the university. Key steps in this regard identified in the present study include:
  - Appointing an appropriate senior leader accountable for overall action and coordination of all four sustainability pillars across the four key activities of the university or college;
  - Locating the leader in the senior executive not in one of the support areas (e.g. in the area of capital works and facilities);
  - Ensuring that the senior leader reports directly to the VC or president and does this regularly — preferably on a monthly basis with a focus on implementation of an agreed performance plan and key achievements;
  - Establishing a senior leadership and coordination team to ensure consistent cross-departmental and unit linkages and collaboration;
  - Establishing a small coordination and implementation unit reporting to the sustainability leader to identify, illuminate, link and leverage EfS initiatives already successfully underway across the institution and in partner institutions;
  - Establishing a nested system of leadership – with local leaders mirroring the focus and accountabilities of the central leader in their local context, and reporting to him/her as part of a network;
  - Seeking to ensure that action on EfS is a standing item on the agenda of all core committees; and
  - Putting in place a monitoring system for the area, the results of which are regularly reported at these committees.

**Efficiency**

- Ensure that meetings are outcomes-focused and effectively chaired; and that administrative systems are fit-for-purpose, efficient, and that they demonstrably assist the institution to put its EfS agenda successfully into practice.

**Collaboration**

- Actively foster a culture of collaboration – in which teams involved in cross-faculty and inter-unit projects are supported, recognised and rewarded.

### 4. Track and improve EfS program quality

The participants in this study have identified a range of key indicators that would demonstrate that a comprehensive approach to embedding EfS in a university is successfully underway (see Attachment Two in the study’s full report). These include quality indicators for inputs and, most importantly, quality indicators for delivery, engagement and impact. It is recommended that the indicators in Attachment Two are used as a starting point for not only setting the KPIs and vision for EfS in our universities and colleges but also for tracking, assessing and improving key initiatives in the area. It is also suggested that existing reporting schemes like the Learning in Future Environments (LiFE) index be considered as a one way to give this process coherence and enable benchmarking.

In order to enable central and local EfS leaders to track, link and improve the many initiatives already underway, the
study has identified the need to develop a comprehensive (inter) national Quality Management & Tracking Framework for EfS in Higher Education. In particular, it has identified the need to establish a tracking and improvement system which gives focus to four interlaced dimensions of EfS quality – course design, support, delivery and impact – and locates this within a broader framework that identifies all of the dimensions of embedding sustainability in our universities and colleges.

In this regard there are a number of proven approaches for assuring and improving academic standards and the quality of higher education learning and teaching in general that can be readily adapted to the specific context of EfS.

The Higher Education Funding Council for England has funded a national initiative in the UK to develop a quality framework for EfS which could support institutional development and reviews in this area. The work is supported by the Quality Assurance Agency of the UK.

5. Put in place the right incentives

Respondents and workshop participants in the study identified a combination of 19 extrinsic and intrinsic incentives which will not only encourage and support the engagement of university staff and students with EfS initiatives but will also then sustain them:

Extrinsic incentives
- Active endorsement and leadership by the vice-chancellor, president, or rector.
- Introduction of relevant awards like a VC/President’s Sustainability Award and systematic acknowledgement by senior leaders of successful implementation of agreed EfS initiatives and collaborations as they occur.
- A focus on EfS capabilities in staff selection and promotion processes; along with a focus on successful implementation of agreed EfS initiatives in the performance management and development processes of all relevant central and local leaders.
- Rewards for trans-disciplinary research in national research reward schemes like Excellence in Research Australia (ERA) where the focus at present is primarily on single disciplines.
- In the Australian context, achieving better alignment between Field of Education and Field of Research categories.
- The allocation of targeted human and resource support for EfS initiatives, including the use of a sustainable university rolling or revolving fund to support both staff and student initiatives.
- Having a senior leader who works with local champions to assist staff with implementation and link up parallel initiatives being undertaken in different parts of the university or beyond.
- Giving careful attention to illuminating, linking and leveraging what is already being implemented; including disseminating positive media coverage of such achievements.
- Right resourcing – targeted support with clear accountabilities for its effective application.
- Peer engagement and support – from both within and beyond the university via networks of staff pursuing the same developments in different locations.

