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Introduction

The Technology Enhanced Learning (TEL) Handbook 2015-18 is designed to guide staff in the considered and appropriate application of technology to enhance student engagement in learning, teaching, and assessment at York St John (YSJ).

Encompassing contemporary themes in technology enhanced learning and epedagogy, this Handbook should act as a reference for good practice and developmental approaches to technology enhanced learning, and assist staff to meaningfully incorporate technology into the learning, teaching and assessment approach of their modules in ways that are underpinned by our new Academic Strategy and current enhancement activities such as Graduate Attributes & the Curriculum for Student Success.

Through engagement with this TEL Handbook and active consideration of what and how you use technology to facilitate learning and teaching, you will be aligning your practice to the UK Professional Standards Framework (UKPSF). The UKPSF underpins a sector wide approach to ensuring the quality of teaching and learning support, and this includes the expectation that staff are committed to continuing professional development (CPD) and evaluation of their pedagogic practice. This is important as evidence of engagement in developing technology enhanced learning can help staff gain recognition as Fellows of the Higher Education Academy through the YSJ CPD Framework, 'Recognising Academic Practice', which is aligned to the UKPSF.

Curriculum for Student Success

• Student Journey
• Core Principles
• Inclusive Culture
• Enriching the Curriculum
• Assessment for Learning
• Recognising Achievement
• Student Voice
• Graduate Attributes

Embedding the Quality Framework

Tutors and academic managers might consider embedding the quality framework and other elements of the TEL Handbook into existing practices such as:

• Programme validation documentation
• Peer Supported Review of Learning and Teaching (PSRLT)
• Programme Evaluative Reports (PERs)
• Performance Development Reviews (PDRs)
Technology Enhanced Learning at YSJ

Who?

The Technology Enhanced Learning (TEL) team supports staff in using a range of tools and technologies to enable effective pedagogy. The TEL team is part of the Academic Development Directorate (ADD).

Vision

The TEL team is committed to promoting, developing, supporting and embedding the effective use of technology for learning, teaching and assessment.

Mission Statement

To set an example of effective and relevant use and support of TEL within and outside the university.

We will achieve this by:

- Embedding the principles of the TEL Quality Framework
- Promoting innovative, inclusive and evidence-based use of technology
- Being approachable, enthusiastic and passionate about TEL
- Explaining concepts clearly and in non-technical language
- Being patient with people and making them feel valued by spending time with them
- Being proactive in seeking out new opportunities to work with colleagues on projects
- Engaging staff in a wide range of flexible development opportunities
- Providing a range of inclusive support resources and materials
- Communicating effectively within and outside the university
- Evaluating and benchmarking our performance

What?

We offer support and training for staff on a wide range of technology enhanced learning solutions. Core systems are provided by the University, full training and support is available via TEL, and there is an expectation that staff will use these systems. Arranged systems are again fully integrated and supported, although staff can choose whether or not to use these systems. Recommended systems are not funded, integrated or hosted by TEL, some training and support is available on an ad hoc basis.

Recommended systems are usually supported by Information & Learning Services (ILS), with full training and support available on integrating these into teaching and learning.

Part of the role of the Technology Enhanced Learning team is to identify and describe emerging technologies likely to have an impact on learning, teaching, assessment and creative inquiry in higher education, and in particular at YSJ.
ILS also provide training and support for *students* on using the wide range of educational technologies listed in this model.

The TEL team have identified several key trends which we feel can have a positive impact on teaching, learning and assessment in the next three years, and are keen to work with academic colleagues in the following areas:

- **Open Badges** - Open framework for gaining recognition of skills and achievements.
- **Flipped Classroom** - Blending learning inside and outside the classroom.
- **Learning Analytics** - Data-driven analysis of learning activities and environments.
- **Learning Design Informed by Analytics** - A productive cycle linking design and analysis of effective learning.
- **Mobile Learning (BYOD)** - Learners use their personal tools to enhance learning in the classroom.
- **Gamification** - Exploiting the power of digital games for learning.
- **Open Educational Resources (OER)** - Free use and re-purposing of teaching, learning & research resources.
- **Social Media** - Making connections and bringing people together around a topic of common interest.
Where? When?

Bespoke Training
We offer support and training on a wide range of TEL solutions. If you would like to talk to us about ways in which we can help and support you and your ideas, then please do get in touch. We can provide tailored training sessions (one-to-one, small group, large group) to meet your specific needs.

