

MASTERS IN TECHNOLOGY LEARNING INNOVATION AND CHANGE PROGRAMME – MODULES

MATLIC 1: Understanding Change and the Innovative use of Technology: Debates and Practices

1. Aims

To develop knowledge and understanding of the process of change in the context of individual and organisational practices and to ensure students both understand and can critique new technological developments which can facilitate this in light of their innovative qualities, cost factors, and the infrastructural and human resource supports needed to implement them.

2. Learning Outcomes

At the end of the module, the participant should:

- Demonstrate their understanding of the theories of change and their application in real life situations and workplace contexts.
- Critically evaluate the use of technology in light of its capability to support change.
- Research current technological developments in light of their suitability for various workplace and learning environments.
- Engage and critique the concept of innovation.
- Critically evaluate the extent to which the presentation of their arguments and findings in written format are in keeping with the rigour of academic writing.

3. Indicative Content

Change and Innovation:

- Global trends and new thinking on change
- Change techniques
- Innovation
- Innovation and change
- Resistance to change and the politics of change
- Philosophy of organisational development
- Organisational cultures and structures

New Technological developments:

- New technological devices
- New communication means and modes
- Web technologies
- Data storage and data display
- Multimedia

4. Learning and Teaching Strategies

The learning and teaching strategies will be varied and include, lectures, skills workshops, supervision of professional work contexts, e-learning, individual tutorial support and small group seminars.

5. Directed Study Time and Independent Learning

This will be used to provide course members with additional planned opportunities to integrate and reflect upon both professional and College-based experiences. It is expected that significant Independent Learning may take place in relation to participants' professional contexts, e.g. in relation to the critical evaluation of work activities, documentation to be used in Workshop activities during supported learning time, or as the basis for assessment tasks. Thus, the overall Teaching and Learning Strategy for the unit builds upon an input, experience, reflection model, which also informs other modules in the MA programme.

6. Tutorials

Small group tutorials will take place throughout the module where the dialogue will be more focussed on the learning outcomes.

7. Forms and Examples of Assessment

Written assessment

8. Bibliography

Suggested Reading

Change and Innovation:

Andriopoulos, C. and Dawson, P. 2009. *Managing Change, Creativity and Innovation*. London: Sage Publications Ltd. *

Bessant, J. and Tidd, J. 2007. *Innovation and Entrepreneurship*. Chichester, West Sussex: Wiley.

Blake, I. and Bush, C. 2009. *Project Managing Change. Practical Tools and Techniques to Make Change Happen*. Harlow: Pearson Education Ltd.

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Morris, M. and Bessant, J. and Barnes, J. 2006. Using learning networks to enable industrial development: case studies from South Africa. *International Journal of Operations and production Management*, **26**(5), pp.557-568. [UU Supplementary Text]

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Shapiro, S.M. 2002. *24/7 Innovation. A blueprint for surviving and thriving in an age of change*. New York: McGraw-Hill.

Tidd, J. and Bessant, J. 2009. *Managing Innovation: Integrating Technological, Market and Organizational Change*. 4th ed. Chichester, West Sussex: John Wiley and Sons Ltd.

Tushman, M. and Anderson, P. (Eds.) 2004. *Managing Strategic Innovation and Change. A Collection of Readings*. 2nd ed. Oxford: Oxford University Press.

New Technological developments

Alessi, S.M. and Trollip, S.R. 2001. *MultiMedia for Learning: Methods and Development*. London: Allyn and Bacon.

Chapman, N. and Chapman, J. 2007. *Digital Media Tools*. 3rd ed. Chichester, West Sussex: John Wiley and Sons Ltd.

Grabe, M. and Grabe, C. 2001. *Integrating Technology for Meaningful Learning*. 3rd ed. Boston and New York: Houghton Mifflin.

Ivers, K. and Barron, A. 2006. *Multimedia Projects in Education. Designing, Producing and Assessing*. 3rd ed. Westport, CT: Greenwood Publishing Group.

Lister, M., Dovey, J., Giddings, S., Grant, I. and Kelly, K. 2009. *New Media. A Critical Introduction*. 2^{ne} ed. Oxon : Routledge

Mirabito, M. and Mergenstern, B. 2001. *The New Communications Technologies. Applications, Policy and Impact*. 4th ed. Woburn, MA: ButterworthHeinemann.

Vaughan, T. 2008. *Multimedia: Making It Work*. 7th ed. New York: McGraw Hill
Savage, T.M. and Vogel, K.E. 2009. *An Introduction to Digital Multimedia*. London: Jones
and Bartlett Publishers International.

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MATLIC 2: Technology, Innovation and Changing practices

1. Aims

That students demonstrate their understanding of how the innovative use of technology can facilitate changing practices by highlighting the implications of introducing new innovative approaches or new technologies for both the end user and for the larger system/organisation where this occurs in light of the infrastructures and resources needed to support this.

