

# Taking students on a journey: Visualising the lesson plan for students to follow

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Nottingham Business School  
Chair '*Games in Learning*' SIG

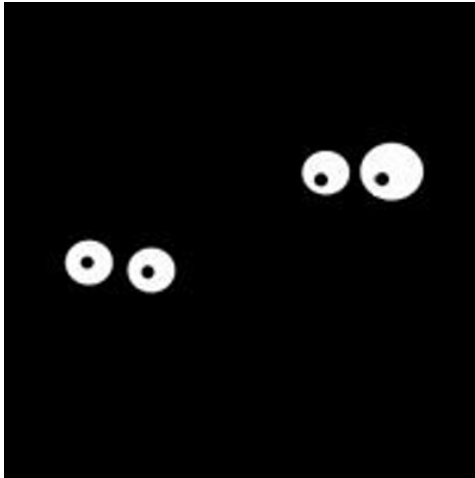
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TILT Festival of Learning  
26 June 2018



# Introduction

## The Architect



Lesson Plan Template		
Lesson Plan		
Unit/Topic: _____		Lesson # _____
Strand(s): _____		Level: _____
Lesson Objectives: <i>(Key Knowledge and Skills students should achieve in the lesson)</i>		
Lesson Structure:		
Time	Introduction of Topic	Teaching Approaches

# Kim's Games

Rudyard Kipling's (1901) novel Kim

Develops memory and observational skills through visual representation and story telling





# The plan for this presentation

Why visualisation?

How I use visual plans for students in my teaching



Think about how you might use visual plans in your teaching?



TILT  
Research  
Project  
2018-19



## Why Visualisation – what does the literature tell us?

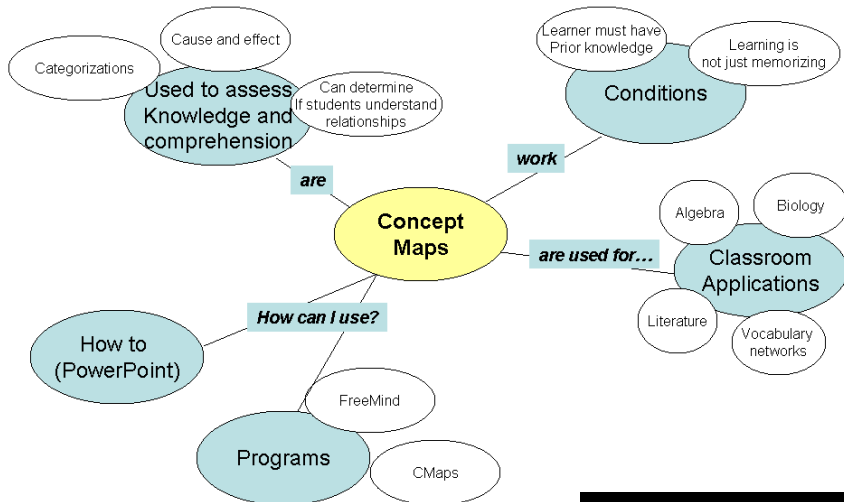
- Visualisation has been around for a long time, and used in many academic topics and across disciplines
- School's and in particular “Primary education” has been using it successfully – Berger (1972) states “Seeing comes before words...”
- In terms of education Hattie (2008, 2012, 2015, 2018) and Kinchin (2016) talk about going “**Beyond the text**”
- Buckley and Waring (2013) argue the amalgamation of text and drawings can act as a powerful tool for the dissemination of complex ideas to critical audiences.

