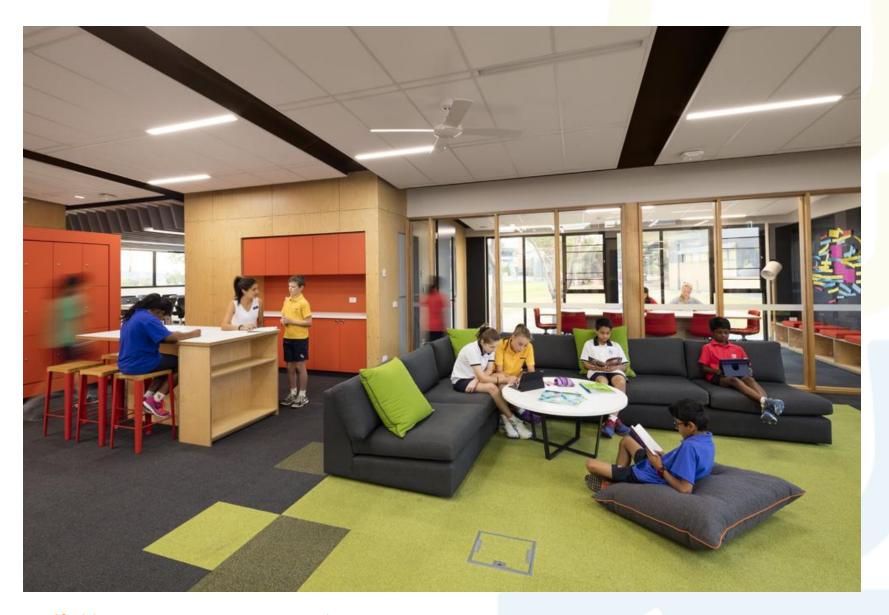
# **Spatial Literacy through Advanced Communication Strategies**



Wesley Imms, Susi Steigler-Peters, Matthew Smith

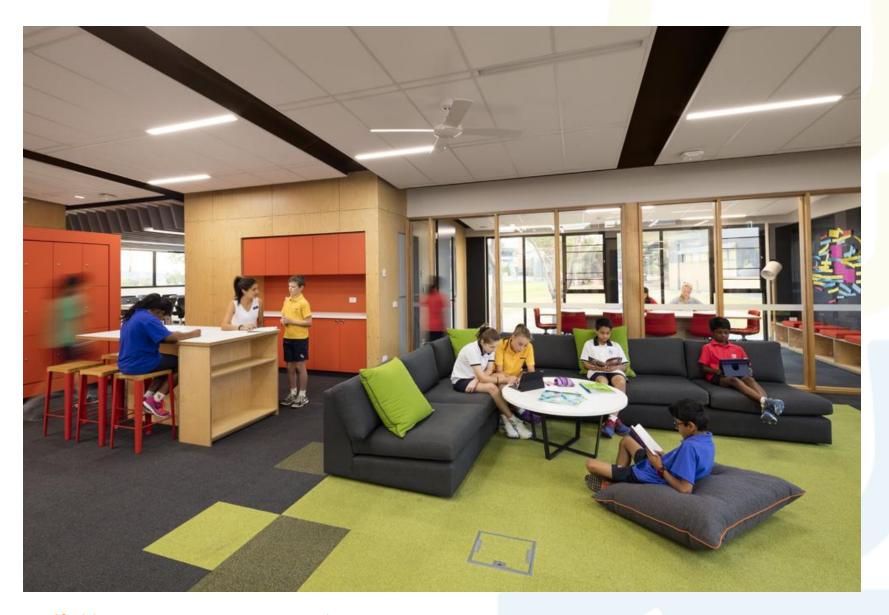


Caulfield Grammar, Victoria, Australia. Hayball © Diana Snape







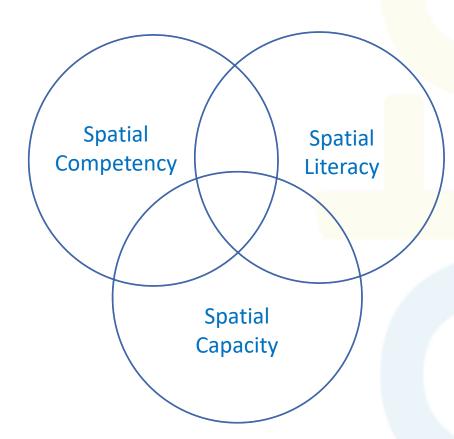


Caulfield Grammar, Victoria, Australia. Hayball © Diana Snape



## **Teachers spatial thinking**

Understanding why it happens



Understanding what happens

Understanding how it can be used



## **Teachers spatial thinking**

Understanding why it happens

- Lackney, 2008
- National Research Council, 2005
- Fisher, 2006
- Leighton, 2017

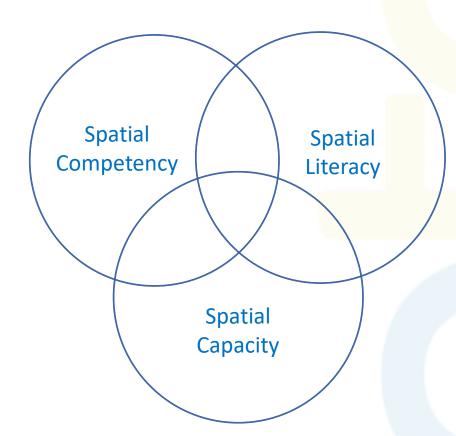
Spatial...