2. Learning Outcomes

At the end of the module, the participant should:

- Demonstrate their understanding of the infrastructures which support technological use and of how applications and software work in light of human engagement and within the broader technological structures.
- Design and critique an innovative use of technology.
- Critically evaluate the presentation of their work to their peers in light of structure, content, functionality of technology and engagement.

3. Indicative Content

- ***Technology; Infrastructure, systems and hardware***
Introduction to Networks and Operating systems
Understanding infrastructure
Information Systems Framework
Introduction to networks
- ***Presentation skills***
Presenting in professional contexts
- ***Technology; Applications and software***
Introduction to the Web
System and User Interaction development
Virtual environments
Multimedia
- ***Innovative use of technology:***
Project work which utilises a hands on approach to develop and critique new technological developments

4. Learning and Teaching Strategies

The learning and teaching strategies will be varied and include, lectures, skills workshops, supervision of professional work contexts, e-learning, individual tutorial support and small group seminars.

5. Directed Study Time and Independent Learning

This will be used to provide course members with additional planned opportunities to integrate and reflect upon both professional and College-based experiences. It is expected that significant Independent Learning may take place in relation to participants' professional contexts, e.g. in relation to the critical evaluation of work activities, documentation to be used in Workshop activities during supported learning time, or as the basis for assessment tasks. Thus, the overall Teaching and Learning Strategy for the unit builds upon an input, experience, reflection model, which also informs other modules in the MA programme.

6. Tutorials

Small group tutorials will take place throughout the module where the dialogue will be more focussed on the learning outcomes.

7. Forms and Examples of Assessment -

Written assignment/s and class presentation.

8. Bibliography

Suggested Reading

Technology; Infrastructure, systems and hardware

Barab, S.A., Kling, R., and Gray, J.H. (Eds.), 2004. *Designing Virtual Communities in the Service of Learning*. Cambridge: Cambridge University Press.

Barfield, L. 2004. *Design for New Media. Interaction Design for Multimedia and the Web*. Essex: Pearson Educational Ltd.

Jochems, W., Van Merriënboer, J. and Koper, R. (Eds.) 2003. *Integrated E-Learning: Implications for Pedagogy, Technology and Organization (Open and Flexible Learning)* London: Routledge Falmer

Nielsen, J. 2000. *Designing Web Usability*. Macmillan Computer Publishing

Nielsen, J. and Tahir, M. 2002. *Homepage Usability. 50 Websites Deconstructed*. Macmillan Computer Publishing

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Piccoli, G. 2008. *Information Systems for Managers. Texts and Cases*. Hoboken, NJ: John Wiley and Sons, Inc.

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Technology; Applications and software

Alessi, S. and Trollip, S.R. 2001. *Multimedia for Learning: Methods and Development*. Boston: Allyn and Bacon.

Barron, I. and Ivors, K. 2005. *Multimedia Projects in Education: Designing, Producing and Assessing*. 3rd ed. Westport, CT: Libraries Unlimited Inc.

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Collis, B. and Moonen, G. 2001. *Flexible Learning in a Digital World*. London: Kogan Page

Davis, J. 2003. *The Photoshop 7 Wow Book*. Berkley, CA: Peachpit Press

Dick, D. 2002. *PC Multimedia and Web Handbook: Technology and Techniques*. Drumbreck Publishing

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Morville, P. and Rosenfeld, L. 2006. *Information Architecture for the World Wide Web: Design Large-Scale Web Sites*. 3rd ed. Sebastopol, CA: O'Reilly Media Inc.

Pogue, D. 2006. *iMovie 6 and iDVD: The Missing Manual*. Sebastopol, CA: O'Reilly Media Inc.

Rosenberg, M.C. 2006. *Beyond e-learning: approaches and technologies to enhance organizational knowledge, learning and performance*. San Francisco, CA: Pfeiffer

Weller, M. 2007. *Virtual Learning Environments: Using, Choosing and Developing your VLE*. Oxon: Routledge.

Innovative use of technology:

Driscoll, M. 1998. *Web Based Training: Using Technology to Design Adult Learning Experiences*. San Francisco, CA: Jossey-Bass/Pfeiffer

Porter, L. 2004. *Developing an Online Curriculum: Technologies and Technique*. London: Information Science Publishing.

Ross, H., Verlas, K. and Levine, A. 2009. *Managing Technology to Meet your Mission: A Startegic Guide for Nonprofit Leaders*. San Francisco, CA: Jossey-Bass.

Sollie, P. and Düwell, M. (Eds.) 2009. *Evaluating New Technologies: Methodological Problems for Ethical Assessment of Technology Developments*. Springer Science and Business Media.