Intrinsic incentives
- Knowing that one is playing an active part in helping one’s students, profession and nation build a socially, culturally, economically and environmentally sustainable future.
- Feeling that what one is doing is both meaningful and useful.
- Satisfaction in seeing one’s students develop their capabilities and hearing back from them about the relevance of what they have learnt and how they have applied it in their work or more generally.
- Receiving positive student responses to one’s teaching.
− Gaining enjoyment from the process of helping people learn.
− Seeing increasing numbers of students wanting to enrol in one’s classes.
− Working with inspiring people.
− Creating a legacy.
− Seeing that one’s views are being incorporated into a new plan and that past successes relevant to that plan are being taken into account and acknowledged (the ownership incentive).

Overall, the study has found that external and internal influences, challenges, satisfactions and incentives all interact to shape what EfS leaders give focus to in their role and how they judge they are doing a good job. This, in turn, sets the agenda for the change strategies necessary to engage key players and to support implementation, along with determining the key leadership capabilities necessary to enact them.

6. Engage the disengaged and the institution’s senior leadership

Successful implementation requires consistent delivery of each EfS innovation. Therefore, the quality of what is delivered and its impact is directly linked to the extent to which not only the already committed engage with implementation but also those who are less interested. How to engage central and local staff for whom EfS is not a priority is a key implementation challenge for EfS change leaders. The study has found that, to achieve this, it is critical to consistently shape, link and leverage the incentives identified in recommendation area 5.

The study has established that a key motivator for engagement with EfS initiatives is the active endorsement by the institution’s senior executive. However, the study has found that not all senior executives and trustees are engaging with the potential for this area to assist their nation, attract students and position their university or college favourably. How to engage such people when EfS is not already their priority is a distinctive challenge for leaders committed to embedding EfS not only in the curriculum but also in their institution’s research, engagement and operational activities.

A range of strategies has been suggested by participants in this study to foster the engagement of each institution’s senior leadership with the area. They include:

- Demonstrating the potential for EfS to attract students and staff to their institution and that initiatives in this area will have a positive return on investment;
- Linking the initiative directly to the existing mission, values and strategic objectives of the institution, and the KPIs of the senior leader concerned;
- Noting alignment of EfS action with key external priorities and policy requirements;
- Leveraging peer pressure from senior leaders in other universities;
- Winning external funding and endorsement for the area (like the endorsement of a Regional Centre of Expertise in ESD by the UN University);
- Gaining positive media coverage and external awards;
- Ensuring key players in the institution’s governing body are on side by having one of them chair a sustainability task force;
- Seeking to have a focus on the area built into the KPIs of the CEO and senior staff and funding allocations by the governing body;
- Undertaking a stocktake of what is already happening across the university to demonstrate the current levels of support for and viability of giving more systematic focus to the area;
- Identifying exactly where sustainability-oriented jobs, specialisations and careers currently exist or are emerging. Doing this not only will help engage senior leaders with the business case for EfS but also will help ensure that EfS programs are relevant and that prospective students are attracted to them by being alerted to careers of which they were hitherto unaware; and
Demonstrating growing student demand for EfS courses.

Participants in the study and related workshops have all made the case for a targeted effort to provide leaders at all levels with capacity building for EfS change leadership.

7. **Apply the key lessons of successful change management in higher education**

*Good ideas with no ideas on how to implement them are wasted ideas.*

This study, like all those that have preceded it, has confirmed that change is not an event like the launch of an EfS policy, plan or program but a complex learning and unlearning process for all concerned.

It has also shown that how students like to learn (i.e. develop their capabilities and ability to implement desired change) is how staff like to learn – through collaboratively figuring out how to solve relevant, real-world challenges, through practical action and learning by doing, reflection on experience, peer support, having access to proven solutions as one needs them, ‘just-in-time’ and ‘just-for-me’; and assistance from people further down the same change path; all guided by the use of overall good practice and diagnostic frameworks like those developed in the current study.