Accredited Awards
• SEDA Supporting Learning with Technology (SLT)
• SEDA Embedding Learning Technologies (ELT)
These two named awards are available through SEDA’s Professional Development Framework. The awards are relevant to all staff involved with learning technologies as part of their professional work, including those teaching or supporting student learning with technology, those supporting teachers or other staff, and those aspiring to use technology in these roles.

Aims
• To support individuals in embedding learning technologies effectively into the curriculum or support for learning.
• To recognise these professional achievements.
• To advance professional practice by promoting scholarship and action research in e-learning, including evaluation and its reporting.
• To enhance the student learning experience, particularly by enabling greater flexibility and widening opportunities.
• To encourage the development of learning communities sharing the SEDA professional values.
• To facilitate the sharing of effective practice within and across institutions.

Audience
The awards support and credit the CPD of any individual who is actively involved in the embedding of learning technologies in higher education including teachers, educational technologists, learning professionals, and educational technology developers. They promote the innovative use of the new technologies to support learning, in a rigorous, scholarly way. Although the context for the application of these skills is the use of new technologies, the skills themselves are similar to those required in other teaching and development activities. The awards do not directly accredit technical skills.
These awards contribute to participants’ professional development and/or academic profile. They enable individuals and teams to develop more effective use of learning technologies, and promote dissemination of practice between colleagues and across subject disciplines. Both awards apply principles and research to the context of current institutional strategies and support structures.

**Why?**

**Digital Capability**

“Effective use of digital technology by university and college staff is vital in providing a compelling student experience and in realising a good return on investment in digital technology.” (Jisc, 2015)

The Jisc digital capability framework describes the skills needed by staff in a wide range of academic, administrative and professional roles to thrive in a digital environment. This provides a structure to help individuals understand what skills are needed and supports the development of staff & students. Jisc have produced an initial model of the framework which describes digital capability as six overlapping elements.

TEL, along with colleagues in ILS, support staff in the development of their digital capabilities in order to ensure effective use of technology at YSI.

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Digital Capability Framework (JISC, 2015, reproduced under CC BY-NC-ND license)
How?

Our approach, although pedagogy-centred, straddles multiple domains, including Academic, Administrative, Technical, Institutional, and National and International Sectors:

Multi-knowledge domain approach to TEL support (Anagnostopoulou, 2015)

This approach results in TEL carrying out a wide range of activities along a spectrum:

Spectrum of e-learning Activities

| Troubleshooting and support for use of technology | Developing Moodle courses for others | Creative content creation for others (irrespective of tech) | Advising and supporting others to develop content and online learning experiences (raising awareness) | Developing skills of others and highlighting good practice (workshops, networking and pedagogical support) | Influencing the design and delivery of curricula (mentoring / coaching relationship) | Co-developing technology enhanced curricula (partnership relationship) | Influencing strategy and policy in learning and teaching (including e-learning) |

Spectrum of e-learning support (Anagnostopoulou, 2015)
TEL Quality Framework

3E Framework

The aim of our TEL Quality Framework is to assist staff to meaningfully incorporate technology into learning, teaching and assessment, using the principles of the 3E Framework. Frameworks for TEL can adopt an approach driven by either the technology itself, or the pedagogical principles that underpin the learning that happens within the virtual environment. Each approach has merits and pitfalls. It is for this reason that we have adopted a combined approach that prompts staff to consider not only what tools they will use but how they will use them to facilitate student learning and what type of learning it is they wish their students to engage in.

Recognising the iterative nature of adopting technology, the 3E Framework is based on a tried and tested Enhance-Extend-Empower continuum for using technology to effectively support learning, teaching and assessment across disciplines and levels of study. The three broad stages within the continuum are:

**Enhance**
Adopting technology in simple and effective ways to actively support students and increase their activity and self-responsibility.

**Extend**
Further use of technology that facilitates key aspects of students’ individual and collaborative learning and assessment through increasing their choice and control.

**Empower**
Developed use of technology that requires higher order individual and collaborative learning that reflect how knowledge is created and used in professional environments.

