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The relationship between multimedia assessment and deep/surface learning:
Change or No Change? Lessons learnt in the TAFE classroom

Research Setting

What am I interested in?
• VET learners – TAFE – who are they and how do they approach their learning
• Encouraging students to be reflective, inquisitive learners – deep learners

As a guide for me
• Investigated learning styles, preferences and strategies
• Sadler-Smith & Smith (2004) discuss the three as: styles – the intrinsic, habitual way a learner acquires information; preference, as the learner’s bias towards a distinct T&L method; learning strategy as the particular method or approach that the learner adopts in negotiating a learning activity or process

So many to choose from?
• Coffield, Moseley, Hall & Ecclestone (2004) distinguish between over 70 learning styles, within 5 main families
• Which one resonates with me?
• Deep/surface approach

My approach then...
• Encourage learners to move (if possible) from one learning style to another – possible?
• Encourage learners to try and adopt learning characteristics that reflect a deep approach
• Via MM?
**Definition of deep and surface learning given to the interviewees**

**Deep Learner:**
- A learner that needs to delve into the subject matter presented to them and not just skim over the topic. It is important that the learner asks ‘why’ not just ‘how’.
- A deep learner is someone who is motivated to thoroughly research the task in order to satisfy their own levels of curiosity and interest.
- A deep learner is someone who understands that knowledge acquisition takes time and effort – but the rewards are justified.
- A deep learner is confident and informed because they have spent the time and attention on the task or topic. This feeling gives them not only a sense of clarity but also empowerment.
- Deep learners try to spend as much time as they can on tasks or topics even those that are not assessable.


**Surface Learner:**
- A learner that is comfortable doing just enough to complete the topic or task.
- A surface learner prefers not to spend too much time or effort on tasks.
- A surface learner is someone who is satisfied with a superficial or minimal understanding of the material.
- Surface learners can learn by trying to memorize information and then regurgitate this information in a test or exam to pass the examination in order. They sometimes use rote learning, as this method allows them to reproduce information.
- Surface learners view information gathering as more valuable than developing understanding based on research and in-depth study.
- Surface learners tend to spend a greater amount of time on tasks that they enjoy or which are assessable.

**Using what as a vehicle to analyse my learners?**

- The role of technology in education – the use of technology as an assessment task – can it aid my learners to be not only active learners but also reflective?
- Therefore...

**Purpose of the research**

- Examine the type of learning engagement of diploma of event students
- Investigate whether non-traditional teaching methods and tools may stimulate and motivate learners (Barrett, 2004, 2005, 2006; Miller, 2004; Chier, 2006; Prensky, 1998; Robin, 2006; Zubizarreta, 2004)
- Explore whether students use a deep or surface approach to a MM assessment task
- Reflect on the outcomes of the research for practitioners, students and industry employers

**My participants**

[Diagram showing participants with interrelated factors]

**Biggs Model – Deep and Surface Learning (Biggs et al., 2001)**

**STUDENT FACTORS**
- Aims and values
  - Practical approaches to learning

**LEARNING FOCUSED ACTIVITIES**
- Engaging pedagogical practice

**TEACHING CONTEXT**
- Objectives
  - Assessment
  - Conclusions
  - Teaching
  - Practical exercises

**LEARNING OUTCOMES**
- Knowledge, skills, abilities acquired
  - Conceptual, critical, contextual approach to learning
In some ways, this assessment task has elements consistent with other work done
• Such as…

Ohler’s representation of Digital MM (2009)

Literature Review
• The literature is weak regarding technology on VET (compared with K1-12, Higher Education)

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Rich

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Technology in Education

Assessment in VET

Learning Styles

Three Research Areas – Literature Review

Research Methodology
• Qualitative
• 13 interviews (11 female, 2 male event diploma students)
• Quantitative
• 13 questionnaires using the Biggs R-SPQ-2F (Biggs, Kember & Leung, 2001)
• What did the participants say? Snapshots

• Some work has been done on assessment in VET and learning styles
Deep Approach

- I am a deep rather than surface learner – I need to know why ... It certainly is important to try and learn and understand things by going deeper into the problem or question to be answered. (Amanda)

- My approach to this assessment was the same for most of my work – do the background work, find the information and make sure that I had questions to ask if I couldn’t find the answer myself. I like being prepared and confident so that I can enjoy it rather than stressing and worrying. (Lisa)

- Even though I had some issues I didn’t give up. I am a patient person who likes to get the work done. That way my work is better and more professional, rather than rushing and trying to get it over and done with. (Sari)

- I prefer to work through problems, rather than just getting the teacher to fix my problems for me. You don’t learn that way. (Ruth)

- Yes, I am a deep learner – I need to know why. (Stephanie)

- I am not good at rote learning – I am probably a deep learner. (Fiona)

- I have to know why. The more I can find out about my study the happier and more confident I feel. (Jess)

Mid-way

- I’m somewhere in the middle. I think I am a bit of both – deep and surface, depending on the task and if I am interested in the topic. If I don’t like the topic then I think I would use a surface approach. But for hands on subjects I think I use a deep approach, and for theory subjects I used a surface approach and I would do the minimal work done. (Lanie)

Surface Approach

- Most of the time though I am happy just to do enough to get by with – it’s no real big deal. (Jasmine)

- I think I am a surface learner. I really only do enough work to get the assessment done so that I can hand it in. (Bec)

- I tend to skim over things instead of spending more time and effort. It’s part of how I learn and get through the work. (Kylie)

- I always look at how much the work is worth which helps me to decide how much work to put in. (Jake)
Dissonance (Case & Marshall, 2009; Entwistle, 1981) – how to respond?

• Michael's apparent dissonance between the predicted surface (Biggs et al. 2001) and his self-describe deep learning behaviours could be an indication of the fluidity of learning preferences
• Suggests that learners adopt a strategic approach when negotiating their learning

Deep or Surface Outcome?

• Neither – it didn’t inhibit an already existing learning style
• Interplay between the three main themes:
• Learning styles, assessment in VET & technology in education
• AND
• The six sub-themes
• So what?
• Proposed model to assist colleagues and teaching practitioners

Deep or Surface Outcome?

• The results do not provide adequate evidence to support the proposition that MM assessment promotes deep learning
• MM assessment enabled the adoption of both deep and surface learning approaches as determined by the learner

How best to use these findings?

• Small in scope
• Propose a model that may assist in approaching similar teaching and learning situations (integrate Biggs’ work)

Biggs Model – Deep and Surface Learning
This has led to…

- Currently piloting a research project based on MM assessment using Flip digital video cameras
- Over 100 degree students involved in using MM within an assessment task
- Tracking learner involvement, motivation and learning approach
- The project has had to meet T&L Outcomes

Thank you