

Reflective Learning:

Seeking metacognition in reflective practice

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Outline

- ▶ Part 1: First steps – thinking skills
Initial matrix development

 - ▶ Part 2: Graduate Diploma reflective learning
project
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Part 1

First steps – thinking skills & initial matrix development

Definitions

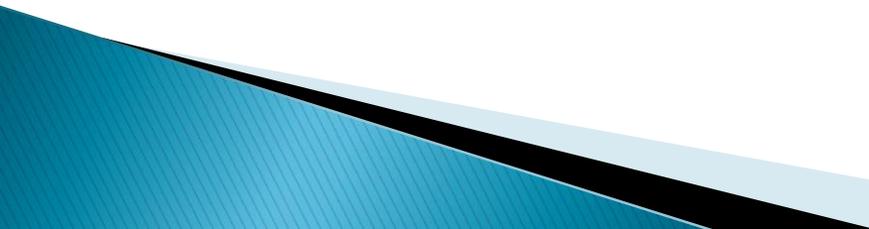
- ▶ Thinking skills teaching can either be augmented within the subject curriculum or be taught as an independent dimension.
 - ▶ It involves a great degree of honesty from the participants and teachers and the ability to be a good listener (Fisher, 2003; Lipman, 2003)
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Some aspects of thinking

- ▶ Considering language / vocabulary
 - ▶ Solving a problem
 - ▶ Considering something
 - ▶ Critical thinking
 - ▶ Comparing / contrasting viewpoints
 - ▶ Reaching a conclusion
 - ▶ Being able to recall factual information
 - ▶ Recognising and adapting to procedures

 - ▶ Metacognitive thinking / learning through talk
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Cognitive Dimension Matrix

- ▶ From the revised version of Bloom's Taxonomy for Learning
 - ▶ Divides knowledge into four categories
 - ▶ Identifies six areas of cognition (this version uses more active statements)
 - ▶ Suggested uses include for course review by staff and identifying areas of S & W
 - ▶ It is not expected to be a complete checklist
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Methodology (AR)

The knowledge dimension	The cognitive process dimension					
	Remembering / recalling information	Understanding meaning (could clarify, categorise, summarise, conclude, contrast or explain)	Applying a procedure to the task	Analyse important from irrelevant points / determine a point of view in discussion	Evaluate – judge which process is the best / determine if the result comes from a logic	Create a hypothesis / a procedure for completing the task
Factual knowledge						
Conceptual knowledge <i>(theories, systems, etc.)</i>						
Procedural knowledge <i>(how to do something, e.g. write an essay)</i>						
Meta-cognitive knowledge <i>(knowing strengths & weaknesses, etc.)</i>						

Key questions for investigation

1. What impact does the recording and monitoring of self study have on a language learners' awareness of metacognition?
 2. How do thinking skill activities aid in raising the development of metacognition for learners on a pathway programme? Do they provide opportunities to enhance the levels of autonomy?
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Key questions for investigation

Metacognition for the purpose of this enquiry was:

- ▶ awareness of strong – weak areas of language skills & strategies to develop them
 - ▶ ability to evaluate elements of difficulty & identify techniques / resources to improve
 - ▶ ability to evaluate skills required / covered by classes & the shortfall for self study
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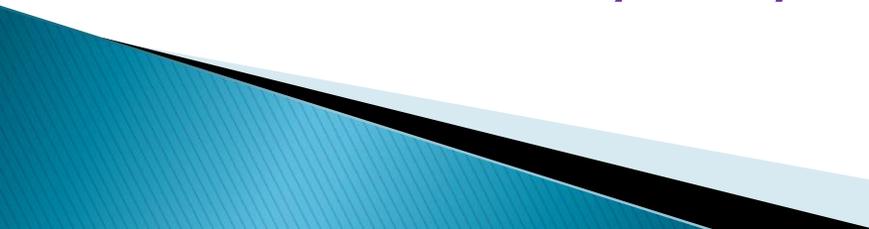
Overview of outcomes - Q2

Figure 1 Participant knowledge and cognitive processing using a traffic light system (green is the strongest) based on evaluation sheet after the task

The knowledge dimension	The cognitive process dimension					
	Remembering	Understanding	Applying	Analyse	Evaluate	Create
Factual knowledge	Green	Green	Green	Yellow	Green	Red
Conceptual knowledge	Green	Green	Green	Yellow	Yellow	Red
Procedural knowledge	Green	Green	Green	Yellow	Red	Yellow
Meta-cognitive knowledge	Green	Green	Red	Yellow	Yellow	Yellow

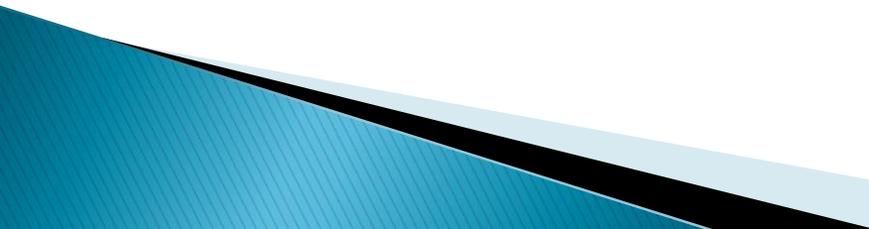
Overview of outcomes

What will you (students) do differently next time?