This section combines the 3E Framework which is based on an Enhance-Extend-Empower continuum, drawn from the TESEP (2007) project, with quality statements devised by a group of YSJ University e-Pedagogy Teaching Fellows, and staff from ADD. The 3E principles are underpinned by a socio-constructivist approach with a focus on active learning, learning as a community, frequent formative assessment and personalised learning through choice. The aim is to improve student engagement, achievement and retention. The 3E Framework considers how activities can be incorporated as a minimum (Enhance), through to uses of technology that give students more responsibility for key aspects of their learning (Extend), and to underpin more sophisticated, authentic activities that reflect the professional
environments for which they are preparing (Empower). The Framework encourages the use of technology as a pedagogic tool. It should be used by tutors to aid the design and planning of the use of technology to support or facilitate a learning experience. In essence, it should help tutors to ‘think through’ what it is they want their students to do and how they want them to learn, using technology. The quality statements relate to firstly a set of minimum expectations (quality assurance) and secondly ideas that would further develop learning and teaching activities involving the use of TEL (quality enhancement). Together, the 3E Framework and this set of minimum expectations comprise the YSJ TEL Quality Framework. This Framework will be revised and updated on a three year basis to ensure relevance with existing and emergent environments and technologies.

In considering the 3E Framework, the following points should be kept in mind:
1. The three Es do not match against academic levels. For example, you should not be limited solely to enhance activities at level 1, extend at level 2 and empower at level 3.
2. Although the 3E levels can be seen as a continuum of change in TEL and teaching practice, they should not be viewed as mutually exclusive. In any single module context, there may be a range of learning tasks and activities that align with any of the three levels within the Framework.
3. The 3E Framework can be applied at programme level where common technology enhanced approaches are used across modules to support student progression to more advanced learning.
4. In being part of a continuum the 3E levels are not clearly distinct categories, and it is to be expected that some technology-enhanced activities will blur the boundaries between one level and another. This point perhaps applies particularly at the Enhance and Extend levels, and maybe less so at Empower.
5. Where students are new undergraduates or likely to be largely unfamiliar with the subject matter then activities at primarily the Enhance level may be most appropriate.
6. Enhance activities can work well in any subject at any level of study. In encouraging the development of learner autonomy and other key graduate attributes required in the workplace then an increase in Extend and especially Empower activities would be more appropriate.
7. The 3E Framework does not promote the Empower level as an ideal, and an important part of the approach is that tutors and their students will start from (and may end up...
8. If the tutor is doing a lot of work at the Extend level, then aiming for the Empower level in some aspects of what they do would be very worthwhile. However, if a tutor wants to begin by Enhancing several aspects of what they already do, this is an equally valuable step in the adoption of TEL.

9. Classroom to fully online? Although Enhance represents simple adjustments to existing practice, and Extend a more purposely blended approach, Empower does not imply fully online.

10. As students transition along the 3E continuum the tutor is relinquishing more control and responsibility to their learners. While this brings benefits, it can require the tutor to adjust and to be comfortable with assuming a facilitating role or, for some kinds of activities, a co-learning role (e.g. student-led seminars).
Minimum Expectations

The checklist is intended to establish a minimum standard in the use of the institutional VLE (Moodle), and to ensure a consistent student experience across the University. The minimum expectation checklist could be expressed as the lowest standard expected regardless of whether the VLE is used to enhance, extend or empower students and their learning. These recommendations may be covered within a combination of module, programme and departmental courses. The list was developed after consulting with staff and students on their minimum expectations for VLE use, benchmarking by investigating sector-wide subscription to minimum standards, and identifying current best practice at YSJ, and was endorsed by Enhancement and Student Experience Committee (ESEC) on 3rd June 2015.

### Course Design and Layout

<table>
<thead>
<tr>
<th>Dedicated Course for Each Module [Essential]</th>
<th>Content should be clearly grouped and labelled, unused blocks or topics should be removed, and additional blocks (Activities, Latest News, Recent Activity) added where appropriate. Use appropriate file types (e.g. PDF) and display file size &amp; type.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Module Description/Outline (Learning Outcomes, Credits etc.) [Essential]</td>
<td>Display core module details, such as module description and learning outcomes.</td>
</tr>
<tr>
<td>Lecture Notes/Handouts [Essential]</td>
<td>Presentation slides, notes, handouts, or lecture recordings should be made available to students in a timely manner.</td>
</tr>
<tr>
<td>Student Expectations Statement [Desirable]</td>
<td>How students are expected to use Moodle e.g. which activities are optional, assessment process, tips for succeeding on the module.</td>
</tr>
<tr>
<td>Student Activity Reports [Desirable]</td>
<td>Enable students to view their own activity reports via their profile page. Activity reports show a list of their contributions, such as forum posts or assignment submissions, and also include access logs.</td>
</tr>
</tbody>
</table>

