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Aim

To share with you an example of how a scaffold for engaging students in reflection has been situated within a blended learning environment and to describe the impact of this intervention

Learning Outcome

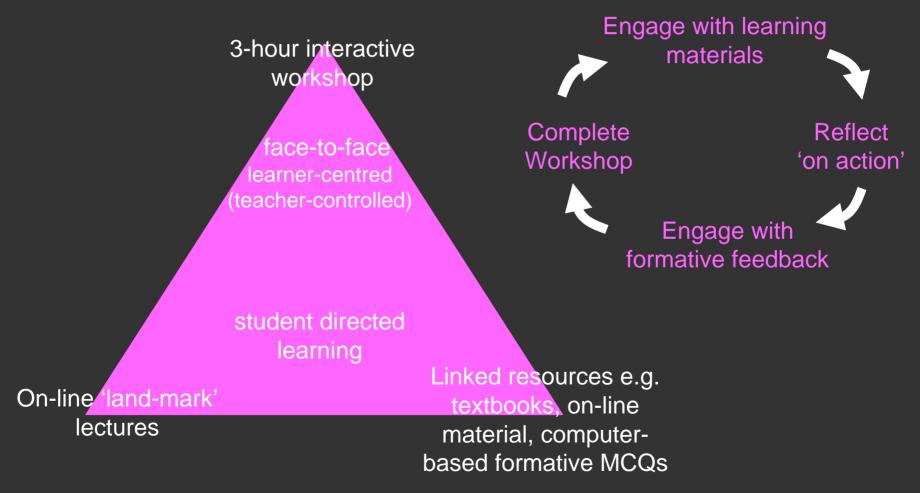
by the end of this session you should be able to:

Reflect on the role and purpose of embedding opportunities for engaging students in reflection in your own learning and teaching context



The Context

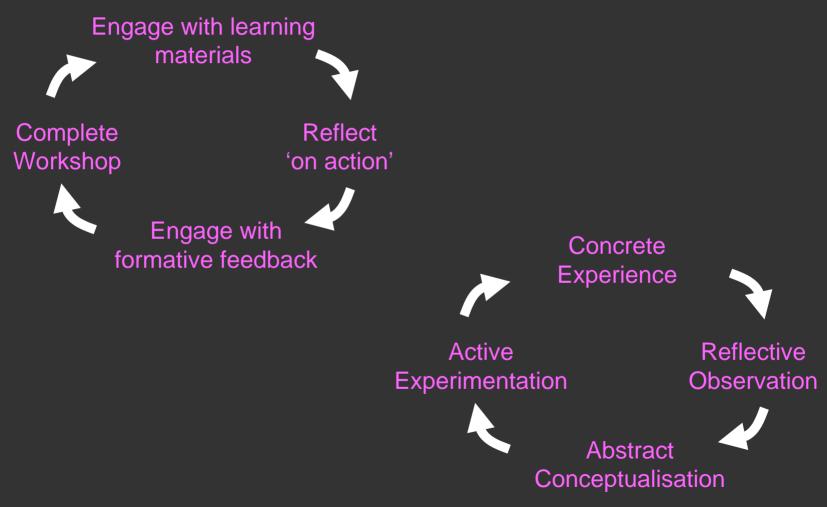
Human Physiology – core level one undergraduate module



Students' blended learning triangle



The link to theory...



Kolb (1984)



Reflection is (can be)...

Application of new knowledge to overcome cognitive problems and puzzles (Schön, 1987)

Way of analysing personal experiences, evaluating and moving on (Cowan, 1998)

Not just thinking. Reflection is an activity that we apply to complex issues... Content of reflection is largely what we know already...Process of reorganising knowledge and emotional orientations (Moon, 1999b; Moon, 2004)

Reflection assists in the development of analytical skills moving the practitioner away from the descriptive and therefore affecting how they perceive their practice (Gibbs, 1988)



Why use Reflection?