# How I use visualisation in my teaching

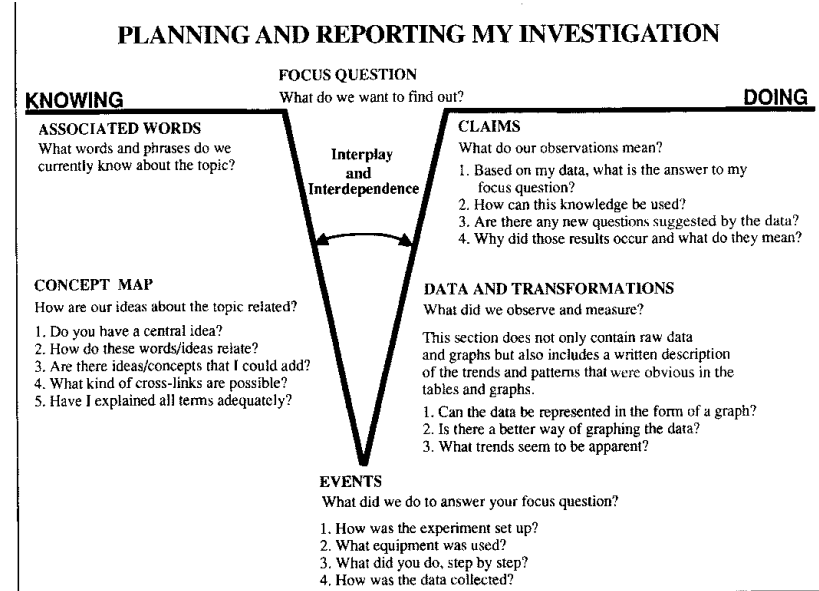
I've been interested in this topic since the early 2000s, in terms of how can I support the students learning journey by providing visual direction, this includes using:

## Concept maps (Novak, 1970's)

### Concept Maps



## Vee maps (Gowin, 1970)

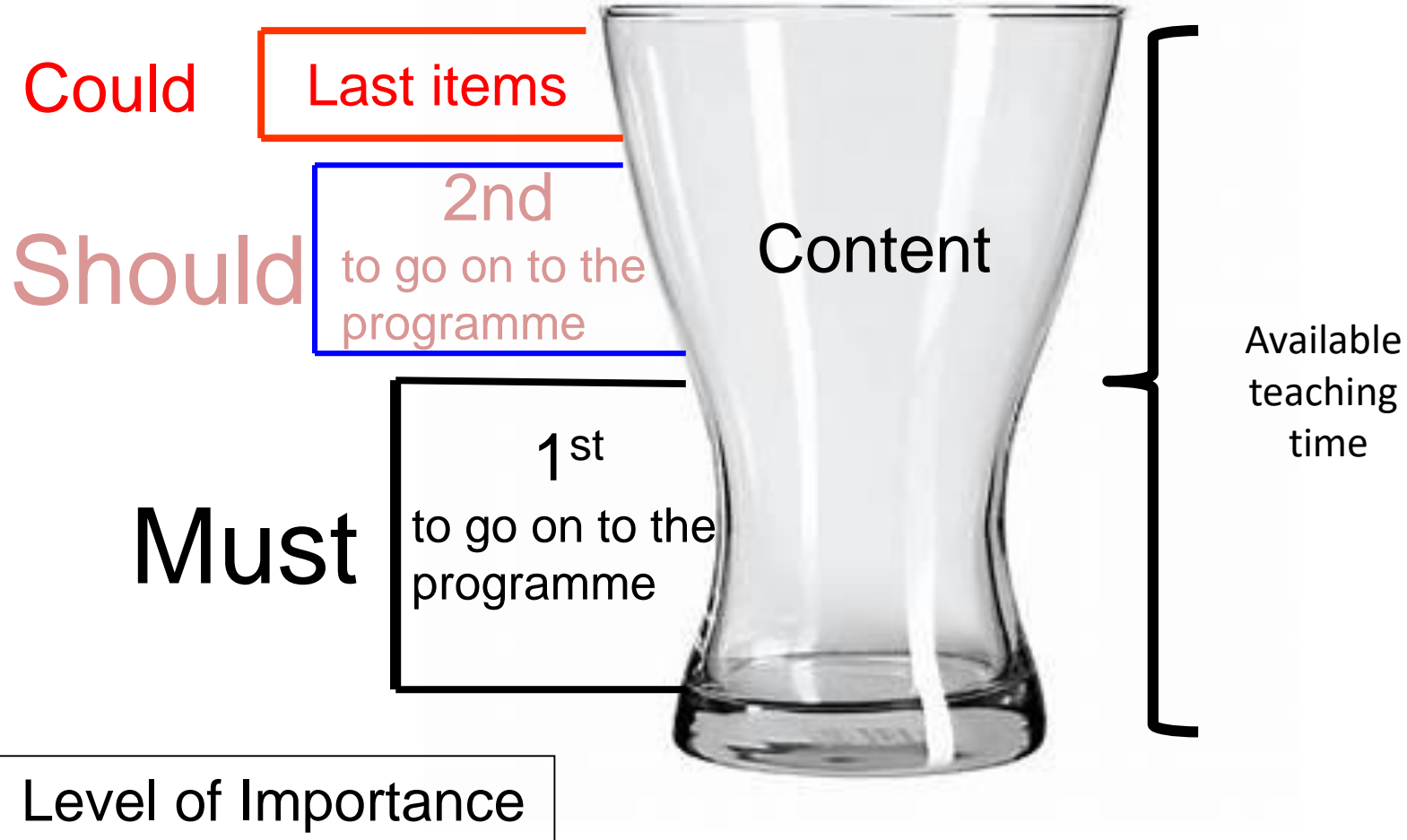


## KWL (Ogle, 1986)

KWL		
What I Know	What I Want to Know	What I Learned

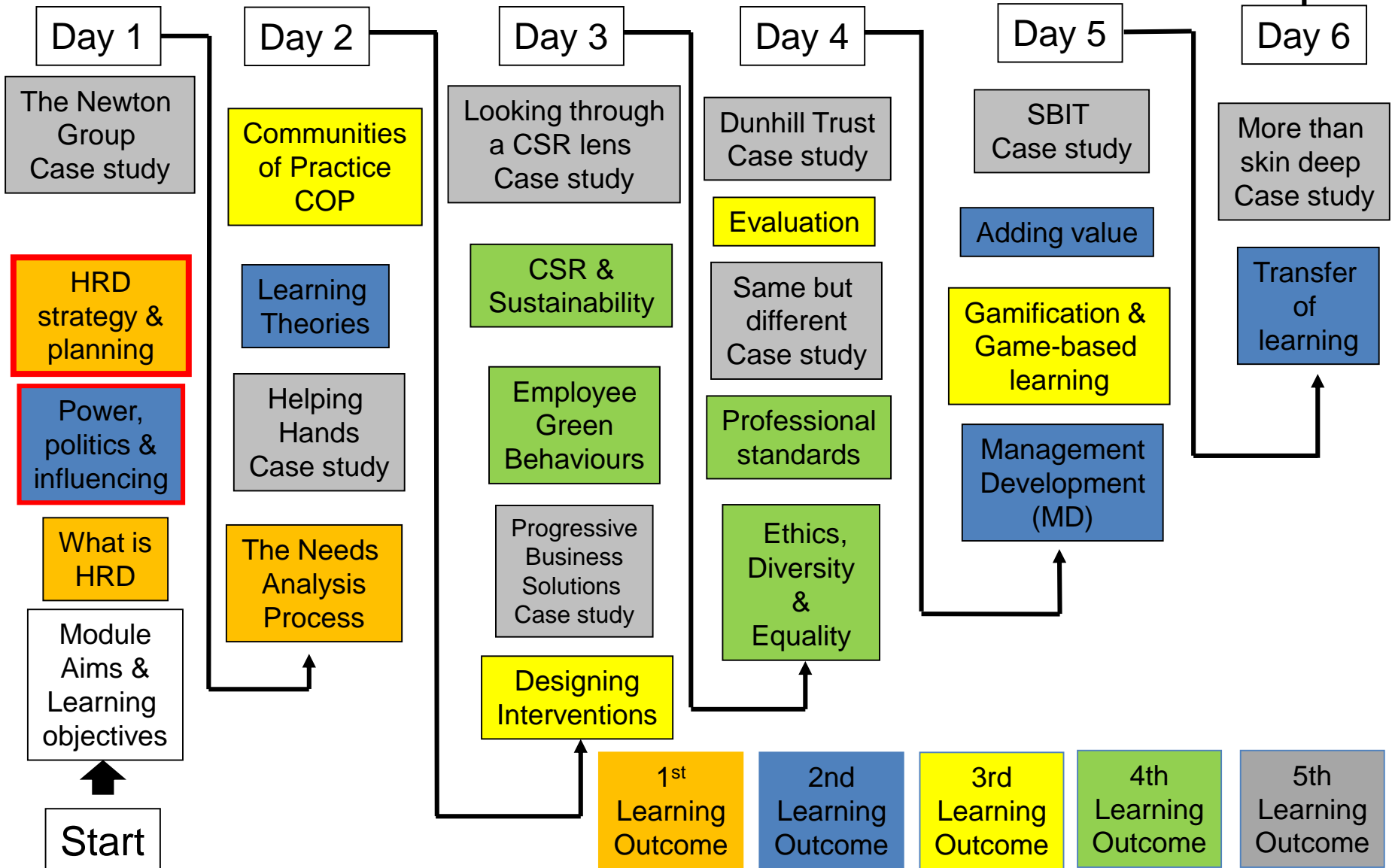
# Must, Should, Could (MSC)

