

This is by way of an introduction to reflective practice and the development of portfolios.

It is not intended to be a definitive review of the subject which is vast.

In today's information age- thinking skills are viewed as crucial for educated people to cope with a rapidly changing world.

Specific knowledge may not be as important to tomorrow's workers as the ability to learn and to make sense of new information.

Thus it can be considered that reflective practice- the preparedness of practitioners to engage in reflectin upon their professional activities- should contribute to the improvement of their performance.

**Education (medical)**

- The focus of the curriculum has shifted:
- From acquisition of knowledge
- To achievement of competence

Rabinowitz et al (2001)

Changing health care environment. Whether we like it or not- medical education has moved this way- radiography education too. Witness Tuning and competency based practice.

So what is competence?

## Competence

- The habitual and judicious use of communication
- Knowledge
- Technical skills
- Clinical reasoning
- Emotions
- Values
- Reflection in daily practice for the benefit of individuals and others

– Epstein & Hundert (2002)

This is what Epstein and Hundert indicated for medical education.

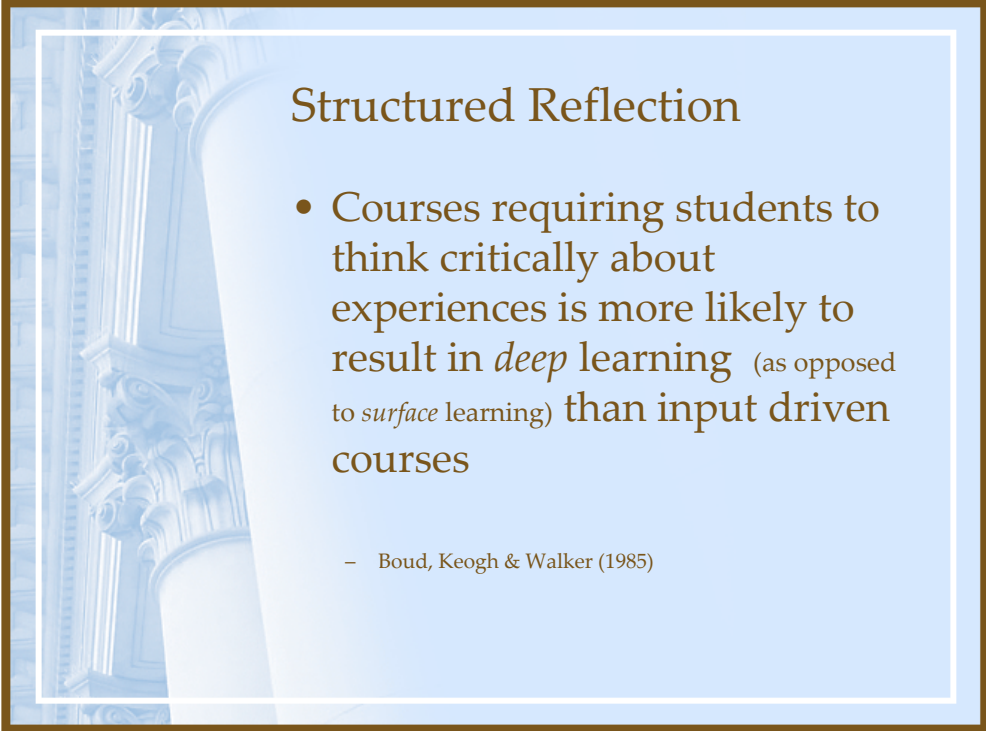


## Deliberation

- Focusing on '*weaknesses*' in one's performance
- Focusing on identifying actions to undertake –learning requirements
- Goal to improve performance
  - Ericsson et al (1993)

Studies on expert practice have brought about the concept of 'deliberate practice'.- considered to be an effortful activity conducted with the goal of improving performance. Rather like reflection then.

1. Generate possible alternative explanations for an unfamiliar problem
2. Generate a number of possible explanations
3. - need to tolerate uncertainty and ambiguity
4. -think about ones own thinking processes



**Structured Reflection**

- Courses requiring students to think critically about experiences is more likely to result in *deep* learning (as opposed to *surface* learning) than input driven courses

– Boud, Keogh & Walker (1985)