The weekly reflective diary was introduced to encourage "reflection on action" (Schön 1987, Moon 1999a). It was the intention that the value of reflective writing would be demonstrated in a range of related areas including:

as an approach and method for improving the quality and depth of student learning

integrating learning across topics

facilitating self assessment of individual development, particularly in relation to transferable skills

establishing autonomy in learning and meta-cognition in students - defined in this context as "the ability to self monitor, self direct, and control their own cognitive processes" (Morrison, 1996)



Understanding Reflection – scaffolding the process

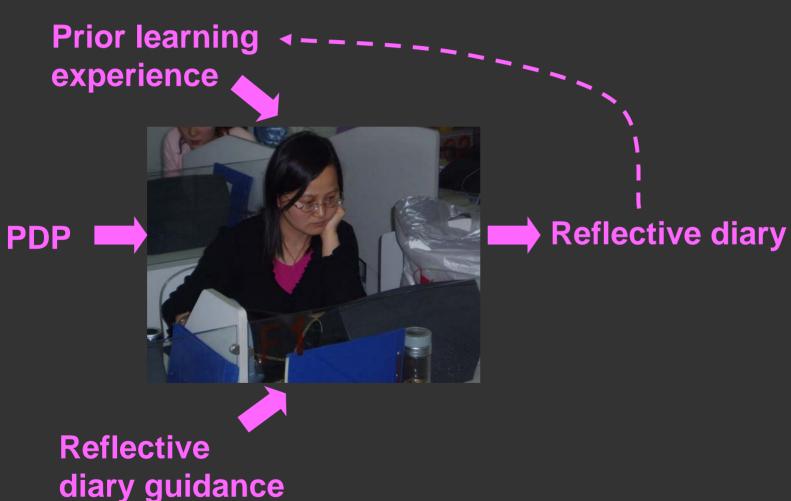
If we ask learners to answer the question 'How well I do (something)? or 'How well could I do (something)?' then the outcome should be a reflective self-evaluation of a particular type of performance (Cowan, 1999, pp79-92).

Process analysis is most useful when it is likely that the learners will shortly tackle similar tasks, following the same process as in the task they are now analysing. Having derived a refined generalisation in their own words, they can then apply their generalisation methodically to future examples within the same category, without 'going back to the beginning again'

(Cowan, 1998, pp33-5).



Understanding Reflection – scaffolding the process





Understanding Reflection – scaffolding the process Reflective diary

List the key points of the topic that you have studied today

List the sources, and the page numbers/web sites that you have used to complete this workshop

How did you learn this week? Would be able to complete similar workshop style questions in a phase test? Was your learning effective or do you need to make changes - what might they be?

A key to successful learning is to question and discuss the material. How much did you discuss with your peers? Or a member of staff?

How did you "feel" about the work? Did you read anything before attending the session, if so was it useful to do this? Was the topic interesting – if yes why? If not – why not?

How did you use the feedback session at the end? Was it useful? If not why not? How will you use the information to help your learning in future sessions?

Indicate below how you have used your self directed study hours for this module during the last week. Was this effective? How will you use this time next week?



Understanding Reflection – dimensions and depth

Hierarchical model of reflective activity

Progressive sophistication from description to deep reflection (Kember *et al.*, 1999; Kember *et al.*, 2000)

Deep reflection associated with perspective transformation (Mezirow, 1991)

