

---

## Creating an MLE

### Embedding MLEs into Institutions

- Implementing change
- Teaching and learning practice
- Supporting course development and delivery
- administrative–issues
- Staff development and pedagogy
- Sustaining and evaluating the MLE
- General questions
- Summary and conclusion

## 8. Embedding MLEs into Institutions

This section assumes you will have a number of the elements of a Managed Learning Environment in place (or at least you think you have!). This should mean that your staff and students are able to get at all sorts of information in ways they couldn't do before, and that this has resulted in change in working practice for everyone – senior managers, administrators, support staff, teachers and learners. This is a new situation and will take no inconsiderable time to bed down.

These processes of embedding will take different forms for each institution and (sorry) there can be no ideal master-plan! However there are key aspects you can address including staff development, new policies and strategies, and you will need to have in place a continuous process of review and evaluation.

An MLE will impact on a large and varied number of aspects of any institution. Consider the list below, which covers just some of the possibilities:

- Students can find out about and enrol on courses
- They can learn online, and access a wide range of learning resources
- They can access learning support through online helpdesks, tutorials, materials, etc
- They can look at their timetables and their own record for any course, unit or module they've taken
- They can talk online, collaborate and share resources with each other
- Lecturers can develop and teach courses online and support learners in new ways
- Heads of department and lecturers can track the progress of their students
- Senior managers, heads of department and administrators can quickly obtain information for funding bodies and other administrative purposes
- Everyone can access a range of services appropriate to their work: computers, email, the Virtual Learning Environment software, other online learning tools and facilities, the library, helpdesk etc
- Staff roles will have changed to enable some services to be offered in new ways
- The use of email and other networked services are part of everyone's life and are no longer 'optional'
- Change has made staff development a core activity for everyone

Your MLE will (hopefully! have been designed and implemented in a way that is appropriate to your institution and will be new territory for nearly everyone. You must now face the question of how to go about embedding it and making it work so that it no longer feels new, but is just part of the way you all work. Some aspects will feel very familiar but may actually have changed in ways you have not fully appreciated, whilst others will feel radically new and different. Also, relationships and expectations will change. Both staff and students, whilst most will be used to online activities at work and home, will need to learn that there may more controls and limitations over what they can do, but new and improved services are now available to them. Everyone will need to learn and understand that just because information and documents can be exchanged almost instantaneously, this does not mean that people can or will deal with them as fast! New conventions for how to treat each other may need to be worked out.

This section looks at what might help in this change process and help you to move towards embedding your MLE so that is common practice. It also focuses on some the issues you might need to consider (and may have overlooked so far).

As the rest of this infoKit has made clear, organisations are very complex, but some key aspects that are covered here which illustrate the process include:

- Implementing change
- Practice and Management of Teaching and Learning

- Supporting Course Development and Delivery
- Administrative Issues
- Staff Development
- Sustaining the MLE
- General Questions

## 8.1. Implementing Change

This section of the infoKit should probably be titled 'Planning for Embedding', as the research done has not indicated that MLEs are embedded in any UK institution in the sense described below. It does not address issues of technology or its implementation directly.

This section addresses questions of:

- What approaches can/are being taken to address embedding?
- How can embedding be integrated into institutional strategies?
- How can embedding be integrated into operational planning?

### 8.1.1. What's 'embedding'?

Successful implementation of an MLE represents a significant change in the way an institution carries out its primary activities, and will result in changes in the practice of almost all staff, academic or service/support. Inevitably, this will lead to further change in light of experience, as strengths and weaknesses emerge, and as technology changes. This requires that an institution is able to adapt its strategies to be able to support evaluation and on-going development, and to be adaptable to change (to use a new phrase, the institution needs to become agile). It also needs to put in place processes that allow new staff and students to be inducted into the full use of the MLE. This section will provide guidance on the specific areas of concern, and where possible, to illustrate this with case studies.

The use of MLEs can be considered to be fully embedded into an institution when all of the policies, procedures, roles and responsibilities that pertain to the use of an MLE are fully integrated – not just with each other but with those which apply to the institution in its normal practice. In other words, whilst a full road map could and should be produced of everything applying to the use of MLEs, this would be done by extracting the required information from statements of policies etc which cover the institution holistically, rather than it existing as a special set of statements on its own.

Equally, embedding also implies that the use of MLEs has become part of the CULTURE of the institution, and is seen by educators, learners, administrators and managers (and indeed all other stakeholders in the institution) as part of their normal working practice. This means that use of an MLE is seen by both teachers and learners as part of the normal portfolio of approaches available to facilitate learning. Equally, management and administrative practice is aligned to the use of the MLE, which is integrated into the systems used, is viewed as part of day-to-day operation and at the same time forms part of longer-term planning and strategy.