There are a number of reflection models- only a few mentioned here  
Kolb's

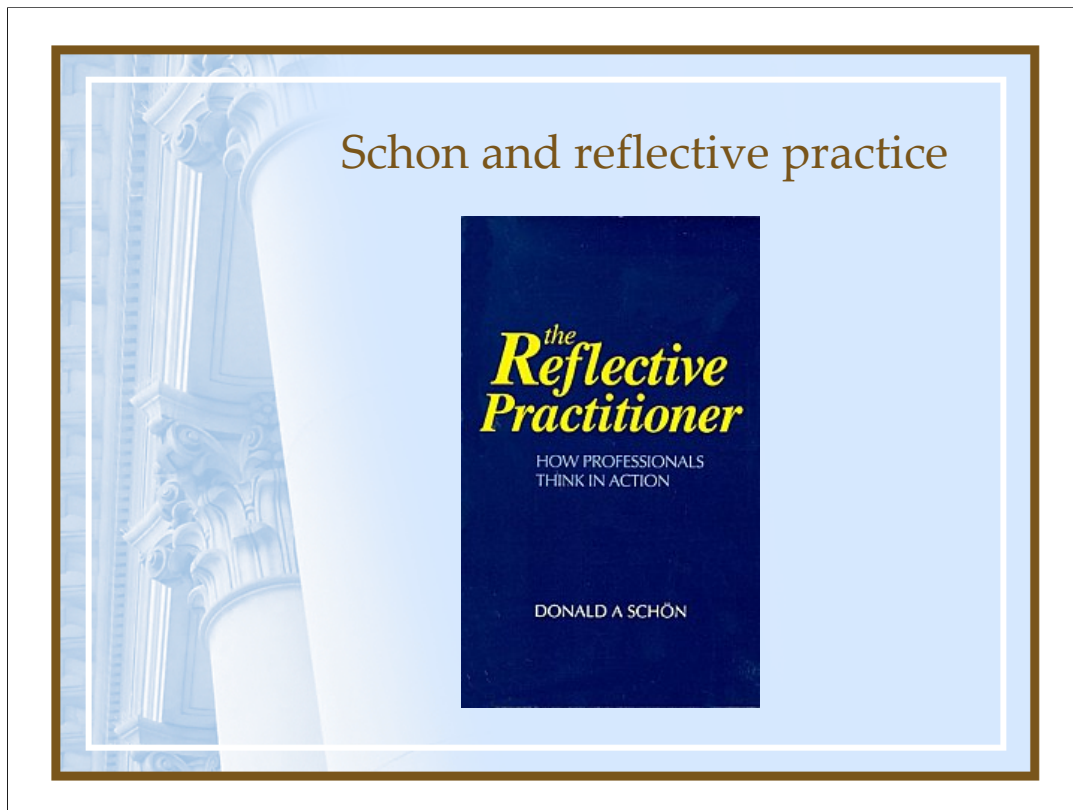
Gibb's

Atkins and Murphy

Could also include:

John's critical incident pathway

Mezirow's theory of transformative learning to mention just a couple of others.



Schon was inspired by the work of Dewey.

For Dewey, reflective thought is provoked by an event in ones life that arouses a state of doubt, perplexity or uncertainty and leads the individual to search for possible explanations or solutions. According to Schon, professionals' practice is largely based on tacit knowledge (knowing in action) the use of which increases as practice becomes stable. Schon's RP would notice when a phenomenon at hand (unexpected outcome of treatment) eluded his/her ordinary categories of knowing in action.

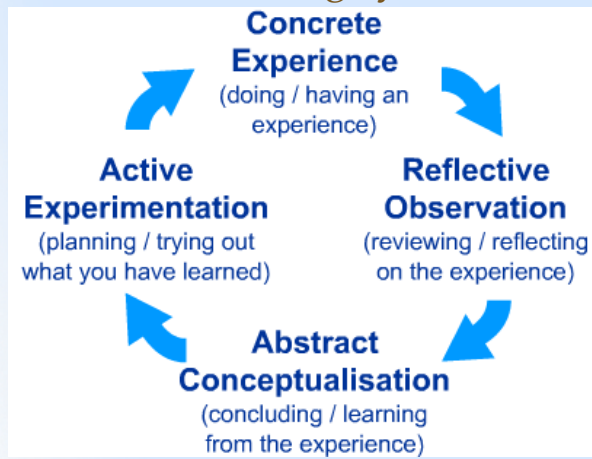
A process of reflection in action would then start by defining the problem within the dynamics of the situation and identifying the decisions to be made, the ends to be achieved and the means to be chosen.