### Assessment Information

<table>
<thead>
<tr>
<th>Assessment Details/Requirements [Essential]</th>
<th>Include details (instructions, marking criteria), coversheets (where appropriate) and weightings for assessments. Ensure that grades/feedback are returned within 3 weeks of deadline.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Assessment Marking/Grading Criteria [Essential]</td>
<td>Provide clear details of the assessment marking/grading criteria.</td>
</tr>
<tr>
<td>Online Submission for Coursework [Essential]</td>
<td>Information on how students are to submit electronic documents via Moodle.</td>
</tr>
<tr>
<td>Draft Assignment (Formative) Feedback [Essential]</td>
<td>Provide appropriate opportunities for formative assessment and feedback. This does not necessarily have to take place within Moodle.</td>
</tr>
<tr>
<td>Sample Exam Questions/Past Papers (Where Appropriate) [Desirable]</td>
<td>Where appropriate, provide links to sample exam questions/past papers.</td>
</tr>
</tbody>
</table>
Communication and Forums

<table>
<thead>
<tr>
<th>Section</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Staff Profiles and Contact Details (Module Tutors) [Essential]</td>
<td>Name, position, telephone, email, location, office hours, as appropriate. How students and staff will communicate, and expected staff response times. Profile pictures (for staff and students) help personalise the online environment.</td>
</tr>
<tr>
<td>Announcements [Essential]</td>
<td>This is a one way channel for important news, and should be the primary means of communicating with students within the Moodle course.</td>
</tr>
<tr>
<td>Mid-Module Evaluation [Essential]</td>
<td>Mid-Module Evaluation should take place at the mid-point of the module. Feedback should be returned to students following the evaluation date/period.</td>
</tr>
<tr>
<td>Staff Profiles and Contact Details (Module Leader/Head of Programme) [Desirable]</td>
<td>Name, position, telephone, email, location, office hours, as appropriate.</td>
</tr>
<tr>
<td>Forums (Q&amp;A/Learning Forums) [Desirable]</td>
<td>Provide forums for tutors and or students to pose questions and answers, or for discussions related to specific course activities.</td>
</tr>
</tbody>
</table>

Resources and Learner Support

<table>
<thead>
<tr>
<th>Section</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Set Text/Essential/Further Reading List [Essential]</td>
<td>Provide a list of course readings, using Rebus:List. Please discuss your reading list requirements with <a href="mailto:ils@yorksj.ac.uk">ils@yorksj.ac.uk</a></td>
</tr>
<tr>
<td>Module Timetable [Essential]</td>
<td>Include a link to the module timetable.</td>
</tr>
<tr>
<td>Plagiarism and Academic Integrity Information [Desirable]</td>
<td>Include information on plagiarism &amp; academic integrity, as well as a link to the 'Develop Your Academic Writing with TurnItIn' course in Moodle (in accordance with the YSJ policy on the use of TurnItIn).</td>
</tr>
<tr>
<td>ILS Information [Desirable]</td>
<td>Provide link to ILS homepage for students.</td>
</tr>
<tr>
<td>Student Support/Study Development Information [Desirable]</td>
<td>Provide links to relevant support services and policies, such as Student Services &amp; Student Systems &amp; Records.</td>
</tr>
</tbody>
</table>

Meeting the Minimum Expectations

Each Faculty is responsible for auditing their own application of the minimum expectations. Checks should take place before the end of Semester 1 in each academic year. The TEL team will assist in co-ordinating audits and advise Faculties on different approaches and good practice.
### Moodle and the 3E Framework

Here are some ideas about how you might meaningfully incorporate the use of some of Moodle's activities into the 3E element of the TEL Quality Framework.