It must be stressed that many of the components of both educational and business practice associated with the use of MLEs have little to do with technology in a direct sense, and that many will exist entirely outside of the technologies employed. Embedding implies however, that the technologies are employed seamlessly in cohort with them.

The Department for Education and Skills (DfES) has launched an [e-learning strategy](#) that was available for consultation until 30 January 2004. It comments:

*'Embedding e-learning will not happen fast. This is a long-term strategy that looks ahead to years when the technology will probably have evolved further. That is all part of the strategy – how we prepare ourselves, through our education system, to cope with an ever-changing world.'*

*Most importantly, this is a unified e-learning strategy for the whole of England. There are e-learning strategies being developed at every level – in the four countries of the UK, in local authorities, institutions, agencies, and departments, as well as in private sector organisations. E-learning does not recognise these physical boundaries. Coming together to consider how best to blend e-learning with our existing systems will benefit all partners.'*

Looking at strategies from UK institutions available on the Web, it is clear that whilst introduction and implementation of MLEs/VLEs/e-learning is often quite clearly addressed, the sustaining and embedding of these things is not. Generic guides aimed at core teaching and learning practice commonly do not mention issues around MLEs/eLearning. For example the LTSN guide 'Assessment: A Guide for Heads of Department', an otherwise excellent resource aimed at advising its audience on writing departmental assessment strategies, nevertheless makes no mention of how the use of MLEs, e-learning or Computer Aided Assessment might complicate this process.

Because strategies are by their nature forward looking, it will require considerable institutional will to ensure that embedding of MLEs is carried through into the on-going development of all of an institution's business and educational policies and procedures.

There is no right answer to approaching organisational change, but any approach should:

- Evaluate 'where have we got to?'
- Identify 'what's not working?'
- Identify 'what strategies and plans are not joined up?'
- Identify 'what policies and procedures are not joined up?'
- Identify 'who's role has changed/is still changing?'
- Identify 'who needs help to cope with these changes?'
- Identify 'what policies, procedures, roles and responsibilities still need to change?'
- Involve those who own the things that need to change
- Ensure resulting changes are still owned by those affected

There is more useful information and advice to help you with this process in the section '[Understanding Your Organisation](#)'.

## **8.1.2. Culture change methods**

This part addresses questions of:

- How can changing the attitude and practice of managers, administrators, teachers and learners be addressed?
- How can the research-oriented community of the institution be involved?

The first thing to stress is how important it is not to forget those in management, administrative and support roles. These are stakeholders who either own the processes and procedures to which successful embedding is important, or who carry roles which, if not considered in this context, can seriously impede successful use by the other stakeholders – learners and teachers.

Another group of stakeholders in which culture is likely to be an issue are those representing external organisations such as accrediting bodies, professional associations, and quality authorities. They have major impact in the context of validations, exam bodies, course reviews etc, and can be very traditional in their outlook.

With all of these groups, including the learners and teachers, the issue focuses very much around getting each group to see real benefit in the use of an MLE and in changing their culture in terms of their working/learning/teaching practice.

It cannot be overstressed that work on cultural change via staff development etc. can be completely overturned if the necessary accompanying changes in policies, procedures, roles and responsibilities are not also made.

Equally it is important to remember that change in behaviour can be achieved by altering rules and procedures!

[Follow this link](#) for key resources for this section (these open in a new window)

## 8.2. Teaching and Learning Practice

This section and the next address questions of course design and pedagogy and how the the development and delivery of quality e-learning experiences can be organised and embedded into the practice of educators, support staff and learners as part of the use of an MLE.

This section addresses questions of:

- How can new methods of course structuring, delivery and assessment be approached?
- How can staff embed new pedagogic approaches into their practice?
- How can new methods of assessment be embedded?
- How can learners integrate the use of MLEs into their experience?
- These two sections are the only place in in the MLE infoKit where issues of Teaching and Learning are discussed in any depth. However this does not mean that the editors of the infoKit do not recognise that teaching and learning are the centrally important activities – the issues involved are well discussed elsewhere and some of the resources in these sections will help follow up such issues. Sadly, much evidence indicates that pedagogic innovation and/or novel approaches to assessment in the use of MLEs/e-learning is the exception rather than the rule.

