

Best practise in an applied  
learning classroom

Teaching/learning in the 21<sup>st</sup>  
Century

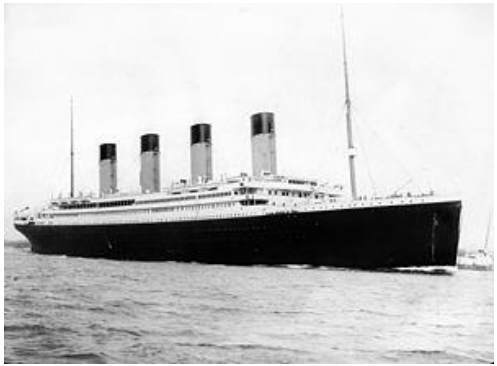


The background features abstract, overlapping geometric shapes in various shades of green, ranging from light lime to dark forest green. These shapes are primarily located on the right side of the slide, creating a modern, layered effect. The text is centered on the left side of the slide.

David Gallagher  
VALA Conference  
June 2018

# Today's learning goals

- Introduce some of the theories that support the delivery of best practise applied learning in the classroom.
- 21<sup>st</sup> Century skills and why they are important
- What does the research tells us about the importance of completing Year 12?
- What makes a difference in the classroom.
- Provide an opportunity for critical reflection and a “looking for learning” activity



# John Dewey 1916

## Experience is the best teacher



- Schools believed that students acquired knowledge as 'theoretical spectators' with no opportunity to test or apply knowledge
- It is important to include doing as part of the learning process
- Separation of the active doing from the passive undergoing phase destroys the meaning of the experience
- It is only in experience that the theory has vital and verifiable significance

# David Jonassen 1999

## Constructivism



- Knowledge is both individually and socially constructed by learners and is based on their interpretations of experiences in the real world
- Knowledge is built by the learner not supplied by the teacher
- Effective learning occurs when educators build on students' existing understanding or knowledge
- Students must construct a product, make a decision or solve problems
- Engage in solving authentic problems where the student assumes ownership of the problem



It takes a whole village  
to educate a child

*African proverb*

# Tom Bentley Learning beyond the classroom

- Formal knowledge has always been contained and enshrined in institutions - factories, universities and schools.
- In the 21<sup>st</sup> Century knowledge is more accessible from outside these institutions due to technology and valuable knowledge is carried by people learning societies
- 21st Century education is not restricted to the classroom nor is the teacher still considered the font of all knowledge
- Learning beyond the classroom - Distributed cognition
- For students to be autonomous, responsible and creative adults, learning must take place in the adult world - distributed cognition





# Jim Gee Principles of effective learning



- Good learning requires students to be active agents (producers) not just passive recipients (consumers)
- Different learning styles work better for different people
- Humans are not good at using verbal information
- People do not like practising skills out of context