- ▶ “I will try to discuss ideas using a different approach next time to see how it works for my role and understanding of the ideas.”
 - ▶ “I will try to forge my own style of working within a group.”
 - ▶ “I will try to be more aware of this weakness (taking into account the opinion of others) because I consider working in a group to be an asset to everybody.”
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Overview of outcomes

- ▶ Some confusing language on the matrix (*'analyse'* and *'evaluate'*)
 - ▶ More time needed for the debrief
 - ▶ Record the session/debrief & transfer to BB

 - ▶ Programme focus – too much on subject & procedural knowledge
 - ▶ More engagement / constructive talk from TS activities than traditional lessons
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Part 2

Graduate Diploma reflective learning project

Reflection

Reflective learning can take many forms such as feedback (oral and written), journals, tasks that require evaluation of the learner's knowledge / skills, action-based reflection and an end of task / module / programme review (Brockbank and McGill, 2007; Stefani et al, 2007; Schunk and Zimmerman 1998)



Reflection

- ▶ It needs to be thought of as a linear process from behaviourism to cognitivism (Nichols 2002; Brockbank and McGill 2007).
 - ▶ Do you agree with this? Why / why not?
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The Graduate Diploma project

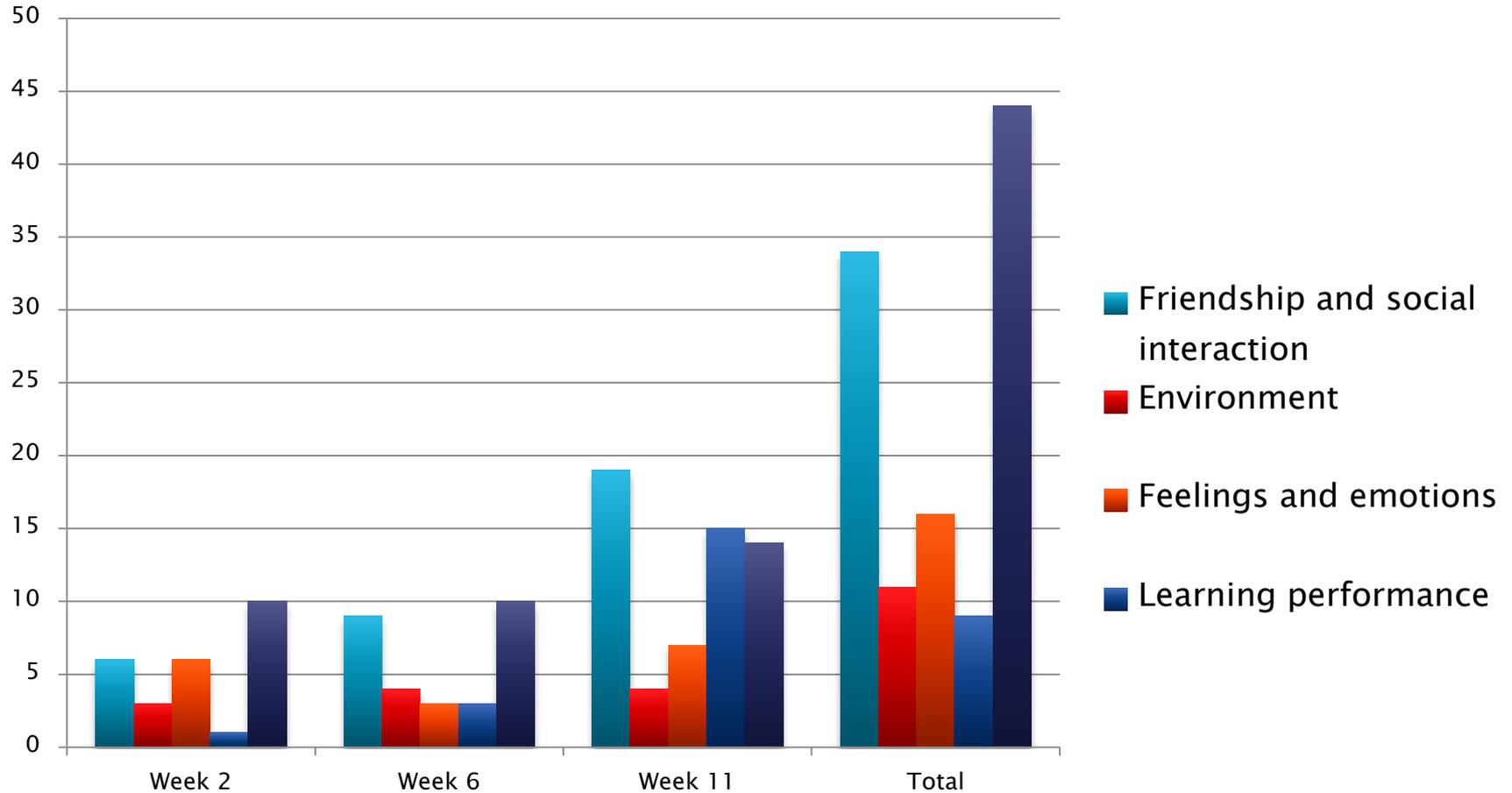
- ▶ It involved two main elements: a blog and a matrix
 - ▶ The blog was completed at the end of each EAP and UKIC class (later extended to all classes in phase two)
 - ▶ The matrix was completed once a week (here it is...)
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Data analysis