*Enhancing the quality of teaching and learning is the key driver, identified by almost every institution, for MLE development. However, the reality appears to be that the student experience is being enhanced through improved delivery of teaching materials and course announcements, improved access to learning resources and better communication. Pedagogical issues are not (yet) a part of this, and, indeed, appear to have been of secondary concern until now. ([JISC MLE Study Report, 2003](#))*

Much of the following discussion refers to VLEs rather than MLEs. It is important to remember that an MLE is a host of interworking systems (some software, some manual) which provide management of the overall process of managing learning in all its aspects, whereas a VLE is (usually) a single software system designed to provide for the management, facilitation and delivery of the actual learning process.

When considering the embedding of MLEs in teaching and learning practice, you should perhaps ask the following question:

'Are we seeking to make the use of an MLE embedded in the sense of getting staff and students to see them as merely a natural extension of traditional practice, or do we wish to use our MLE as an agent to effect real innovation in teaching and learning practice, regardless of whether delivery is 'e', blended or traditional?'

If you are content to see your MLE used just to reflect traditional teaching and learning practice,

you should first question if you are doing it to get staff on board and then ask if what you want to embed in your institution is a culture which is content to ignore new practices in teaching and learning.

When staff DO successfully address novel pedagogies when using a VLE, they can find that it has real impact on their traditional practice. Indeed this is perhaps an indication that embedding has started to take place.

Much useful information on computer aided assessment is available from such sites as the [CAA Centre](#), but remember that computer-aided does NOT equate to innovative, and there is a wealth of innovative assessment practice that can be incorporated into the use of MLEs albeit not necessarily automated.

Ultimately getting learners to adopt new approaches and integrate them into their learning experience will require first that staff do the same. This involves cultural change and will be linked to staff development and internal sharing of good practice.

### **8.2.1. Management of Teaching & Learning**

This part raises issues around the various institutional policies and processes covering the creation and conduct of courses, including such questions as:

What impact does the use of MLEs have on the approach to approval of new/modified courses, including quality and validation issues? How can new approaches to course structure, delivery mode, calendar and timetable be addressed? How can the use of MLEs be integrated into assessment policy and practice? What changes to approaches to course monitoring and teaching quality need to be made?

### **8.2.2. New Courses**

Most institutions have some form of mechanism for dealing with 'I've got an idea for a new course'. Questions you might want to consider in the context of MLEs/e-learning include:

- How do you know there is a demand for the course?
- What additional documentation is needed for the validation?
- What service levels should apply?
- How can you assess intended learning strategies?

### **8.2.3. Courses changing to e-Delivery**

This can be a very difficult issue. Most institutions have procedures to be followed when a course changes its learning strategies, mode of delivery or learning outcomes.

How much of a change to, or introduction of, e-learning or e-resources will require a course review, re-validation or re-approval?

### **8.2.4. Quality Assurance**

You now need to address the questions:

- How will you quality assure 'e' courses?
- What does the QA need to cover?
- To what extent do 'e' courses impose additional QA effort?

## 8.2.5. New Approaches to Course Structure, Delivery mode, Calendar & Timetable

These issues can impose considerable challenges to institutional administrative procedures. e-learning tends to break down the convenient system of categorising and administering courses adopted by most institutions by:

- Breaking the distinction between full and part-time courses
- Leading to courses which operate on start and finish dates outside the organisational rhythm of the institution
- Offering roll-on and roll-off courses with no clear cohorts
- Confusing the distinction between awards, credit bearing, non-credit bearing and commercial courses

The use of e-learning for consortium courses such as Foundation Degrees compounds these problems even further. These issues are explored further in the section on [Administrative issues](#).

## 8.2.6. Assessment

The use and administration of CAA (Computer Aided Assessment) is well discussed on a number of websites. Areas which can be more problematic arise when MLEs/VLEs are used to collect and administer traditional assessments such as written essays, projects and examinations. Some areas you might want to consider are:

- How will blind marking be done?
- How do you confirm authorship of material submitted?
- What additional mitigating circumstances might arise?
- What is the role of external examiners in this context?
- How do you administer assessments (and exam boards) for roll-on roll-off courses?

These issues are discussed further in the section on [Supporting Course development and Delivery](#).

## 8.2.7. Course Monitoring and Teaching Quality

Here, there are questions to address such as:

- What course content, student activity and evidence of learning do you need to retain?
- In what form will you retain such material, and for how long?
- How will the course be evaluated by learners and tutors?
- Do you have a common evaluation approach across the institution?
- How will you present your e-learning course for inspection/teaching assessment?
- How will you assess teaching quality internally – for example how does one practice peer observation for e-learning?