The driving force of this process of change (learning) is motivation. Motivators can be both extrinsic and intrinsic (recommendation area 5). Staff will, for example, be consistently asking ‘Is this EfS initiative relevant to me, is it desirable, is it clear what I am to do, have I got some ideas on what works, is this a priority for my boss, am I getting help to make it work and, most importantly, is it feasible (i.e. do I have time to learn how to make this change work and to grapple with putting it effectively into practice)?’

Discussion of the study’s findings at its feedback workshops has confirmed that a set of productive change, development and implementation strategies identified in previous studies apply equally well to the distinctive context of EfS change leadership. To be enacted successfully they require EfS change leaders with the capabilities highlighted in recommendation area 8, people who understand the incentives identified in recommendation area 5 and know how to use the strategies identified in recommendation area 6.

Participants in this study identified the following **successful change strategies** which leaders of EfS can use:

*Identify and acknowledge what is already happening in your institution at the outset*
- Undertake a stocktake of current EfS activity early on in order to engage staff, and to identify, acknowledge, link, build on and leverage what is already happening.
- Acknowledge the current contributions of staff and emphasise that everyone has a role to play in achieving the successful implementation of the EfS agenda. In this regard local staff particularly value senior leaders noticing and praising their success in implementing desired EfS innovations.
- Ensure that everyone involved is speaking the same language - as noted in recommendation area 2, the study has found considerable variation in the way in which HE staff, students and stakeholders are using key terms.

*Learn by doing*
- Use a process of ‘steered engagement’ which sets a small number of overall strategic priorities and then invites local groups/units to identify how best to implement them, given local capabilities, resources, student needs, area(s) of study and context (Fullan & Scott, 2009: pgs 85-88). This combined top-down and bottom-up approach sets overall parameters for change but allows local development and ownership of the most suitable and feasible solutions.
Recognise that implementation does not unfold in a one-off, linear fashion but through rising spirals of development, implementation, evaluation and improvement as those who are seeking to put a desired EfS change into practice learn how to make it work by doing it. This process of action learning or learning by doing involves trialling proven solutions under controlled conditions, determining what works and what does not, enhancing the approach in the light of this monitoring and finally, usually after a number of iterations, specifying what really works and helping others to adapt and implement this proven approach in other locations. This process of ‘mutual adaptation’ is very different to the more linear one of trying to finalise what is to be implemented at the outset.

This is in recognition of the observation by Francis Bacon in the 16th century that ‘In life we rise to great heights by a winding staircase’.

Focus on evidence-based decision making

- Give focus to making decisions based on ‘consensus around the data’ not just ‘consensus around the table’.
- Use data from the tracking system identified in recommendation area 4 to identify priority areas for improvement action and successful areas of practice warranting acknowledgement and scale-up.

Institute, link and leverage incentives for engagement and collaboration

- Put in place a range of incentives and rewards to build a change-capable, collaborative culture which fosters cross-disciplinary and cross-unit work, along with the other incentives known to engage people with desired EfS initiatives identified in recommendation areas 5 and 6.
- Use external levers for internal improvement (Scott & Hawke, 2002). This includes using an external quality audit to give focus to the area; leveraging relevant government policies and grants to the university’s strategy; hosting key national forums and high profile centres on the area (like a UN University-endorsed Regional Centre of Expertise in ESD); and using positive media reports to promote achievements to internal audiences.

Build linked leadership and networks

- Put in place a nested system of leaders of EfS that can help give overall coherence but also foster locally appropriate solutions.
- Identify and build champions for this work into a mutually supporting network, led by the member of the university executive responsible for this area.
- Seek to ensure that there is a champion for this work on the governing body of the university and work with this person to engage that group to mainstream the area by building attention to EfS into the strategic objectives of the university, and the associated funding, KPIs and performance requirements of senior, middle and local leaders.
- Learn from the successes of others through building targeted networks with institutions addressing the same agenda. This is best achieved via a process of benchmarking for improvement.