7. Premise reflection

4. Content reflection

5. Process reflection

6. Content & Process reflection

2. Introspection

3. Thoughtful Action

1. Habitual Action

0. Description

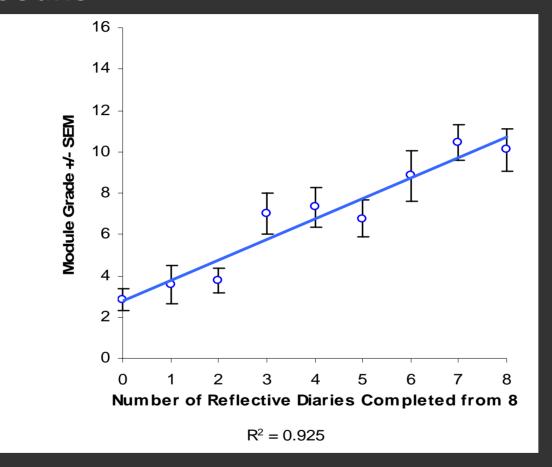
Coding categories for reflective thinking (reproduced from Kember et al., 1999)

Reflective

Non-Reflective



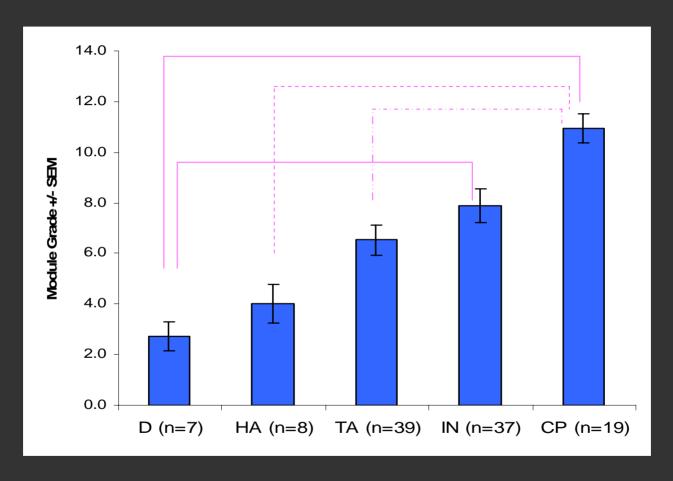
Results



Relationship between module grade achieved and level of engagement as defined by number of reflective diaries completed (n=110)



Results



Sample means and SEM for the five levels of reflection (n=110). Note: D = Description; HA = Habitual Action; TA = Thoughtful Action; IN = Introspection; CP = Content & Process Reflection

Pair-wise comparisons significant at p<0.01 level indicated



Results – a qualitative perspective from description to reflection…

"very useful"

"useful, it gives sense of direction that I have to follow"

"Yes, useful but much information to be retained"

"the workshop this week was quite difficult. This maybe because I didn't do any reading about the topic beforehand"

"the workshop was very challenging and too many calculations involved. need to do so much more reading in order to be able to complete workshop questions in the phase test"



Results – a qualitative perspective from description to reflection…

"Feedback useful, helped me to understand my weaker areas"

"Key points on cue cards, extra reading on relevant theory on questions that were incorrect"

"Made extra notes and corrected those things where I went wrong. Useful as it tells and explains where went wrong. If proper notes aren't made, can't revise properly"

"The use of the feedback made me understand in more depth about the subject"

"I used the feedback to correct and amend my answers to the workshop Qs [questions] and realise what I need to revise and make more notes on"



Reflections on Reflections

Positive student engagement with process of completing reflective diary

Higher levels of engagement with the process correlated with improved assessment performance correlated

Many reflective diaries characterised by candour; however few cross threshold from description to deconstruction and reconstruction (Samuels & Betts, 2007)

Value of formative feedback acknowledged by many students

Students engaging in Content & Process Reflection demonstrate significantly improved assessment performance

Greater sophistication in the level of 'reflection' is associated with improved assessment performance



Reflections on Reflections on Reflections on Reflections

Descriptive narratives (Bain et al., 1999; Samuels & Betts, 2007) focus on : What happened? What might be done differently? rather than, how and why?

Reliability of assessment of levels of reflection?

Role of self assessment in deepening reflection?

Evolution of depth of reflection, change over time (module)?

What other factors play a role in development of reflection?

Use of technology to support deeper reflection (PebblePad)? (<u>www.pebblelearning.co.uk</u>)





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