<table>
<thead>
<tr>
<th>Activity</th>
<th>Enhance</th>
<th>Extend</th>
<th>Empower</th>
</tr>
</thead>
<tbody>
<tr>
<td>Assignments</td>
<td>Adapting technology in simple and effective ways to actively support students and increase their activity and self-responsibility.</td>
<td>Further use of technology that facilitates key aspects of students' individual and collaborative learning and assessment through increasing their choice and control.</td>
<td>Developed use of technology that requires higher order individual and collaborative learning that reflects how knowledge is created and used in professional environments.</td>
</tr>
<tr>
<td></td>
<td>Create assignment ‘dropboxes’ to enable students to submit their work electronically. Ensure that there are clear instructions and information for students in the description.</td>
<td>Have students peer review each other’s assignments. (See Workshop).</td>
<td>Have students contribute to the assessment criteria for assignments and then peer review. (See Workshop).</td>
</tr>
<tr>
<td>Big Blue Button</td>
<td>Make recordings of virtual classroom sessions available to all students. (See Extend).</td>
<td>Schedule live virtual classroom sessions with students around key topics - assessment and feedback, for example. These sessions could be student-led, where they are asked to bring along specific questions to ask the group.</td>
<td>Have students suggest and vote on themes for virtual classroom sessions. Students are tasked with facilitating the online sessions.</td>
</tr>
<tr>
<td>Chat</td>
<td>Create a one-off chat, based around a specific theme, e.g. final assessment. Make transcript available for students.</td>
<td>Arrange regular ‘out of office hours’ chats around specific themes e.g. final assessment or how to reflect. Students participate in a facilitated chat. Transcripts are made available.</td>
<td>Ask students to suggest themes for ‘out of office hours’ chats. Allow students to organise and facilitate chat sessions. Transcripts are made available.</td>
</tr>
<tr>
<td>Choice</td>
<td>Set up a choice activity to quickly test students’ understanding of a topic.</td>
<td>Use the choice activity to facilitate student decision-making, for example allowing students to vote on direction for the course, on assignment questions/titles or on topics for online debates.</td>
<td>Have students propose choice questions to ask other cohort members. Use the data generated to come to conclusions or inform learning.</td>
</tr>
<tr>
<td>Database</td>
<td>Create entries in a database related to key concepts within the chosen academic discipline. Ensure that each entry contains: concept, name of the main academic theorist, link to a journal article, link to a key text, link to a key website, link to any relevant media.</td>
<td>Ask students to conduct their own research and add entries to the database. Allow students to rate, review or comment on each other’s entries.</td>
<td>Have students create entries around their specific research interests or questions. They can then use this data to identify any areas of common interest amongst peers.</td>
</tr>
<tr>
<td>---------------------</td>
<td>-----------------------------------------------------------------------------------</td>
<td>-------------------------------------------------------------------------------------------------</td>
<td>-------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Forum</td>
<td>Create a general help forum for students to ask questions about the course.</td>
<td>Create a discussion forum to encourage debate around a specific theme, topic or reading. Have students rate and comment on their peers’ forum posts - students should justify the rating by responding to the post with an added comment.</td>
<td>Nominate student groups to moderate weekly forum debates. Student moderators should be responsible for encouraging participation, keeping the discussion on track and summarising the key outcomes.</td>
</tr>
<tr>
<td>Glossary</td>
<td>Create a primary glossary of key terms related to a specific academic discipline. Have the entries auto-linked throughout the Moodle course.</td>
<td>Create a secondary glossary for each theme or topic which students have to populate by doing their own research.</td>
<td>Have students rate and comment on each other’s glossary entries - students should justify the rating by responding to the entry with a comment. The most highly rated terms get promoted to the primary class glossary.</td>
</tr>
<tr>
<td>Quiz</td>
<td>Create a short quiz for students to formatively test their understanding of the subject area.</td>
<td>Create several themed formative quizzes drawing random questions from a question bank. Provide students with detailed feedback and scores.</td>
<td>Allow students to generate their own quiz questions for a practice question bank (requires the use of the Quiz Creator role). Create a formative quiz drawing random questions from the student question bank.</td>
</tr>
<tr>
<td>Wiki</td>
<td>Create a module/assignment knowledgebase for students.</td>
<td>Create a lecture notes wiki. Ask student groups to take responsibility each week for populating the wiki with a summary of the lecture/ seminar.</td>
<td>Have students work in groups to create and manage a wiki to demonstrate evidence of planning and preparation for a group work project.</td>
</tr>
<tr>
<td>Workshop</td>
<td>Enable students to submit files for formative peer review.</td>
<td>Have students come up with some of the criteria against which all work will be assessed by peer reviewers.</td>
<td>Allow peer review activities to be taken into account for summative grades.</td>
</tr>
</tbody>
</table>
Mayes’ Conceptualisation Cycle

Mayes and Fowler’s (1999) Conceptualisation Cycle

Conceptualisation (information dissemination): At the conceptualisation stage, students are exposed to other people’s ideas or concepts. The purpose of this stage is to provide the learner with an awareness of what they need to learn and understand, this is most commonly achieved in face to face classroom or lecture based sessions but also takes place in the VLE.