In a subsequent stage the professional may critically review his or her understanding of the original programme and develop more complex representations that lead him to generate solutions. Their validity is tested in the next step through analysing scenarios and consequences or the pros and cons of each alternative whose adoption would enrich the professionals knowledge structure and practice

Reflection on action occurs later and provides opportunities to learn from the earlier decision making process

## Experiential Learning

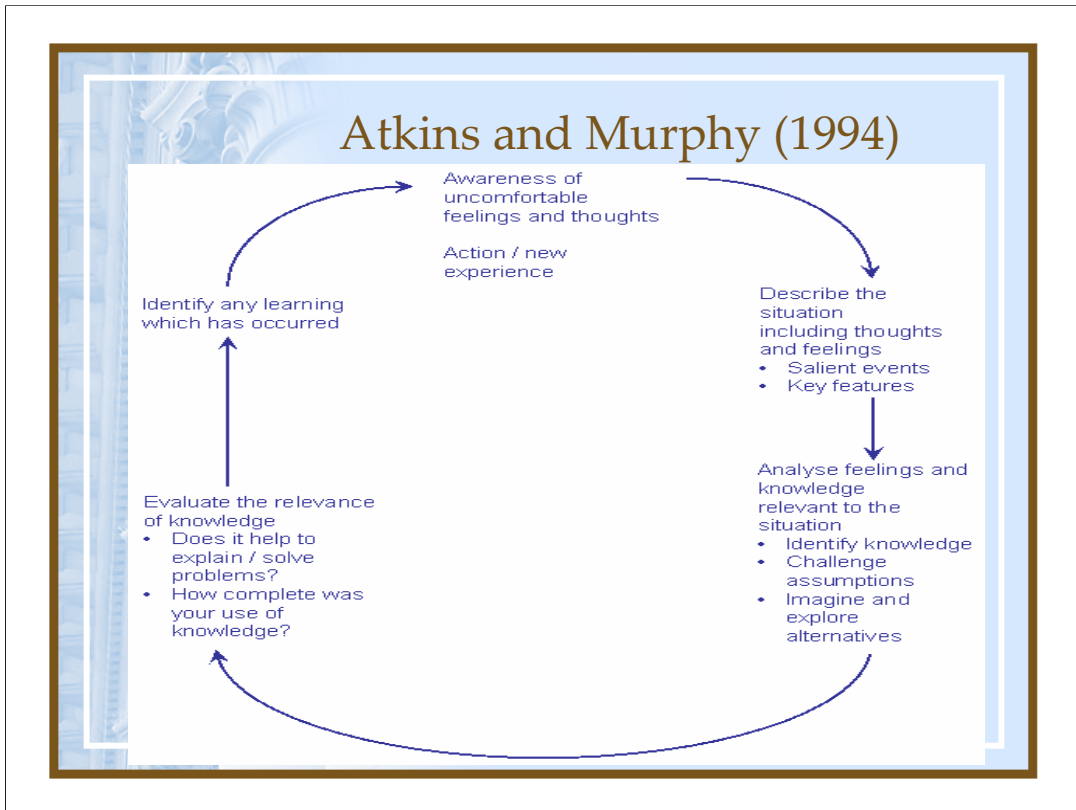
- Kolb's learning cycle (Kolb 1984)



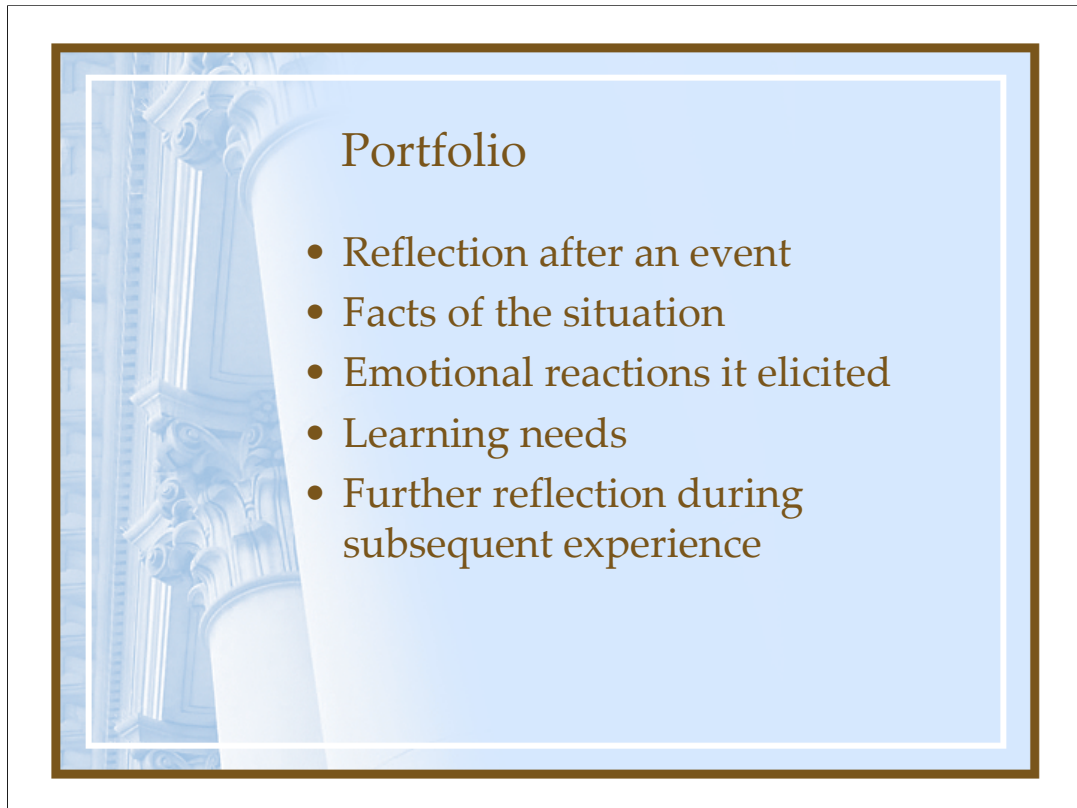
Kolb describes a learning cycle whereby learning needs are identified through structured reflection on experiences. These needs are then met by specified educational activities. The cycle is completed by applying new learning to professional practice and in the process identifying further learning needs arising from the subsequent new experience.

