Title: **Concept and mind mapping – visual strategies to enhance student and staff learning.**

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Session Learning Outcomes

By the end of this session, delegates will be able to:

- Identify the major differences between concept map and mind map applications.
- Explain how these different forms of software can be used to enhance staff and student learning.
- Reflect upon how these software applications could be used in their own context.
- Choose appropriate forms of accessible and cost-effective software in this area.
- Start using the basic features of at least two different applications.

Session Outline

Key issues to be addressed are:
- What are the essential differences between concept and mind mapping?
- How can these applications be used to enhance the learning experience for both staff and students?
How accessible and cost-effective are the different software packages?

The last decade has seen a significant increase in the availability and use of concept and mind maps which can be created, used and shared on computers of all shapes and sizes – from desktop to laptop to tablet – and which offer useful educational advantages over the hand-drawn maps which characterised the early developments. This mapping software has also been increasingly used to support problem-solving and decision-making in other organisational settings (e.g. Bryson et al, 2004).

However, staff in HE and FE face some important practical and theoretical difficulties to resolve before they can use these applications effectively. Although there is a growing body of evidence on the effective application of this software with both staff and students (e.g. Novak, 2010, and the series of studies by David Hay and Ian Kinchin in the UK), prospective users may be suspicious of the more ambitious claims of some of the proponents of mapping and be confused by the variety of software now available. There are also practical considerations of cost and accessibility. This session will address major questions which often arise, including:
- what is the evidence for educational effectiveness?

- are some packages 'better' than others?
- are not some of the claims about the effectiveness of mapping based on misleading conceptualisations of the nature of human learning?
- how easy are different packages to use/train?
- what does it cost to invest in this technology?

Session Activities and Approximate Timings

The outline of the workshop is a follows;

Opening presentation and discussion – what are the potential advantages of visual strategies? And what are the different strategies available? (10 minutes)
Concept mapping demonstration and activity (10 minutes)
Mind mapping demonstration and activity (10 minutes)
Concluding discussion – how can we use these applications to enhance and support learning? (15 minutes)

References

Bryson, J.M., Ackermann, F., Eden, C. and Finn, C.B. (2004) *Visible Thinking: Unlocking causal mapping for practical business results*. Chichester: John Wiley.
Buzan, T. (2007) *The Buzan Study Skills Handbook*. Harlow: BBC/Pearson.
Hay, D.B., Kinchin, I.M. & Lygo-Baker, S. (2008). Making learning visible: The role of concept mapping in higher education. *Studies in Higher Education* 33 (3), 295-311*
Novak, J. D. (2010) *Learning, Creating, and Using Knowledge: Concept Maps as Facilitative Tools in Schools and Corporations*. London: Routledge.

* For a list of further relevant studies, see:
http://www.kcl.ac.uk/study/learningteaching/kli/research/projects/visual-learning-experience.aspx