Primary Courseware is used to support, for example, online lecture notes, instructional videos, reading lists etc., which are a good way of giving students information.

Construction (learning activity): At the construction stage tutors provide learners with meaningful online tasks that allow them to apply the concepts outlined to them in the conceptualisation stage, such as lab work, preparing presentations, writing blog posts, online quizzes, etc. The learning environment, tasks and task materials are referred to as Secondary Courseware.

Dialogue (dialogue and feedback): However, it is only at the dialogue stage, in the performance of tasks in which these new concepts are tested during conversation with tutors and peers, that learning takes place. This is achieved by students participating in effective computer mediated communication (CMC) with their tutors and fellow students whereby their understanding and conceptualisations outlined in stage 1 and applied in stage 2 can be assessed in applied contexts via online discourse which will bring to light any misconceptions about the subject and allow these to be addressed via meaningful online two way conversations. This is engagement with Tertiary Courseware e.g. discussion forums, videoconferencing, simulations etc.

“Conceptual learning is characterised as a cycle, involving the three stages which we term conceptualisation, construction and dialogue. These are mapped onto primary, secondary and tertiary courseware.”

(Mayes & Fowler, 1999)
Laurillard’s Conversational Framework

Laurillard’s Conversational Framework (Laurillard, 2002) has been widely cited and used as both a design template and an analytic tool. Laurillard describes the stages involved in the dialogic interaction between a tutor and student, demonstrating the way in which concepts are internalised and adapted by each in the process. Laurillard stresses that, for higher level learning, dialogue must take place at both a theoretical and practical level.

Laurillard (2002) claims that there are four main aspects of the teaching-learning process and that different educational media can be analysed (and used) in terms of these dimensions:

- Tutors’ concepts
- Tutors’ constructed learning environment
- Students’ concepts
- Students’ specific actions

Each (larger) pedagogical scenario should include all four kinds of activities (communication forms) that happened in eight kinds of ‘flows’ in the model:

1. **Discussion** (between the tutor and the learner)
   - Tutors and learners’ conception should be mutually accessible
   - Both should agree on learning objectives

2. **Adaptation** (of the learners’ actions and of the tutors constructed environment)
   - Tutor must adapt objectives with regards to existing conceptions
   - Learners must integrate feedback and link it to his own conceptions

3. **Interaction** (between the learner and the environment defined by the tutor)
   - Tutor must create an environment adapted to the learning task given to the learner
   - Tutor must focus on support for task and give appropriate feedback to the learner.

4. **Reflection** (of the learner’s performance by both tutor and learner)
   - Tutor should support the learner to revise his conceptions and to adapt the task to learning needs
   - Learners should reflect with all stages of the learning process (initial concepts, tasks, objectives, feedback, …)
Salmon’s Five Stage Model

Professor Gilly Salmon first developed the practical Five Stage Model, ‘scaffolding’ a progressive learning environment through online activities, or ‘e-tivities’, as part of her own research into online learning and the use of computer-mediated communication (CMC), and published it in her book E-moderating (Salmon, 2011). The five stages are:

1. **Access and Motivation.** At stage one, e-moderators need to provide support and allow sufficient time to enable learners to access their course materials. Maintaining motivation in the early stages is important because you do not want to deter your learners before they have properly started the course. At this early stage, there will be little interaction between learners.

2. **Socialisation.** Now that your learners have all successfully ‘arrived’, stage-two focuses upon encouraging your learners to get to know each other; even if you are teaching students online as part of a blended learning approach, and everyone has already met each other in the lecture theatre or seminar room, it is still important to go through this process in the online environment too.

3. **Information Exchange.** On the successful completion of stage-two, your learners can be encouraged to share information as they continue to connect and build upon the relationships they started to develop with each other earlier. Exchanging information can be fun and beneficial but it can also be overwhelming if too much is shared and learners cannot identify what is useful to them.