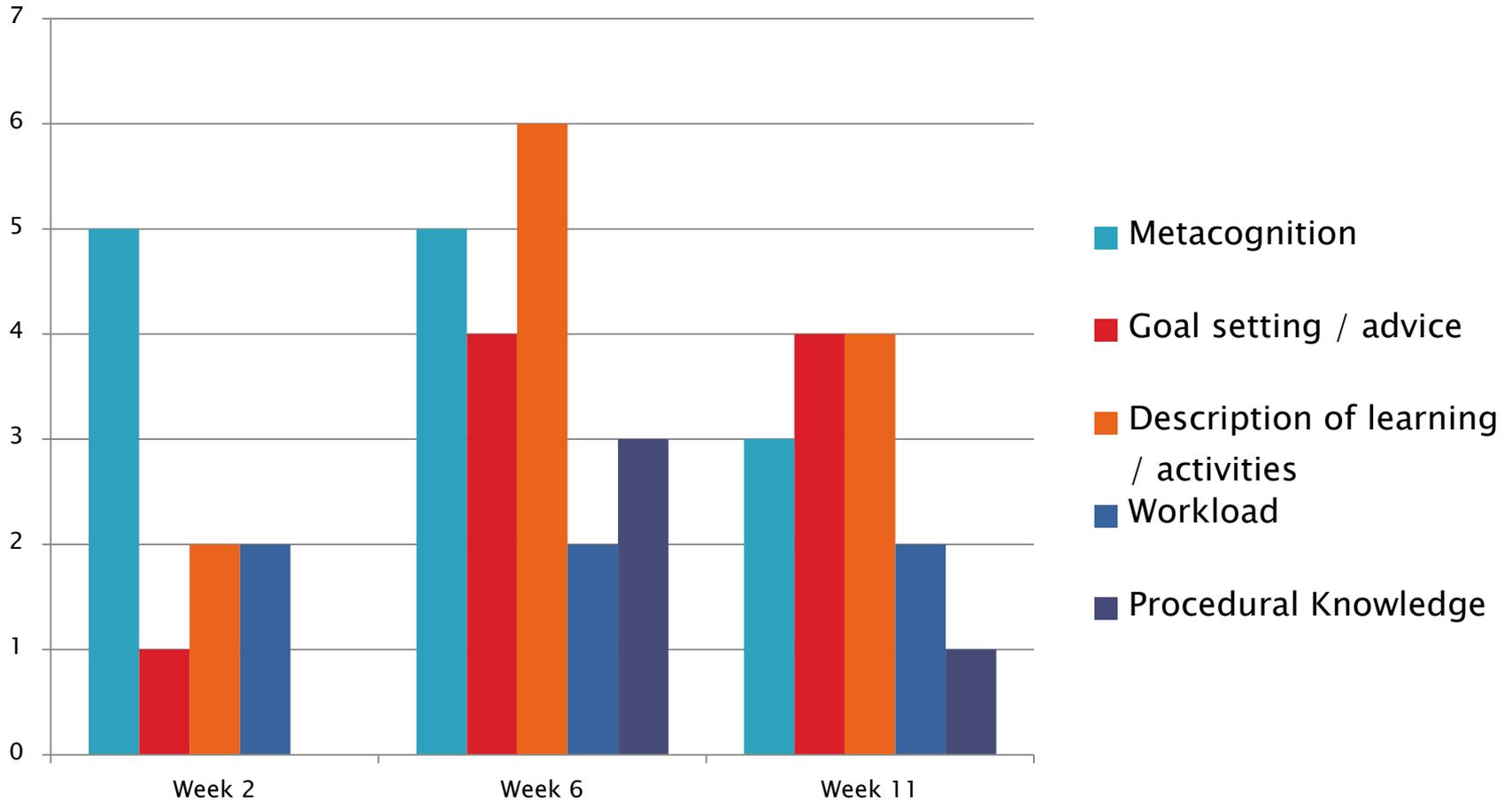
- ▶ The quantitative data has not been analysed yet – hopefully this will be done over the next 4–6 weeks
 - ▶ There has been a micro analysis of qualitative data, some of which is presented on the following slide...
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Sub theme	Theme	Total
Caring about teacher input	Friendship and social interaction	13
Metacognition	Reflection	13
Teamwork and groups	Friendship and social interaction	12
Self Criticism	Learning performance	12
Description of learning/activities	Reflection	12
Goal setting / advice	Reflection	9
Happy	Feelings and emotions	7
Achievements	Learning performance	7
Caring for peers	Friendship and social interaction	6
Weather / climate / surroundings	Environment	6
Workload	Reflection	6
Time (of day and of year)	Environment	4
Procedural Knowledge	Reflection	4
Friends and social interactions	Friendship and social interaction	3
Tired	Feelings and emotions	3
Relaxed	Feelings and Emotions	2
Anxious / concern	Feelings and emotions	2
Temperature	Environment	1
Upset	Feelings and emotions	1
Encouragement	Feelings and emotions	1