Advice on addressing these can be found in the Key Resources for this section

[Follow this link](#) for key resources for this section (these open in a new window)

[Follow this link](#) for more resources for this section (these open in a new window)

## 8.3. Supporting Course Development and Delivery

This section covers the issue of how a planned and integrated approach to the development and delivery of e-learning experiences can be put in place in such a way that the policies and

procedures that apply and the roles of all staff involved are both coherent and understood in the context of the use of an MLE.

### 8.3.1. Supporting Course Development

This section covers the issue of how the institution supports the development of e-learning courses, and how the various services and support staff involved in the operation of an MLE might be involved. In particular it addresses the questions:

- How do you plan and support the development of new courses in terms of:
  - ◆ Analysis and Planning?
  - ◆ Design?
  - ◆ Development?
  - ◆ What parts of the institution are/should be involved in this process?
  - ◆ How does supporting this change roles?

e-learning presents a challenge to the roles and responsibilities of academics and support professionals. Apart from the expected quality processes most traditional course development is done in an ill-formed and often quite ad-hoc way. Whilst some involvement of support professionals will inevitably take place (e.g. library resources, IT requirements), this is very rarely integrated in any real way into the course design/development process.

e-learning, by its very nature, demands considerably more planning. However, there is little evidence that pedagogy is much considered in this process, with far too many staff seeking to model traditional practice onto e-delivery. Support, at all levels, is often either overlooked or not effectively used. Indeed, it is very often the case that developers have not thought through the reason why they are going to use e-learning in the first place. (Sometimes the reason for doing it is solely that funding exists!).

Overall the essential amateurism of much course design and development is thrown into sharp relief by e-learning and the use of MLEs (especially their VLE component). The resources for this sub-section include a lengthy discussion of the following questions:

- What approaches to development suits your situation best?
- How will analysis and planning be carried out?
- Is the development feasible?
- Who are your potential learners?
- How will pedagogic approaches be chosen?
- How will mode of delivery be selected?
- How will you ensure integration?
- How will you ensure that all those involved in a development own the development?
- What's needed in an outline plan?
- How will you ensure the right match of learners, learning outcomes, pedagogy, and technology to create a course design?
- What course design process is appropriate?
- How will you structure the course?
- How will you manage and support development and implementation of the product?
- How will you ensure you satisfy quality requirements?
- What preparation is needed for delivery?
  - ◆ Staff Development?
  - ◆ Ensuring support infrastructure and service levels are in place?
  - ◆ Ensuring organisational procedures such as enrolment are planned for?
  - ◆ Ensuring assessment procedures are planned for?
  - ◆ Designing and implementing marketing?

### 8.3.2. Supporting Course Delivery

This section covers the issue of how the institution supports the delivery of e-learning courses, and how the various services and support staff involved in the operation of an MLE might be involved. In particular it addresses the questions:

- What quality assurance processes do you carry out prior to delivery?
- How do you integrate the use of MLEs into the support of learning?
- How is the use of MLEs integrated into assessment?
- What administrative and technical support processes support delivery?
- How is access to courses beyond delivery dealt with?

(The administrative issues discussed in the next section are also relevant to these points.)

A final reality check – Before starting any e-learning course a final check is a good idea:

- Is the course ready and fit for learners to start?
- What checks are in place to ensure quality at the time of delivery?
- Are you ready to enrol for this course?
- Support – is it all in place?
- Deliverers – are they in place?

### 8.3.3. Delivering a Course

Issues to consider include

- Enrolment of students
- Inducting Students
- Ensuring access.
- Dealing with latecomers and drop-outs
- Managing collaborative and group working
- Setting up and initiating activities
- Providing feedback

### 8.3.4. Assessment

The issues here were introduced in the section on Key Roles and solutions should have been designed in, but some additional points are worth considering, particularly in the context of group and collaborative work:

- Peer Assessment
- Monitoring
- Formative Assessment
- Authorship/Plagiarism
- Proof of Submission

Overall, it is important to ask the question 'Does our assessment practice within our MLE conform to institutional policy as laid down?'

### 8.3.5. Supporting delivery

Many of the issues of support have already been addressed. One of the most fundamental questions here is: 'Is everyone one involved in support clear about who supports what, and do they really own those aspects of support?'

### 8.3.6. Access beyond delivery

Access to learner activities and outputs beyond delivery is needed for quality, monitoring, resit, revision, and 'taking your learning away' (lifelong learning).

[Follow this link](#) for key resources for this section (these open in a new window)

[Follow this link](#) for more resources for this section (these open in a new window)

## 8.4. Administrative Issues

This section highlights some of the thornier administrative issues not discussed earlier. Many of these are overlooked at your peril!