# Howard Gardner Multi-intelligences

Linguistic

words and language

Musical

music, sounds, rhythm

Logical-mathematical

numbers and logic

Spatial-visual

pictures, shapes

Bodily-kinesthetic

physical exp, movement, touch

Intrapersonal

self reflection

Interpersonal

human contact, team work



# Gardner Multi-intelligence

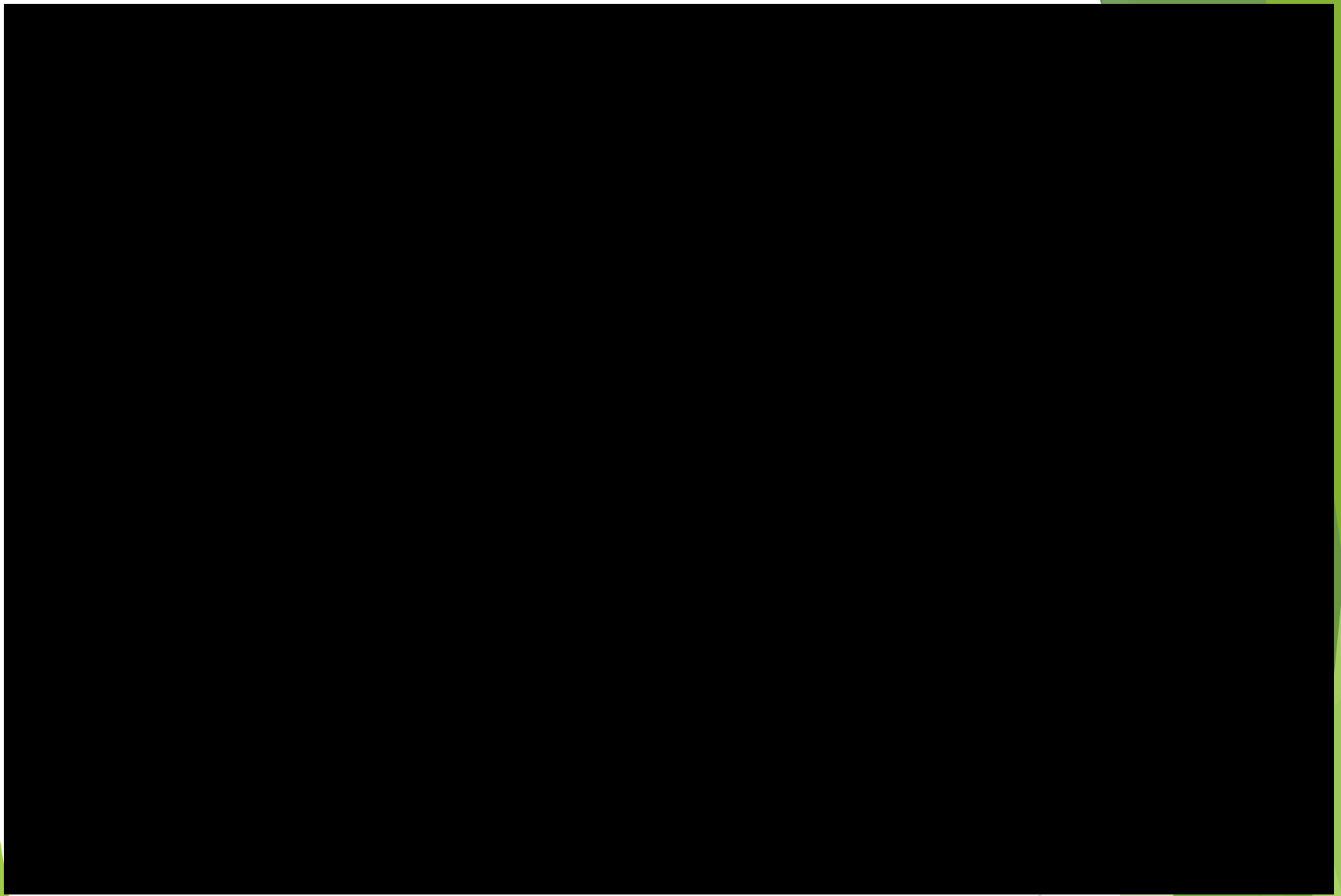
- Individualise - ‘One size does not fit all’. Teach in ways that students find comfortable and learn effectively
- Pluralise - teaching in several ways stories, art, drawings, hands on
- Not learning styles

# Schank, Berman & McPherson

- The problem with traditional teaching methods is the focus on factual knowledge rather than learning new skills - criteria compliance
- Distinction between know-what and know-how
- The ease of access to knowledge and the rapid rate of knowledge development now means that know-how is as important as know-what

# TEST





# Margaret Wilson

## Embodied Cognition

- Traditionally cognitive science viewed the mind as an abstract information processor with no connection to the outside world.
- The forces that drive cognitive activity do not reside solely inside the head of the individual but instead are distributed across the individual and their environment (Embodied cognition).

# Summary

What does all this mean for teaching and learning?

- Students need to be active agents (producers) not passive recipients (consumers)
- interplay between body and mind
- learning beyond the classroom - learning societies
- learning by practice and doing
- cognitive activity should take place in a real world environment
- 21<sup>st</sup> Century teachers are project managers of learning



# Demos The Forgotten Half

## 21<sup>st</sup> Century labour market characterised by

- dwindling supply of lower-skilled jobs
- diminished number of semi-skilled jobs
- growing number of jobs at the technical level
- rise in the number of jobs at the professional managerial level.

Education should be less focused on pushing students through the hoops of assessment and more focused in equipping them with the capabilities to progress through the labour market.



# Demos The Forgotten Half

Five proven labour market premiums

1. Character premium - soft skills, capabilities
2. Literacy and numeracy premium - boost earnings and employment rates
3. Work premium - best way to build employability skills
4. Technical premium - vocational training to Level 3 (A levels)
5. Graduate premium - wage premium £100,000 over their life



# Assessment and Teaching in the 21<sup>st</sup> Century Skills Project

250 researchers across 60 institutions categorized 21st century skills for students. They are:

- **Ways of Thinking** - creativity, critical thinking, problem solving, decision making
- **Ways of working** - communication, teamwork and collaboration
- **Tools for working** - ICT and information literacy
- **Skills for living** - citizenship, personal and social responsibility

*Preparing Teachers and Developing School Leaders for the 21<sup>st</sup> Century OECD Report 2012*

What is not on the list?