It is recommended that professional development for leaders of EfS give specific, situated attention to how the above key change management strategies can best be deployed in their own, distinctive context, taking into account the stage of development of their institution in addressing the EfS agenda.
8. **Focus on the change-leadership capabilities identified in this study**

*Change doesn’t just happen but must be led, and deftly.*

To negotiate and reshape existing organisational contexts and implement the challenging transformation agenda summarised above successfully requires a distinctive set of leadership capabilities. The study has found that these capabilities align generally with those identified in earlier studies of leadership in higher education (Scott et al, 2008, Scott & McKellar, 2011) and in studies of effective leadership of change in other educational contexts (Scott, 2003, Fullan & Scott, 2009, Fullan, 2011). However, given the distinctively challenging transformation agenda identified in this study, these capabilities need to be particularly well developed. It has also found that the combination of capabilities varies depending on whether the EfS leadership role is one that is local, in middle management or in the senior levels of the institution.

A key message of this study is that change-capable and resilient universities are built by change capable and resilient leaders. This is why their selection against the key capabilities identified in this study is so important. If we get a critical mass of leaders with the right capabilities working on a shared EfS vision and agenda with colleagues centrally and locally and, if they also model how to behave appropriately and constructively when the inevitable glitches of implementation arise, they will be building a change-capable and resilient culture by modelling what works to their staff and students.

Furthermore, it is via the unified actions of leaders that the transformation of the focus, structure and support systems necessary to create an operating context more supportive of EfS in our institutions of higher education will be achieved.

Importantly, the study has found that the EfS leadership capabilities that count have much in common with the attributes of change-capable and resilient organisations and societies. And, interestingly, that many of them also align with the underpinning values of the world’s major religions. It is for this reason that participants in the study have identified the need to give the capabilities highlighted in the study more specific focus in the graduate attributes of our universities and colleges.

In this study the top 15 ranking capabilities on importance for effective leadership of EfS out of the 38 investigated are, in rank order.

Every one of these top 15 ranked

1. Having energy, passion and enthusiasm for EfS (P-commitment)
2. Being willing to give credit to others (IP-empathising)
3. Empathising and working productively with diversity (IP-empathising)
4. Being transparent and honest in dealings with others (IP-empathising)
5. Thinking laterally and creatively (C-strategy)
6. Being true to one’s values and ethics (P-decisiveness)
7. Listening to different points of view before coming to a decision (IP-empathising)
8. Understanding personal strengths and limitations (P-self-awareness)
9. Time management skills (GSK)
10. Persevering (P-commitment)
11. Learning from errors (P-self-awareness)
12. Learning from experience (C-responsiveness)
13. Remaining calm when under pressure or the unexpected happens (P-self-awareness)
14. Being able to make effective presentations to different groups (GSK)
15. Identifying from a mass of information the core issue/opportunity (C-diagnosis)

**Code:** P-Personal Capability domain; IP-Interpersonal Capability domain; C-Cognitive Capability domain; GSK-Generic Skills & Knowledge domain

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8.

Change doesn’t just happen but must be led, and deftly.

To negotiate and reshape existing organisational contexts and implement the challenging transformation agenda summarised above successfully requires a distinctive set of leadership capabilities. The study has found that these capabilities align generally with those identified in earlier studies of leadership in higher education (Scott et al, 2008, Scott & McKellar, 2011) and in studies of effective leadership of change in other educational contexts (Scott, 2003, Fullan & Scott, 2009, Fullan, 2011). However, given the distinctively challenging transformation agenda identified in this study, these capabilities need to be particularly well developed. It has also found that the combination of capabilities varies depending on whether the EfS leadership role is one that is local, in middle management or in the senior levels of the institution.

A key message of this study is that change-capable and resilient universities are built by change capable and resilient leaders. This is why their selection against the key capabilities identified in this study is so important. If we get a critical mass of leaders with the right capabilities working on a shared EfS vision and agenda with colleagues centrally and locally and, if they also model how to behave appropriately and constructively when the inevitable glitches of implementation arise, they will be building a change-capable and resilient culture by modelling what works to their staff and students.

Furthermore, it is via the unified actions of leaders that the transformation of the focus, structure and support systems necessary to create an operating context more supportive of EfS in our institutions of higher education will be achieved.