This sub-section builds on some of the more organisational aspects discussed in the sections '[Teaching and learning practice](#)' and '[Supporting course development](#)', looks at a number of other administrative and organisational issues, and addresses such questions as:

- What changes to your institutional processes to support novel course calendars and delivery schedules have been or are required?
- What impact on costing, charging and fees does the introduction of MLEs have?
- What impact do MLEs have on your recruitment processes?
- What impact do MLEs have on your registration and enrolment processes?
- Getting good solutions to such administrative issues is an important contribution to making the MLE sustainable – this is discussed further in the section '[Sustaining and Evaluating the MLE](#)'

### 8.4.1. Novel Courses

A course may be 'novel' in terms of mode of attendance, calendar, mode of recruitment and enrolment, and duration. Consider each of the following and ask yourself 'can our MLE handle...:'

- A course which runs two semester on-campus and one semester virtually each year?
- A course where learners pay-as-learn – they enrol and pay for each component as they take it.
- A course which runs to a conventional start-stop pattern, but which then remains open as a resource and learning community?
- A course where learners can complete at any time up to five years?
- A course where learners can join whenever they like and present for assessment as soon as they feel ready?

### 8.4.2. Costing, Charging/Fees

The whole of education is notoriously bad at costing. Also most institutions change on a contextual basis: according to the nature of client (commercial etc), mode of attendance (full/part time) etc.

- Does your MLE enable you to cost your offerings?
- Does your MLE allow you to charge differentially by learner and/or course?
- Does your MLE allow you to have free or open courses?
- How are charges/fees decided – do you have a model for this?
- Could your MLE support price per credit charging?

Most institutions have some loose model for costing, but decision-making varies from highly centralised – which can militate against loss leaders etc – to highly devolved – which can result in inconsistent charging (to the same client!) or unintended loss making.

- Can your MLE accept e–payments?
- If so, does this result in direct enrolment?
- How is this process linked to entry requirements?
- Can learners pay by instalments?

There is little evidence of this as yet.

The problem of free courses can pose problems where access to courses is linked to an enrolment system which is triggered by payments. Suppose you want to have a course where one module (for example a key skills module) is free but the rest of course is charged?

### 8.4.3. Recruitment

Apart from the issues of charging etc discussed earlier, there other issues relating to recruitment which need consideration in the context of embedding an MLE.

For example, whilst a number of institutions offer on–line applications for their courses, a totally 'e' approach would require the resolution of how to handle the critical issues of verification/veracity of eReferences and eReferees, verification of (potential) off campus eLearner credentials, bona fides and qualifications prior to enrolment.

### 8.4.4. Registration and Enrolment

Many institutions now have effective links between their MIS systems and their VLE as part of their overall MLE. However, many problems are still likely to arise, either through human factors or lack of flexibility in one or more component of the MLE. Some examples you may find it useful to consider are:

- Do you have courses which are informal in some way and do not use the institutional enrolment system?

Whilst this may seem perfectly reasonable, it may also indicate that that your institution is failing to gain full income from its offerings (for example, why should every course be credit bearing?), and more importantly, how can/will your institution successfully operate personal development planning/recording achievement without registering all learners and learning activity in its MLE systems?

- What degree of granularity and combination of course grouping can your MLE provide automatically?

Whilst some VLEs can provide several or many levels of sub–grouping, it is less likely that the MIS components of an MLE will. An example: A Foundation Degree course at a University consists of a number of modules, each module is delivered at a number of partners colleges using the University MLE – can the MIS system (and registration procedure) provide the VLE with course and module cohorts which are broken down into College cohorts within each module? (See the [consortium case study](#) in the key resources for the section 'Supporting course development and delivery')

Another problem is where a component module serves more than one course. For example, a study skills module may be delivered as a single cohort to students who are registered on more than one course, and for who the component may have different learning outcomes. How can your MLE facilitate this type of course?

A last, and particularly thorny example: students are taking a course where the learning is negotiated – i.e. except for a couple of core modules, the rest of the course is chosen by negotiation, and can include any module offered by the institution, and also modules which are independent or work based learning and are agreed uniquely in each case. (The course can be

started at any time and completed at any time within five years). To add complexity, this means the learner will have tutor relationships at course, module (in the case of a standard chosen module, the module leader for the normal group taking the module) and also account managers for independent and work-based learning. Consider how you could reflect this in your MLE, both in terms of MIS functions and VLE support activities.