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MATLIC3: Enhanced understanding and research practices

1. Aims

To ensure students have an in depth understanding of the various learning theories that inform our understanding of how people learn in a variety of contexts such as formal educational settings, the workplace and in the broader community and an understanding of research principles and processes with a view to engaging with how these theories can inform the innovative use of technologies to enhance learning in a wide variety of social and environmental contexts and to meet the needs of an organisation or individual.

2. Learning outcomes

On successful completion of this module, participants should be able to:

- Discuss and debate the various theories of learning and their application in the context of the innovative use of technology in real life situations.
- Critique core concepts in relation to research principles and practices.
- Design and pilot a variety of research tools and critically evaluate research findings.
- Investigate and plan a strategy for carrying out a research project which aims to enhance learning through the innovative use of technology.

3. Indicative Content

- Educational theories and learning
- The contextual nature of learning
- Research principles
- Research design
- Research tools
- Analysis of data
- Writing up research.
- Research on technological developments and learning

4. Learning and Teaching Strategies

The learning and teaching strategies will be varied and include, lectures, skills workshops, supervision of professional work contexts, e-learning, individual tutorial support and small group seminars.

5. Directed Study Time and Independent Learning

This will be used to provide course members with additional planned opportunities to integrate and reflect upon both professional and College-based experiences. It is expected that significant Independent Learning may take place in relation to participants' professional contexts, e.g. in relation to the critical evaluation of work activities, documentation to be used in Workshop activities during supported learning time, or as the basis for assessment tasks. Thus, the overall Teaching and Learning Strategy for the unit builds upon an input, experience, reflection model, which also informs other modules in the MA programme.

6. **Tutorials**
Small group tutorials will take place throughout the module where the dialogue will be more focussed on the learning outcomes.
7. **Forms and Examples of Assessment -**
Written assignment/s and class presentation.
8. **Bibliography**

Suggested Reading

Ashburn, E.A. and Floden, R.E. (Eds.) 2006. *Meaningful learning using Technology: What Educators need to know and do*. New York: Teachers College Press.

Bertrand, Y. 2003. *Contemporary Theories and Practice in Education*. Madison: Atwood Publishing.

Daniels, H. 2003. *Vygotsky and Pedagogy*. London: Routledge Falmer

Dewey, J. 1966. *Democracy and Education*. London: Collier-Macmillan

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Jochems, W., Van Merriënboer, J. and Koper, R. (Eds.) 2003. *Integrated E-Learning: Implications for Pedagogy, Technology and Organization (Open and Flexible Learning)* London: Routledge Falmer

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MASTERS IN TECHNOLOGY LEARNING INNOVATION AND CHANGE PROGRAMME – MODULES

MATLIC 4: Implementing the innovative use of technology to facilitate change and enhance learning

1. Aims

To ensure the student through the active engagement with research, meets an identified need of an individual or organisation/group by implementing the innovative use of technology to support change and/or enhanced learning and can provide documentary evidence, in keeping with academic rigour to support this.

2. Learning Outcomes

On completion of the programme a successful student will be able to show that he/she can:

- Design and implement a research project which involves the innovative use of technology.
- Demonstrate their understanding and application of the theories on change, innovation, learning and technological developments.
- Engage critically with literature and research with a view to informing their own practices.

3. Indicative Content

- Preparation for work placement and research project
- Engaging with writing for different audiences
- Writing your dissertation
- Data analysis

4. Learning and Teaching Strategies

The learning and teaching strategies will be varied and include, lectures, skills workshops, supervision of professional work contexts, e-learning, individual tutorial support and small group seminars.

5. Directed Study Time and Independent Learning

This will be used to provide course members with additional planned opportunities to integrate and reflect upon both professional and College-based experiences. It is expected that significant Independent Learning may take place in relation to participants' professional contexts, e.g. in relation to the critical evaluation of work activities, documentation to be used in Workshop activities during supported learning time, or as the basis for assessment tasks. Thus, the overall Teaching and Learning Strategy for the unit builds upon an input, experience, reflection model, which also informs other modules in the MA programme.

6. Tutorials

Small group tutorials will take place throughout the module where the dialogue will be more focussed on the learning outcomes.

7. Forms and Examples of Assessment

Dissertation

8. Bibliography

Suggested Reading

Bell, J. 2005. *Doing Your Research Project. A Guide for first time researchers in education, health and social science.* 4th ed. Maidenhead: Open University Press.

Cohen, L., Manion, L. and Morrison, K. 2007. *Research Methods in Education.* 6th ed. London: Routledge Falmer

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Rose, G. 2007. *Visual Methodologies: An Introduction to the Interpretation of Visual Matter.* 2nd ed. London: Sage.

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Silverman, D. 2006. *Interpreting Qualitative Data: Methods for Analyzing Talk, Text and Interaction.* 3rd ed. London: Sage.

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