4. **Knowledge Construction.** At stage-four, learners should now be ready for more active online learning and can begin to construct new knowledge as a result of their...
interaction with one another, drawing upon each other's skills and experience.

5. Development. At stage-five, learners become more independent from the e-moderator and take more responsibility for their own learning and their group. Learner interaction with peers is not necessarily as frequent and demanding as seen in stages two to four, as learners can become more focused upon their individual learning goals again.

The amount of interactivity between an individual learner and their colleagues increases with each step. Importantly, as the expectations of participants increase, the role of the e-moderator shifts to a more facilitative role.

“For online learning to be successful and happy, participants need to be supported through a structured developmental process”

(Salmon, 2013, p.15)

As Conole (2010) suggests, models or frameworks, such as these, can be used as a type of schema to help mentally align to a particular pedagogical approach. Alternatively, they can be used directly to help guide the design of a learning activity or course, to help guide design decisions about what kinds of learning activities would be appropriate to promote the pedagogical approach instantiated in the model or framework. They can be used to guide the development of a learning environment, or they can be used as direct representations to the students, to help guide their learning process, or as analytic or descriptive tools to describe practice.

Electronic Management of Assessment (EMA)

Using technology to support the assessment lifecycle, from the electronic submission of assignments to marking and feedback.

The term electronic management of assessment (EMA) is increasingly being used to describe the way in which technology is used across the assessment lifecycle to support the electronic submission of assignments, as well as marking and feedback.

Assessment and feedback involves the management of a complex set of business processes, especially in higher education. Many universities and colleges are seeing benefits and cost savings from using technology to support and to streamline these processes. This high level model shows the types of activity that can be supported through technology.

At a more detailed level the processes also include: assessment scheduling; submission of assignments; tracking of submissions; extension requests and approvals; academic integrity; academic misconduct processes; examinations; marks recording; moderation and external examining.
How does EMA benefit students?
The range of benefits to students depends on how many of the associated processes are carried out electronically.

Typically many universities and colleges begin by replacing paper-based assignment submission with an online system and both off-the-shelf and bespoke systems are used.

Research shows an overall student preference for EMA and reveals that few need training to support its introduction.

It must however be remembered that there will be access and accessibility issues for a minority of learners who will require additional support.

How does EMA benefit academic staff?
EMA delivers both pedagogic benefits and administrative efficiencies.

The greatest benefits for academic staff are delivered when both marking and feedback are carried out electronically.

How can EMA improve organisational efficiency?
The move from paper-based to online systems can save a considerable amount of low value administrative effort associated with receiving, processing, distributing and filing student assignments throughout the academic year.

Are there any drawbacks?
The overall value of EMA depends on your organisational context.

- Discipline-related issues
- Staff resistance
- Supporting transition

YSJ has adopted electronic assignment submission, marking and feedback for all appropriate text-based assignments. Contact Technology Enhanced Learning for more help, information & advice.

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Assessment lifecycle
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Teaching

There is an exception in copyright law which allows minor copying for the purpose of illustrating a teaching point, so please contact ILS if you have a query about copyright material that you want to use. You may also wish to explore Open Educational Resource repositories, which contain material licensed for reuse, subject to terms and conditions.

When it comes to using images in your teaching, we recommend that you use copyright cleared or public domain images where possible. The good news is that there are lots of sources of high quality images out there. See www.yorksj.ac.uk/ils/copyright/moodle for a list.

Reading lists

ILS pays for subscriptions to ebooks and journal articles; however this does not give permission to copy PDFs and upload them to the VLE. This may be the case even if you are the author. Please link to electronic resources instead.

If you would like to upload a scanned extract from a print item, ILS offer a Digital Scanning Service. It is easier than ever to make requests; just select the ‘Digitisation Request’ option when adding a resource to a Moodle list, and they’ll do the rest.

Please contact ils@yorksj.ac.uk or visit www.yorksj.ac.uk/ils/copyright for more help, information or advice.

Research

You will need to consider the copyright status of material that you reuse in your research outputs. You will also need to consider your copyright when it comes to uploading your research to our institutional repository, RaY. ILS encourages researchers to negotiate their publishing contracts and to retain copyright wherever possible to do so.
Inclusivity

Use of technology to enhance learning, teaching and assessment should be considered and appropriate, and should never exclude any learner from engaging in the process. The burden of inclusivity lies with all staff, by curriculum design, and it should not be left to students to adapt.