# Research findings

Students who do not complete school are at risk of:

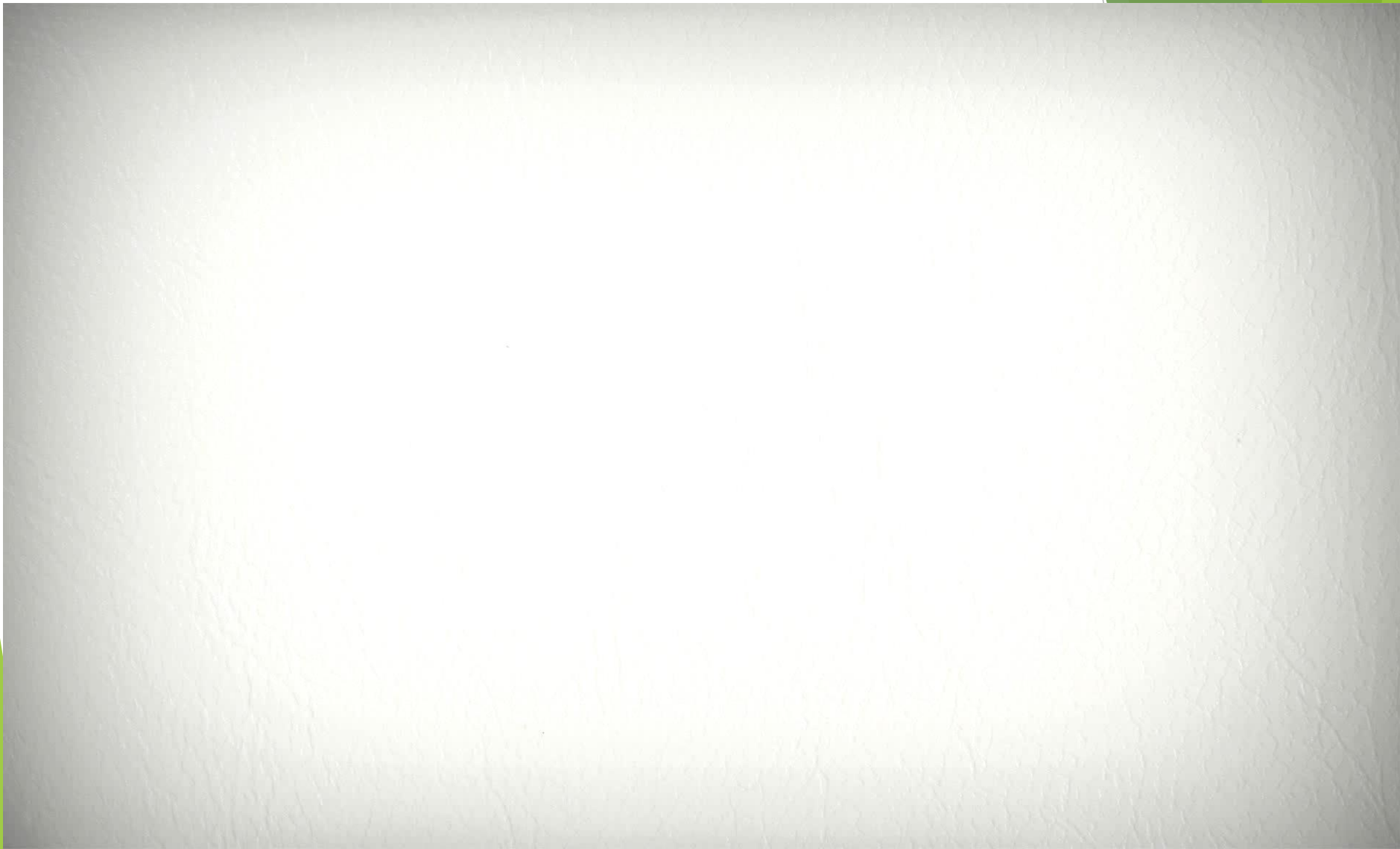
- underemployment or no employment
- lower wages and loss of income over working life
- impacting on tax payers through loss of revenue, higher welfare costs, unemployment benefits and higher costs for criminal justice system (\$2.6 billion per year)
- placing a greater demand on health system e.g. greater risk of obesity
- decreased participation in the electoral and political process, less charitable giving and weaker social cohesion
- greater likely hood of imprisonment and contact with the criminal justice system
- mortality rates up to nine time higher than the general population