Importantly, the study has found that the EfS leadership capabilities that count have much in common with the attributes of change-capable and resilient organisations and societies. And, interestingly, that many of them also align with the underpinning values of the world’s major religions. It is for this reason that participants in the study have identified the need to give the capabilities highlighted in the study more specific focus in the graduate attributes of our universities and colleges.

In this study the top 15 ranking capabilities on importance for effective leadership of EfS out of the 38 investigated are, in rank order.

Every one of these top 15 ranked

1. Having energy, passion and enthusiasm for EfS (P-commitment)
2. Being willing to give credit to others (IP-empathising)
3. Empathising and working productively with diversity (IP-empathising)
4. Being transparent and honest in dealings with others (IP-empathising)
5. Thinking laterally and creatively (C-strategy)
6. Being true to one’s values and ethics (P-decisiveness)
7. Listening to different points of view before coming to a decision (IP-empathising)
8. Understanding personal strengths and limitations (P-self-awareness)
9. Time management skills (GSK)
10. Persevering (P-commitment)
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**Code:** P-Personal Capability domain; IP-Interpersonal Capability domain; C-Cognitive Capability domain; GSK-Generic Skills & Knowledge domain

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capabilities attracted an importance rating of more than 4.3/5.

The study’s findings and the workshop discussions on them have confirmed two key conclusions from earlier studies.

First, that the highest-ranking capabilities consistently come from the personal (P) and interpersonal (IP) capability domains, with the remainder typically coming from the cognitive capability scale (C). High levels of skill and knowledge (competence) emerge as being necessary but not sufficient for effective leadership in the area. Yet the hundreds of respondents and workshop participants involved in this and previous HE leadership studies have repeatedly reported that there is only limited focus on the specific aspects of emotional intelligence and cognitive capability identified above in the selection and promotion processes they have encountered during their career in higher education.

Second, that the most effective leaders in higher education:

- listen, link and lead – always in that order.

That is, they listen with a case for change and a framework or menu of options to identify what those who are to implement a desired initiative are already doing and what, in their view, is most likely to work; then they link this feedback together into an ‘owned’ plan of attack and finally they lead – by actively helping staff to try out their chosen strategy under controlled conditions, keeping what works and modifying what does not. This is a distinctive and highly effective way to develop an owned, implementable vision for change and aligns with the key lessons identified from two decades of research on effective change management in higher education (Fullan & Scott, 2009: 73-96).

- model, teach and learn

That is, they model the behaviours that count to their staff when change is in the air; they operate as effective teachers with their staff as they help them learn how to implement desired changes and, finally, they are constantly on the lookout to improve their own practice.

9. Review EfS leadership position descriptions, selection processes and succession strategies in the light of the study’s findings

In the light of the above findings it is recommended that each university and college review its leadership policies, processes and procedures as a threshold issue.

Specifically, it is recommended that each HEI:

- Review its position descriptions for all local, middle and senior leaders of EfS, and leaders more broadly, against the study’s findings on the top-rating leadership capabilities, along with the findings on how respondents judge they are doing an effective job and the aspects of their role which they believe are most important. For example, it is recommended that the performance criteria in PDs give specific focus to all of the capabilities attracting an importance rating of more than 4.2/5 in each leadership category studied. It is also suggested that a more comparable definition of specific role descriptions be established, given the fact that many common position titles have quite different levels of scope and focus.

Participants in the study repeatedly emphasised how important it is to have a critical mass of the right leaders in place and how a poor leadership selection decision not only costs the university in terms of the salary for the appointee but can have dramatic collateral damage on the morale, efficacy and engagement of the staff who report to them.
In addition, they recommended that the same capabilities could be given more specific emphasis in the position descriptions and selection processes for entry-level staff. This, said participants, would help build up a pool of people with the potential to take on leadership positions later in their career. An interesting parallel was noted between the findings for leaders and those for successful graduates in a series of studies undertaken in nine professions over the past decade.

- Revise leadership selection procedures so that what is given focus in these processes is valid (i.e. that it focuses on what counts for effective leadership in the EfS role concerned) and how these selection processes are carried out is both valid and reliable. (For example, there are clear indications in this study that short interviews with a selection panel may not reliably tap the capabilities found to be critical for effective leadership of EfS).

