

Title: **Creating modules for the digital visual age: Inclusivity, imagery and dyslexic and student experiences**

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Session Learning Outcomes

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

- Understand the relationship between excessive text in lectures, cognitive overload and student disengagement
- Recognise the importance to teaching and learning of image-based media in conjunction with text, from a theoretical and practical perspectives
- See the extent to which active learning and student engagement are enhanced by the application of multimedia methods
- Recognise the value of multimedia learning for inclusivity, specifically for dyslexic students
- Use online software to create visual presentations quickly
- Create opportunities for pedagogic-specific research with their own students that feeds into Continuous Professional Development in line with the UKPSF

Session Outline

The objective of this session is to look at the effects on student engagement and active learning of using imagery in lectures. It's based on a 3-year control-group experiment in which students were exposed to slides using images and text, versus slides using text only, with exit survey questions concerned with scholastically-defined characteristics of each. Data showed increases in engagement and active learning of between 40-80% for the groups exposed to images and text. The results were amplified with dyslexic students.

The 45-minute session consists of 4 sections. 11 mins each

The first overviews the lecture context, Multimedia Learning research, the experiment and the experimental data. Key issues:

- logocentric hegemony of HE lectures amid the most visual era of human evolution
- effect of excessive text on cognitive overload & student disengagement
- opportunity MML theory presents to transform lecture practice
- the method of experimentation used, and developed, to assess impact
- means of implementing multimedia methods in lectures

The second part will introduce participants to Haiku Deck software, a 'half-way house' which automates image seeking and allows a 'feel' for the method. You will:

- Engage online software designed to facilitate image-based slide presentations
- Create an image-based presentation of your preference

In part three we will look at how images affect dyslexic students. We will review the research method and the data and look at some commentary from dyslexic student focus groups over a 2-year period

In part four we will look at how to locate images independently of Haiku Deck software and discuss the quality and viability differences. We can address:

- Concerns with time commitment
- Accessibility of images (from Google to subscriptions)
- Free sites
- Copyright

Session Activities and Approximate Timings

The session starts with a 25-minute demonstration of the method, the experiment and the data it generated using multimedia methods projected using PowerPoint.

Participants will then be directed to a software platform that uses Artificial Intelligence to locate copyright-safe imagery. Participants should bring with them an existing lecture to develop into a multimedia presentation.

Having engaged with the concept directly in practice, participants can engage in a discussion around 4 points:

- perceptions of the legitimacy of multimedia, visual learning
- validity of the research method and its further utility for participants
- applicability across disciplines
- utility for CPD purposes

There will be a short evaluation form aimed at identifying the extent to which participants were impacted in terms of possible change to the way they think about lectures

References

Mayer, R (2014). The Cambridge Handbook of Multimedia Learning. Cambridge University Press.