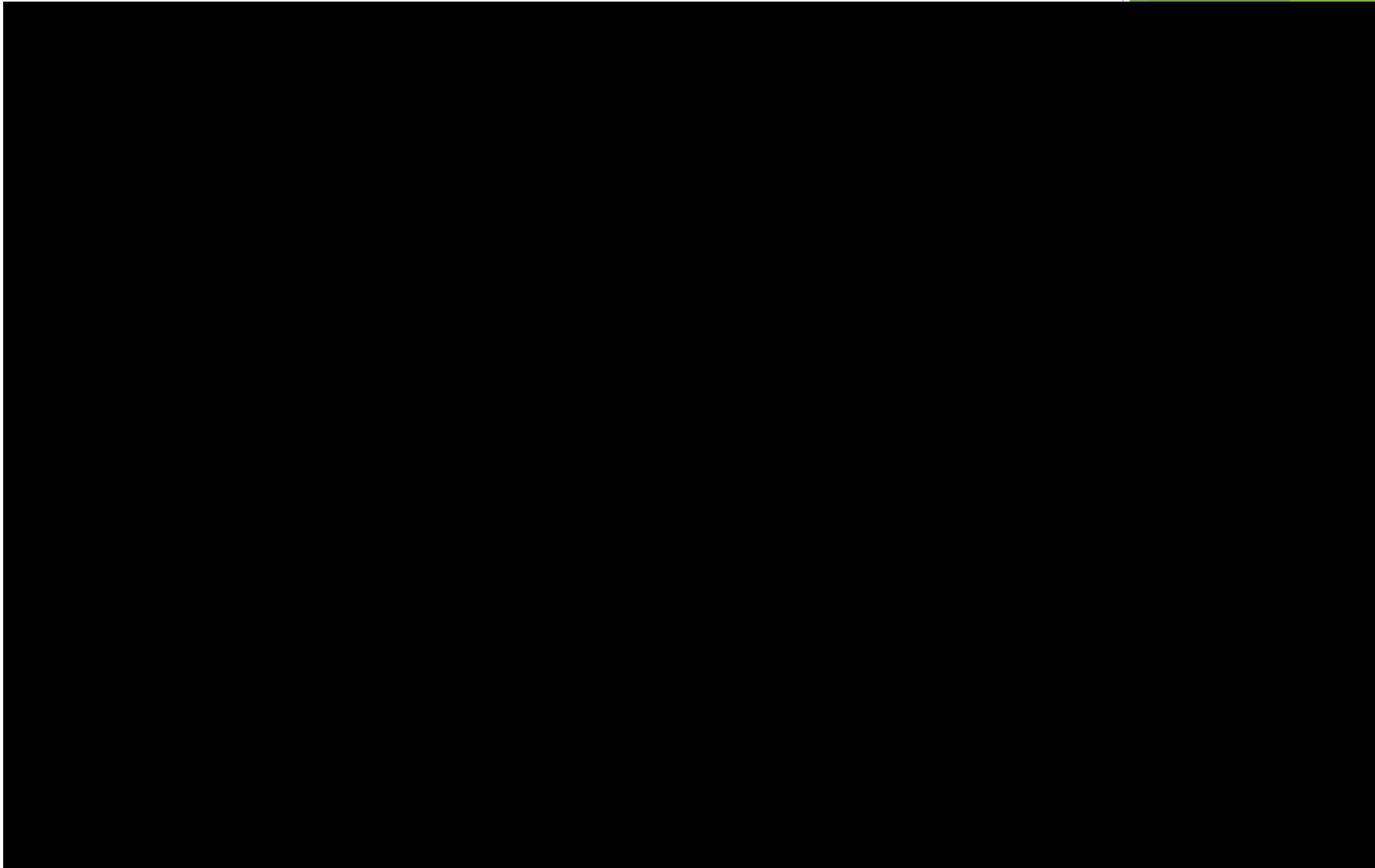
# J Hattie Excellent teachers

## Excellent teachers:

- deliver knowledge that is more integrated and combines new knowledge with prior knowledge
- are opportunistic and flexible in their teaching
- are great seekers and users of feedback in their teaching and learning
- are passionate about teaching and learning
- have high respect for their students.
  
- Strategies for High Impact Teaching







# Patti Clayton 2009 Reflection (Looking for learning)



- What have you done today?
- What have you learnt today?
- Were you engaged, confused, lost or challenged? Why?
- How will you apply this to your teaching and learning?
- We had the experience but missed the learning - (*T.S Eliot 1943*)