Simmons (2003)



# Visualising the learning journey through the L&TD module (Scalar)

## Learning & Talent Development Module (FT cohort)





# Visualising the Learning and Talent Development Module

## Topics covered during the module journey



Day 1



Day 2



Day 3

Corporate Social Responsibility  
and Sustainability



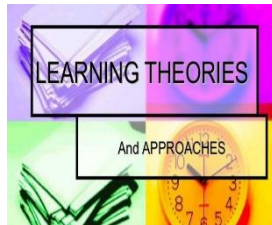
Day 4



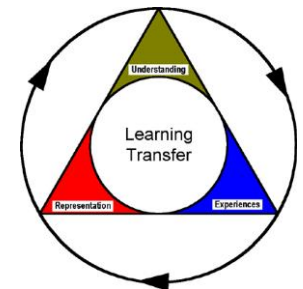
Day 5



Day 6



Designing a Training Program



Supported by:

Hot Learning  
Activities



Let's  
Take a  
Quiz



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# Visualising the Learning and Talent Development Module

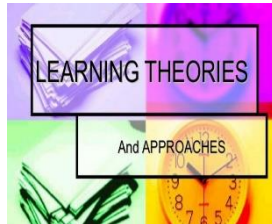
## Topics covered during the module journey



Day 1



Day 2



Day 3

Corporate Social Responsibility and Sustainability



Designing a Training Program



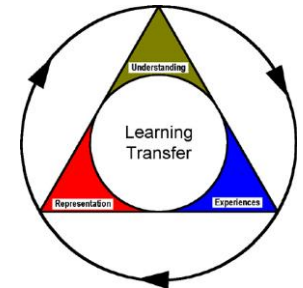
Day 4



Day 5



Day 6



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Let's Take a Quiz



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Four topics to discuss

## Day 1 L&TD Module

Topic 1



Abdullah,  
(2009)



Topic 2



Ashridge (1986)  
3F's model



Lunch Break

Topic 3



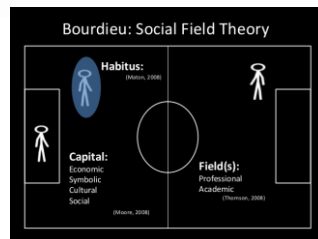
Stakeholder  
Grid



Creative Thinking  
Exercise



Topic 4



The  
Newton  
Group  
Case  
Study

Hot Learning  
Activities



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# Using Visualisation in Assessment

## What are your angels?

This originates from the idea that Michelangelo could see the angels in a rough piece of marble he was about to carve, see (Barrett & Hussey, 2015).

I issue my assignment brief to students who have to draw their visualisation of what is happening. Feedback from students is that it enables them to gain a better understanding of what is happening and get a hook into the situation.