Universal Design for Learning (UDL)

UDL helps academics by providing a framework for understanding how to create curricula that meets the needs of all learners from the start.

The Three Principles

• Principle I: Provide Multiple Means of Representation (the ‘what’ of learning). Learners differ in the ways that they perceive and comprehend information that is presented to them.

• Principle II: Provide Multiple Means of Action and Expression (the ‘how’ of learning). Learners differ in the ways that they can navigate a learning environment and express what they know.

• Principle III: Provide Multiple Means of Engagement (the ‘why’ of learning). Affect represents a crucial element to learning, and learners differ markedly in the ways in which they can be engaged or motivated to learn.

More information about UDL can be found at http://www.udlcenter.org/

Inclusivity – Quick Advice

Planning

1. Make course materials available online and in advance. This will allow students to process, prepare and modify into alternative formats that may be more suitable for their needs.

2. Ensure course materials are visually clear and that examples, illustrations and case studies are accessible (i.e. jargon is minimal and cultural references can be universally understood).

Teaching

3. Provide flexibility in how information is delivered and discussed such as giving instructions verbally and visually. Use a variety of teaching strategies, activities, and assignments that will accommodate the needs of all students.

4. Recognise and value your students by approaching teaching sessions with an ethos of dialogue. Find ways to connect with and learn about the uniqueness of all students through ice breakers and personal reflection activities and
facilitate peer-to-peer discussions to encourage students to support each other.

**Assessment**

5. Provide flexibility in how students demonstrate their knowledge and how you assess this by varying the assignment type (for example presentation, lab report, reflective portfolio) and allowing choice in assignments, where appropriate (for example between topics or allowing students to set their own questions).

6. Prepare and support students in the assessment process by giving clear guidelines, access to marking schemes, organising assessment specific tutorials and providing opportunities to practice via class tasks or formative assessment.

**Dialogue**

7. Utilise your pastoral role. Be aware of what support services are available in order to refer students on to the right place. These services also exist to provide guidance to academic staff on how to teach more inclusively so if in doubt, ask the experts.

8. Everyone is different. Invite those who may have requirements to talk about what might be best for them.

9. Inclusivity is a journey. It is not about being all things to all people all of the time but about continually reflecting on teaching practice and asking, how can I do better?

Quick Advice adapted with permission from Plymouth University (2015).

**Web Accessibility Initiative (WAI)**

Inclusivity can refer to efforts made to address a broad range of issues in making technology available to and usable by all, whereas accessibility primarily focuses on people with disabilities.

WAI provide strategies, guidelines, resources to make the Web accessible to people with disabilities, including these Accessibility Principles: [http://www.w3.org/WAI/intro/people-use-web/principles.html](http://www.w3.org/WAI/intro/people-use-web/principles.html)
Curriculum Design

A well-designed programme engages and enthuses students and, ultimately, improves the quality of their learning. It also results in an enhanced teaching experience for academic staff and a greater currency in both pedagogy and key strategic issues for the sector. For these reasons, one of the ADD key priorities will be working with departments on curriculum design.

Our aim is to design interventions which are bespoke and appreciative of disciplinary difference. Some departments may find that a ‘sandwich’ approach works better for them:

1. Initial consultation: you provide an outline of the challenges you are facing, and the opportunities available to you, in relation to future curriculum design.

2. Staff in ADD use this information to plan a bespoke staff development session.

3. Second consultation: we facilitate the session, working with you and your staff to devise ways to meet the challenges and maximise the potential of the opportunities.

The bottom line is: we are happy to do what works for you.

Contact add@yorksj.ac.uk for more information.

Contact Technology Enhanced Learning

The TEL team supports staff in using a range of tools and technologies to enable effective e-pedagogy. The TEL team is part of the ADD.

Our team is currently a small one but we’re a friendly bunch; so if you ever need any specialist advice or just want a chat about learning technologies, epedagogies and ways in which you can harness the benefits of technology for teaching, learning and assessment, feel free to email, Tweet, call or just pop in to our office for a chat.

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W: www.yorksj.ac.uk/TEL
Twitter: www.twitter.com/YSJTEL
Blog: http://blog.yorksj.ac.uk/moodle/
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