- Give more careful attention to succession planning by identifying prospective leaders seen to possess the capabilities ranked highest on importance in the study and assisting them to prepare for leadership via targeted mentoring, secondments, exchanges and other practice-based learning strategies focused on EfS.

10. Apply the most productive approaches to leadership learning identified in the study to the professional development of EfS leaders

Participants in this study have identified an array of preferred modes for learning leadership of EfS. These include learning on the job, via ad hoc conversations with experienced colleagues, peer-to-peer learning within and beyond their institution, studying real life workplace problems in EfS, through local and external networks of peers involved in the same work, visiting other institutions, attending EfS conferences and involvement in relevant professional associations. To apply these findings, it is recommended that a comprehensive and integrated approach be adopted. What follows is a detailed overview of the elements and guiding principles for such an approach.

**EfS leadership learning principles**

In terms of leadership support and development, the study has confirmed the key lessons from studies of productive adult learning extending back more than four decades (Tough, 1977), lessons which also align with international research on professional learning in general and what engages and retains university students in productive learning (Scott, 2008, Fullan & Scott, 2009 and Scott, Grebennikov & Chang 2010, Scott & Yates, 2002, Scott & Wilson, 2002, Wells et al 2009) in particular. This includes the importance of:

- Ensuring such programs meet the following quality checkpoints:
  - immediate relevance to participant needs;
  - a focus on active, problem-based and work-based learning;
  - availability of ‘just-in-time and just-for-me’ solutions;
  - consistent theory-practice links;
  - clear management of expectations about what is to be provided in the program and a clear direction for learning using the frameworks for good practice identified in this study;
  - a focus on the leadership capabilities that count;
  - flexible access and learning modes;
  - timely and constructive feedback on progress;
  - the use of program facilitators who are experienced EfS leaders and effective teachers; and
− aligned and effective learning support.

○ Giving focus to the priority areas for EfS leadership development identified by respondents in the study. These include:
  − how best to achieve high levels of staff and student engagement with EfS initiatives;
  − how to build a collegial and collaborative working environment;
  − how to connect EfS with the campus and/or the region as a living laboratory; and
  − how to achieve the successful implementation of new initiatives in EfS.

○ Enabling our leaders to identify successful solutions to implementation problems as they experience them².

○ Provision of a range of targeted leadership development opportunities, including:
  − Individual universities and colleges running role-specific EfS leadership programs on the results of this study for their own local, middle and senior leaders of EfS;
  − running ‘market days’ and offering broader staff seminars on what EfS means in practice by showcasing the activity that is already underway;
  − embedding leadership training into EfS leaders’ performance development indicators and

individual development programs; and
  − establishing staff exchanges with partner institutions pursuing the same EfS change agenda.

○ Modelling the effective approaches to ‘just-in-time’ and ‘just-for-me’, problem-based and (inter)active learning in these leadership programs so that the leaders learn through experience what works for students.

○ Mining the data in this study to produce a series of succinct guides (‘skinnies’) on effective change leadership for EfS in HE – each targeted on how best to address the distinctive challenges faced in different EfS leadership roles. Guides produced so far are for deans/heads of department and EfS program coordinators. There is potential for these to be produced as interactive, digital, mixed media artefacts.

○ Securing the active endorsement of the peak bodies in each country for action on the area and for these groups to actively lead, monitor, disseminate and acknowledge what is happening; and, when feasible, to run their own national EfS leadership program. Equally important is these peak bodies ensuring that relevant government policy (e.g. Australia’s National Action Plan for ESD) and commitments to international initiatives like the HE Treaty at Rio+20 are appropriately acted upon, supported and tracked.

○ Using the study’s feedback workshops and resources as a leadership development strategy in their own right. The 300 EfS leaders from around the world involved in these workshops have recommended their use in this way not only at local institutions but regionally and nationally, via

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² A national good practice clearing house which builds on the interactive platform www.sustainability.edu.au developed in 2010 by UWS and ALTC is one good starting point. This platform identifies all current EfS initiatives in the area, effective teaching resources for different fields of education and provides a section on effective leadership in which the findings of the current study are to be located. There is potential to link this portal with others now available around the world, including those provided by AASHE in the US, Copernicus in Europe, the UNAI Hub on Sustainability operated by the Black Sea Universities Network, along with others.
UA, Australasian Campuses Towards Sustainability (ACTS) and equivalent overseas peak groups. More broadly, they have recommended that OLT use the approach to engaging users of the results from the outset as a model and requirement for all subsequent OLT-funded projects.