Barab et al (2000) research suggested that students' actions of designing and building their on visualisations or "inscriptions", Pea (1994) contribute to students mastering the topics with depth and clarity.



What are your angles?  
(Steakley, 2010)

# Your turn now

Think of one of your on teaching sessions or module and consider how you might visual the plan for students.

Q. What do you see are the benefits and barriers to overcome?





# Feedback from the exercise

Benefits	Barriers
<ol style="list-style-type: none"><li>1. Helpful for international students</li><li>2. Dyslexic students</li><li>3. Gives single snap-shot of whole/holistic perspective</li><li>4. Know where they are in the learning journey</li><li>5. Supports students to make connections to other learning</li><li>6. Could support lesson planning &amp; learning design</li><li>7. Can support students who are visual learner or with learning needs</li><li>8. Visually interesting</li><li>9. May provide a 'hook' for students</li><li>10. Allow intuitions</li><li>11. Allow designs</li><li>12. Help trouble shooting to see the problem issues</li></ol>	<ol style="list-style-type: none"><li>1. Challenging for some to see a liner pattern</li><li>2. Format of images on the page, size, order etc.</li><li>3. Student perception/interpretation could differ</li><li>4. Could be misinterpreted; needs to be extra not instead of</li><li>5. Does it mean that assessment mechanisms might have to change?</li><li>6. Worried that this might discourage reading</li><li>7. Lots of work to find the images</li><li>8. Can impose your own visualisation on others</li><li>9. Not all people can think visually</li><li>10. Sometimes you'd rather take the students to darkness</li></ol>

# Feedback from the exercise

Benefits	Barriers
<ul style="list-style-type: none"><li>13. Filling the narrative of development</li><li>14. Need to get this out</li><li>15. Give clues to students for what they are about to enter</li><li>16. It is faster &amp; easier to communicate the plan</li><li>17. They have an idea of what is coming</li><li>18. Images can communicate in a universal way</li><li>19. Less reliant on language</li><li>20. Avoid text heavy explanation – should communicate point effectively than text</li><li>21. Images have a universality for international students that text may not have</li></ul>	<ul style="list-style-type: none"><li>11. Students don't get what its about</li><li>12. If you do it every class it may become routine &amp; a time for students to switch off</li><li>13. Time consuming</li><li>13. Pictures/images need to be appropriate</li><li>15. Possible problems of cultural interpretation</li><li>16. Miss the point/importance</li><li>17. Dumb down content</li><li>18. Can look lazy</li><li>19. Doesn't suit everyone</li><li>20. Can be open to interpretation</li><li>21. Do we all see the same thing</li><li>22. Lends itself better to particular subjects/aspects</li></ul>

# Feedback from the exercise

Benefits	Barriers
<ul style="list-style-type: none"><li>22. Helpful for international students</li><li>Appeals to visual learning styles</li><li>23. Trains students to be visual learners</li><li>24. Visualising progression – gives direction</li><li>25. More interesting and engaging</li><li>26. Appeals to visual learners</li><li>27. Helpful</li><li>28. Students can order their thoughts/topics better</li><li>29. Visual learners</li><li>30. Students with dyslexia</li><li>31. Diversity</li><li>32. Accessible</li><li>33. Simplifies</li><li>34. Make connections</li><li>35. Direct link to Module Learning Outcomes (MLO) to session outcomes</li></ul>	

# Feedback from the exercise

Benefits	Barriers
<p>36. Helps with module and session design</p> <p>37. Faces all audiences</p> <p>38. Clarify the content of relations between different parts</p>	

# Summary & final thoughts!



Not suitable  
for my subject

I  
**REALLY**  
CAN'T  
**BE**  
**BOTHERED**

Diverse student population





**Questions?**

**Answers!**

# Awarded a TILT Sabbatical 2018-2019



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Mike Coffey  
School of Science & Technology  
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The research project is focused on the area of **LEARNING GAIN**.

We are seeking colleagues across NTU  
who use 'games' in their teaching.

If you would be willing to participate in this research project, can you please email either of us and we will contact you later with details.

## References

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