Patterns of general themes



Subthemes of reflection



Some blog examples...

The self criticism theme suggests an awareness that is also quite metacognitive at times, for instance:

- ▶ *When I finished the listening, I found several shortcomings for myself. Firstly, in honest I cannot focus my attention to the test at the beginning because of the lack of practices of listening.*
- ▶ (Appendix A, Monday 12/12/2011)

Some blog examples...

- ▶ There is another good example of some metacognitive thinking when she talks about a moment of realisation in her learning in regards to note-taking:

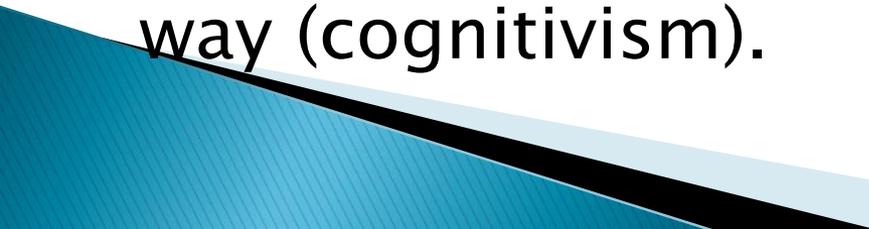
Another more important thing was what we learned today. Taking notes was always treated as an easy thing for me in my mind. I was used to circle some words like the unknown vocabulary and key words in one article or a chapter. Till today I found that some informations I marked were not related closely to the purpose you should focus on. I just highlighted the words as a habit, however, sometimes the notes I got did not work for my understanding. And usually I will not organize them. The notes are scattered often. In the class, I learned some new methods to take notes different from that I just use only one style before. It must be valuable for articles and books which have different structures.

(Appendix A – Wednesday 9/11/2011)

Some blog examples...

In this case the student has taken the information from the classroom and is going to use this to change her approach to note taking (behaviourism), thereby enabling her to use note taking as a mechanism to learn.

While she is doing this, it seems that one of the main reasons is to organise the content so that the concepts are presented in a way in which she could consider them in a more constructive way (cognitivism).



Finally...

To conclude:

- ▶ The use of reflective tools seem to have provided some level of metacognitive awareness
 - ▶ Much analysis is still needed – if you are interested in following my work, please keep in touch
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References (for presentation)

- ▶ Anderson, L. W. & Krathwohl, D. R. (2001) A Taxonomy for Learning, Teaching and Assessing: A Revision of Bloom's Taxonomy of Educational Objectives. London: Longman
- ▶ Brockbank, A. and McGill, I. (2007) Facilitating Reflective Learning in Higher Education (2nd ed). Maidenhead: Open University Press
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- ▶ Schunk, D.H and Zimmerman, B.J. (eds) (1998) Self-Regulated Learning: From Teaching to Self-Reflective Practice. London: The Guilford Press
- ▶ Stefani, L., Mason, R. and Pegler, C. (2007) The Educational Potential of E-Portfolios: Supporting Personal Development and Reflective Learning. London: Routledge

Thank you

- ▶ Thank you for listening
- ▶ Do you have any questions?

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