[Follow this link](#) for key resources for this section (these open in a new window)

## 8.5. Staff Development

Embedding cannot be achieved by decree – policy and procedure alone will not suffice, people need embedding as well and this can involve considerable and uncomfortable cultural change...

This section looks at the area of staff development for all staff, and addresses such questions as:

How is staff development implemented in terms of addressing:

- Pedagogy and use of resources
- Use of technology
- Management and administrative philosophy
- How is staff development integrated into other practice, policy and procedure?

The most important part of the relationship between staff development and embedding is that working practice and culture can only be changed if the policies, procedures, roles and responsibilities that are in place will reinforce the impact of development on staff, in that they will practice what they have learned.

Some questions to consider:

### 8.5.1. Pedagogy and the Use of Resources

#### *Education Development*

Many institutions have programmes in place for the educational development of teaching staff. Does your programme have the use of eLearning integrated into it? If so, does it address issues around pedagogy and the use of technology? Too much teaching staff development focuses on the technology rather than the issues of course design and facilitation of learning in the context of using technology.

Secondly, much of such staff development is aimed at new staff, how are the 'old lags' encouraged to be involved?

#### *MLE/e-learning Development*

Again the question here is: Are you addressing the educational issues or merely focusing on using the technology? Whilst many institutions would argue that getting people started justifies a technology led approach, when one looks at this from an embedding point of view one should perhaps ask: 'Is there a danger of embedding weak educational practice by not including pedagogic issues in MLE focused staff development?'

#### *Resources and eResources*

This is a major cultural challenge, particularly in HE where teaching staff often have strong views about the IPR of content and resources they have created. Asking the question 'How do you promote effective use of and management of resources?' raises additional questions:

- ◇ Does your institutional policy on Copyright and IPR address the needs of e-learning AND is it effectively disseminated to, and understood by staff?

- ◇ What staff development do you have in place for teaching on the use, reuse and repurposing of local, regional and national eResources?
- ◇ What development do you have in place to encourage staff to share, reuse and repurpose each other's materials?

#### *Other Staff and Pedagogy*

A number of reports have indicated problems with joining up staff development of support staff with that of teaching staff, and problems with support staff having sufficient pedagogic understanding to effectively support eLearning and the use of MLEs. For example:

- ◇ How are information specialist' such as librarians, integrated into staff e-learning development?
- ◇ How are both information and IT support staff given an understanding of how the MLE is used by staff and students, both educationally and administratively?

### **8.5.2. Use of technology**

The issue of training teaching staff on technology has been discussed above, but the issue of which technologies to train them on (or not) and the level to which to train them remains. In addition, the training of support and administrative staff also remains.

#### *Teaching staff*

The depth to which to train teaching staff must be a function of the policies and procedures governing the use of your MLE. Most training will focus on the use of the VLE and Assessment components, but will also involve training in PDP systems and administrative systems as appropriate. There is a danger in both under and over training teaching staff in terms of the range of systems and functionality covered. You may well find that whilst it was expedient to train staff in quite few management and higher level course creation procedures during the implementation and rollout phase of your MLE, as you come to embed the MLE you wish to centralise certain responsibilities and controls. However, this can then lead to friction with teaching staff who feel that control and flexibility is being taken away from them.

(A parallel to the above is being experienced by institutions that are introducing Content Management Systems to manage their web servers, where staff resent not being able to do just what they like any more)

Nevertheless staff development of all staff should probably contain a fairly full overview of the MLE and its parts, with an emphasis on who does what and why.

#### *Support staff*

The main failing in the training of support staff tends to be that of concentrating on training them how to carry out the technical tasks they are required to do in support of the MLE, without giving them an understanding of how the MLE is intended to be used by others. This need is particularly true of helpdesk staff, where training often focusses on the tasks required to fix things (e.g. change account details), but lacks giving the staff the understanding of how, for example, learners use the system educationally which makes effective problem solving and communication with the client more difficult than necessary.

There is relevant discussion of staff development in the context of 'Understanding Your Organisation' in the section 'Planning, dissemination and evaluation'.

### **8.5.3. Management and administrative philosophy**

Most of the issues above, like understanding how the MLE forms part of the learning and teaching experiences, still apply here. However the issue of understanding how the MLE fits into organisational strategy and how to build this into on-going departmental and other local operating

plans is a particularly difficult area.

This is because of the circular nature of the problem – such staff have a tendency to ignore MLE issues unless they are part of their normal practice, but unless something is seen as part of normal practice, staff development in it is seen as irrelevant.

The solution is to introduce staff development alongside relevant changes in policy etc. This is where embedding **MUST** imply senior management commitment to real change.