Networked learning
A key strategy recommended by participants in this project concerns now moving to link and leverage the many parallel networks for EfS currently in place around the world.

Key suggestions in this regard include:

- Building local, national and international links between EfS leaders in a similar role in different locations. Participants noted the potential to use the 500 EfS leaders involved in the present study as the basis for an international EfS leadership network upon which to build a community of practice.

An important complementary networking and development initiative is the Sustainable Futures Leadership Academy. The SFLA seeks to use experienced vice-chancellors, rectors and university presidents to assist CEO colleagues new to the area who wish to give focus to building EfS systematically into their university’s core activities. This is in recognition of the key finding in the current study that one of the key challenges for our EfS leaders is the difficulty of getting momentum if the VC or equivalent is uninterested, unclear on how best to proceed or unengaged with the area.

- Sector bodies like Universities Australia, ACTS, the US Association for the Advancement of Sustainability in HE (AASHE), the UK Higher Education Academy and Copernicus working in concert to sponsor conferences which focus on change leadership for EfS, in order to build informal networks and foster inter-institutional leadership exchanges focused on good practice.

- Ensuring that these networks work effectively by using a common tracking framework with which to identify successful practice.

- Peak bodies like UNU and the International Association of Universities (IAU) convening regional, national and international conferences for leaders of sustainability in higher education in order to build, link and leverage best practice on leadership for EfS.

The study has not only found many similarities in its findings across the countries involved but also some significant differences which suggest strong potential for cross-cultural learning and improvement benchmarking.

An important next step recommended by participants in the present study is to replicate it in a range of other contexts, starting with Malaysian Higher Education and then elsewhere in Asia, the Sub-Continent, South America and Africa. This process could, it was suggested, be facilitated by groups like the IAU.

Acting on the opportunity to learn across countries is indeed at the core of what the EfS agenda is all about. A good first step for networked learning would be to not only build an international portal around the findings listed above, with situated case studies of how to enact them in different contexts, but also to link and leverage the following peak sustainability in HE networks to support the use of this resource: ACTS, AASHE, Copernicus and similar networks in other countries, along with the UNU RCE Network and the IAU.
Summary

This study has taken place at a turnaround moment for universities and colleges around the world – a time supportive of sector transformation towards giving more central focus to education for social, cultural, economic and environmental sustainability. The study has identified how this opportunity might best be addressed, what the key elements of transformation should be, how to manage the process and, most importantly, the key capabilities necessary for those who lead this transformation to enact it.

The international networks and commitments exist – now is the time to act in concert to take up the challenge and use higher education to build a better future and the next generation of leaders capable of making it happen.

Products

The study has produced
1. A validated framework and guide for effective change leadership for sustainability education in universities and colleges.
2. A functional prototype of an online tool for subsequent use by institutions of higher education.
3. A field-tested methodology and set of resources for engaging higher education staff with the results of the study including a set of slides on the results and a video on how to use them.
4. A set of empirically confirmed benchmarks for validating position descriptions and selection procedures for leaders of EfS in higher education.
5. A set of checkpoints for developing a university culture and mode of operation that will facilitate effective change leadership in the area.
6. A set of quality checkpoints for effective leadership development and training in the area.

In the longer term, the project will encourage:

- Accelerated leadership for sustainability in HE institutions.
- New sustainability leadership corridors – spaces for leaders to work together, share and develop new skills and capabilities.
- A group of leaders who are ready to act as change agents to advance the transformation of higher education for sustainability across the world.

In the full report that accompanies this executive summary the study’s aims, focus, context and methodology, along with each of 10 recommended areas for action identified above are explored in detail. These are available for download from the Office for Learning and Teaching website at: http://www.olt.gov.au/.
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