...ability

...reasoning

...intelligence

...cognition



Understanding what happens

Understanding how it can be used



## The 'My learning space' tool

#### Aim

- A tool that gathers evidence
  - Environmental factors
  - Student and teacher activity
  - Use of affordances
  - Technology
  - Outcomes (analytics)



## The 'My learning space' tool

#### Outcome

- A teacher friendly tool
  - Immediate
  - Relevant, teacher-friendly
- A tool that 'links'
  - Lesson-to-trend student learning outcomes
  - Changes in practices to student learning data
- A tablet/iPad device



## The 'My learning space' tool

### Procedure

- Use established tools, as much as possible
- Trial, test, validate

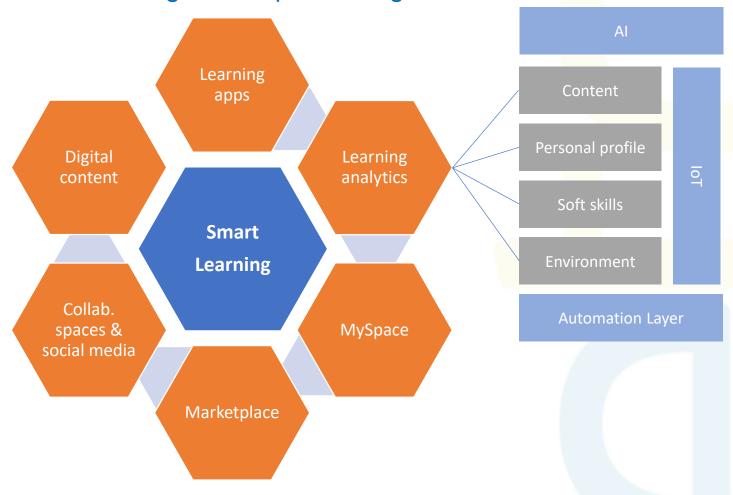




- Fully privatised since 2006
- Australia's largest telecommunication and information company
- Australia's 'most valuable brand'



### Smart Learning - conceptual design



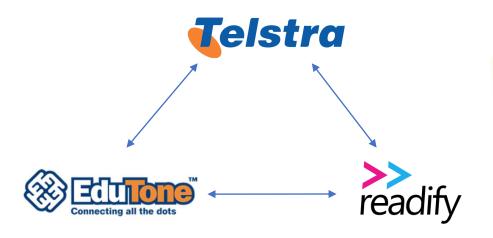
A cloud-based personalised learning ecosystem powered by learning analytics



#### Issues

- Who owns which IP?
- Marketing and commercialisation
- Privacy, ethics considerations
- Transitory (churn) nature of industries
- Time difference between research and industry
- Motivation
  - What's in it for me?
  - What constitutes 'evidence' (eg, scope, use, application)



























































New Zealand Government

Te Kāwanatanga o Aotearoa









#### Issues

- Who owns which IP?
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## **Contact information**

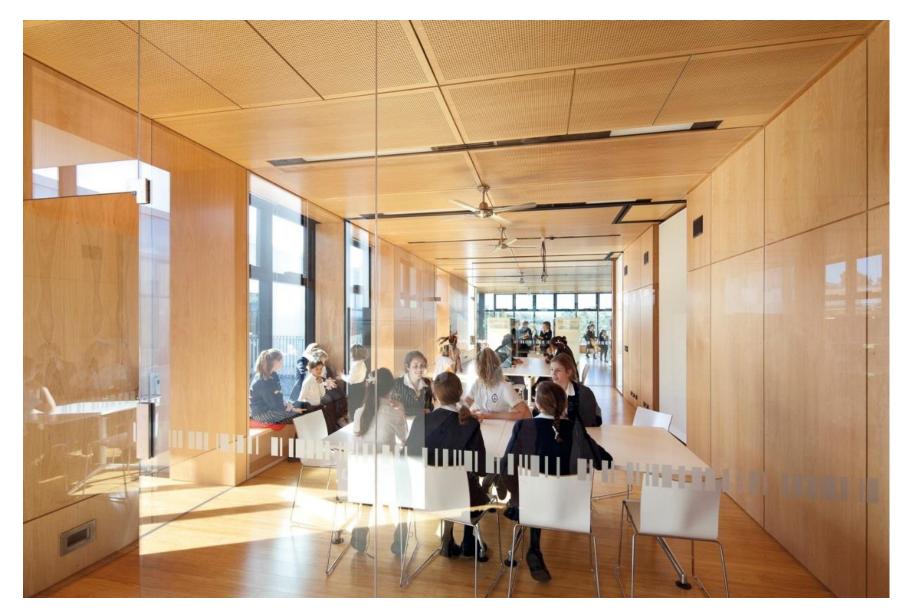
INNOVATIVE LEARNING ENVIRONMENTS AND TEACHER CHANGE

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