Evidence and examples of how Senior Managers have been engaged in staff development for MLEs and e-learning are almost non-existent, or at best anecdotal. Given that a review of the 'DTI Microcomputers in Schools Initiative' in the Nineteen–Eighties commented that a major bar to success was the failure to address the development of School Heads, this is an area where action is needed urgently.

[Follow this link](#) for key resources for this section (these open in a new window)

## **8.6. Sustaining and Evaluating the MLE**

Embedding implies cultural change – without it things can soon uproot themselves again. Sustainability implies you know what you want and why you want it and – and this is the hard part – that you can tell if you are getting it!

This section looks at the area of sustaining your MLE and addresses such questions as:

- How do you evaluate the use of your MLE?
- How is evaluation used to inform strategy, policy and practice, and how do you ensure that policy and practice is sufficiently responsive to lessons learned and new demands, customers and external policies?
- How is the sustainability of courses and learning resources ensured?

Overall, honest answers from across the FE and HE sectors to these questions would be such things as: 'badly', 'not at all', 'don't know' etc! In particular, one of the great ironies of educational institutions is that they are rarely learning organisations.

The discussion of [Administrative Issues](#) in a previous section is also relevant here.

### **8.6.1. Evaluation of MLEs**

This has been discussed in other parts of the infoKit. However some aspects of evaluation in the context of embedding are worth exploring: first a number of (true) generalities about the education context:

- Education is an unstable environment, being subject to rapid politically driven change
- Developments in educational institutions are unstable, even if well planned, for much the same reason
- Senior management tend to lose focus on developments once past the project stage, taking the view 'we've done that' and moving on to the next challenge.
- Education is notoriously bad at evaluation

The introduction of an MLE is often treated as a project, whereas it is, if it is going to be sustainable, an on-going an ever changing development. Therefore the management of an MLE needs to include, as apart of post-project thinking' an approach to project management and evaluation which reflects this – moving into attitude of maintaining the MLE is possibly dangerous.

Evaluation needs to be ongoing and needs to evaluate process as well as outcomes, procedures as well as educational impact. This implies it must be both formative and summative, and must be focussed on the users – it whichever context that may be.

Using evaluation to inform strategy, policy and practice and enhance responsiveness

Three major problems afflict evaluation in FE and HE (apart from not doing it, that is!):

- Evaluation tends to be overly summative (with an 'after the event' focus)

This tends to prevent institutions understanding what is wrong the processes they use to develop systems, and handicaps the organisation in both learning from its own experience and in responding effectively to sudden change.

- Evaluation tends to be too survey-based and 'big bang'.

Institutions seem to love massive surveys. These have many failings – surveys are poor at finding out things you hadn't thought of asking about, and by being too wide in terms of who they address, lack the granularity to pick up on more contextual or local problems. Instruments such as interviews and focus groups can often tell you far more.

- Evaluation tends to be under-resourced and is often either not finished or incompletely analysed.

All this also assumes that evaluation is itself embedded – it needs to be a fundamental part of both strategy and operational planning and integrated into development planning. Mechanisms must exist to feed local information upwards. This is less common than you might think – for example, it is quite usual for course monitoring to feed upwards only in general terms rather than in detail – this does not always help the institution (as opposed to the course or department) to pick up issues effectively and respond to them.

You may find the discussion and resources on '[Models and Frameworks](#)' useful in this context.

## 8.6.2. Sustainability of courses and learning resources

This will hinge on a number of things:

### 1. Ability to reuse and repurpose content

- ◆ Do you have in place the means to reuse and repurpose content? – This might be inherent in the VLE or similar component of your MLE, or be achieved via a repository
- ◆ Can you link to other eResources in local (eBook, eLibrary), regional and national resources?
- ◆ Can you do this in such a way that once established references can be reused in a way that preserves their context? For example a web site on fish is an information source, whereas a link to a specific item on that site which discusses swim bladders in the context of buoyancy is a learning resource. 'Reading lists' of references and resources are highly contextual, and because they represent the exercise of considerable professional expertise by their creator, also constitute significant intellectual property.
- ◆ How can you preserve and reuse these without losing their context?

It is also important that it is desirable to be able to reuse and repurpose learning experiences and pedagogic approaches as well as content

### 1. Culture change in academic staff

A minefield (also discussed earlier) – this requires a shift in attitude by many staff, who may be very unwilling to 'share' for all sorts of reasons.

- ◆ What incentive can you put in place to encourage this?
- ◆ Is the institution's position on IPR clear and known?
- ◆ Do your mechanisms for reuse and repurposing offer staff real timesaving?

## 2. Adherence to standards

Adherence to standards is going to be essential if the goals of the previous two points are to be met.

- ◆ Do the component parts of your MLE conform to the relevant international and national specifications, standards and frameworks?
- ◆ Do the software vendors you are relying on have a clear and demonstrable commitment to tracking these. Currently IMS Content Packaging, IMS Metadata, the UK Common Metadata Framework, SCORM and Simple Sequence are relevant here but in the future the IMS Learning Design Specification will become important.

## 3. Exit strategy from MLE components

An MLE is not a single software system and your courses and resources are a huge investment.

- ◆ Will you be able to move them? You may change VLE or move to something new instead of a VLE in the future. Are you locked in?

Addressing sustainability of courses and resources will have a profound effect on staff roles, this is discussed in the resources for this section.

[Follow this link](#) for key resources for this section (these open in a new window)

## 8.7. General Questions

This section is plea for contributions. Please consider the questions below and send us your experiences and ideas.

- In terms of you own strategy and/or plans, and in consideration of the above, what stage are you at in the embedding of your MLE? What approach is being taken? For example: a project approach or an overall institutional strategy?
- Are staff being encouraged to try things out for themselves or is the approach more managed?
- What overall changes are being made to enable your strategy/plan?
- What advice/lessons do you have?
- What materials do you have or could you produce to contribute to the infoKit?

[Follow this link](#) for key resources for this section (these open in a new window)

## 8.8. Summary and Conclusion

Don't think because you got this far that the work is over!

Is your MLE now just part of normal life and being used as a matter of course wherever appropriate? Is its use included seamlessly in all applicable policies, procedures, roles and responsibilities? If so you have made great strides towards embedding, however...

Embedding is not a once and for all process – if it was it would imply that your institution is immune to change and by and large this only applies to the extinct. The whole process is one of continuous evaluation and review.

Your organisation will need to change, both of its own volition and as a response to external pressures. This means that you will have to keep revisiting the make-up and needs of the institution ([Understanding your organisation section](#)) and why you have an MLE ([Why might you want an MLE section](#)).

Responding to change will mean that your MLE will have new requirements to address ([Gathering requirements section](#)). In turn, you will need to re-examine your technology options ([Technology options section](#)) in the light of these new requirements and in response to the ever-changing technologies available. This will mean you will need to change your MLE's design ([MLE design section](#)) and implement these changes ([Implementation section](#)). (In reality all of what has gone before can and will need to happen in various orders.)

Of course, now many of the things you had embedded will be thoroughly uprooted and you will need to address policy, procedure, roles and responsibilities and all the associated cultural change issues yet again.

Having done this – you can evaluate how it went, if it's working, and start all over again...

Good luck!

## Section Editor

**Mark Stiles** is Professor of Technology Supported Learning at Staffordshire University where he is Head of Learning Development and Innovation. Mark and his team are responsible for managing, facilitating and supporting eLearning across the University and for research and development work in the strategy, technology, pedagogy and interoperability issues associated with eLearning.

He has been involved in numerous projects for the JISC and other organisations, including developing the free COSE VLE, carrying out interoperability pilots, the CO3 project with Bangor and Huddersfield, the SURF X4L project (looking at educational and technical issues of content reuse) and the Staffordshire ICE project which is investigating the interoperation of VLEs with eBook aggregators.

Mark is also carrying out various evaluation work including a summative evaluation of the DiVLE programme and providing consultancy to the JISC MLEs Programme. He is a regular speaker on all things "eLearning" and has published widely in the field. Mark's background includes 15 years as an educator and manager in Further Education and 10 years in HE IT management.

---

### **Disclaimer**

We aim to provide accurate and current information on this website. However, we accept no liability for errors or omissions, or for loss or damage arising from using this information.

The statements made and views expressed in publications are those of the authors and do not represent in any way the views of the Service.

The JISC infoNet Service offers general guidance only on issues relevant to the planning and implementation of information systems. Such guidance does not constitute definitive or legal advice and should not be regarded as a substitute therefor. The JISC infoNet Service does not accept any liability for any loss suffered by persons who consult the Service whether or not such loss is suffered directly or indirectly as a result of reliance placed on guidance given by the Service.

The reader is reminded that changes may have taken place since issue, particularly in rapidly changing areas such as internet addressing, and consequently URLs and email addresses should be used with caution. We are not responsible for the content of other websites linked to this site.

This material is licensed under the [Creative Commons License](#) – 2006

---