## Gibb's model of reflection (1988)





Nursing model



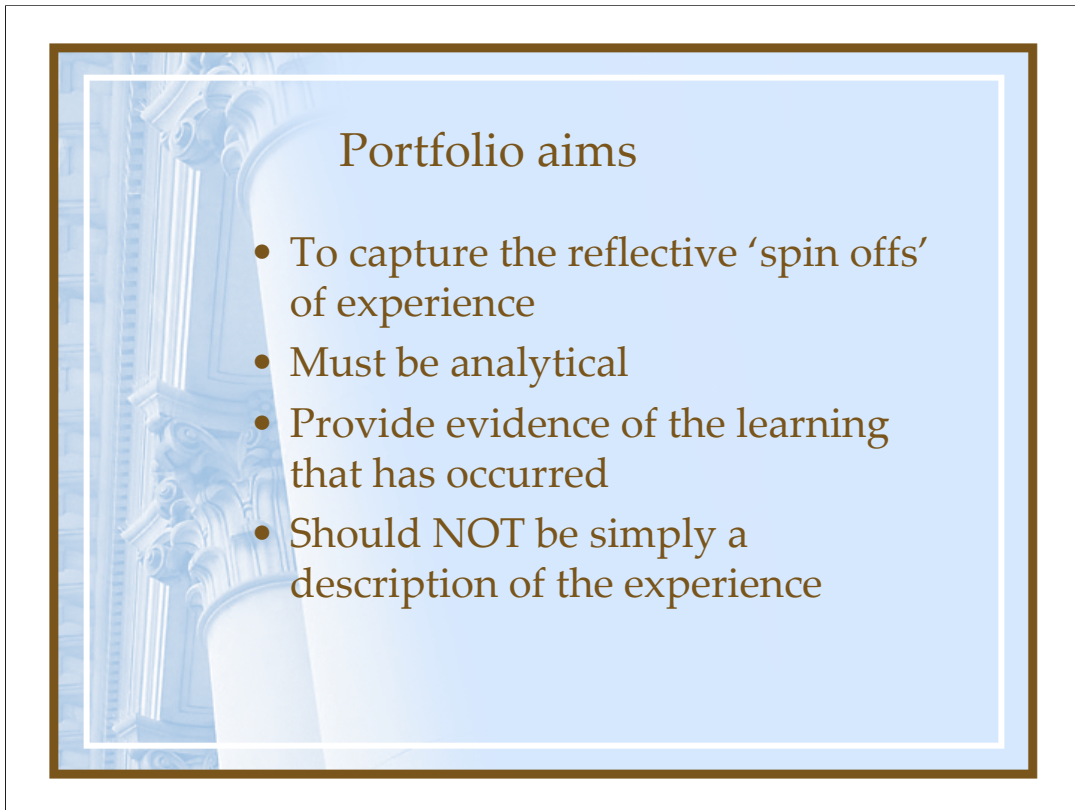
Common term used in the graphics and fine arts – indicating a collection of the learners work that gives evidence of learning and expertise and used for the purposes of assessment.

Similar meaning in HE but evidence of professional growth consisting of written entries and artefacts collected in the course of experiential learning.



## Reflective portfolio uses

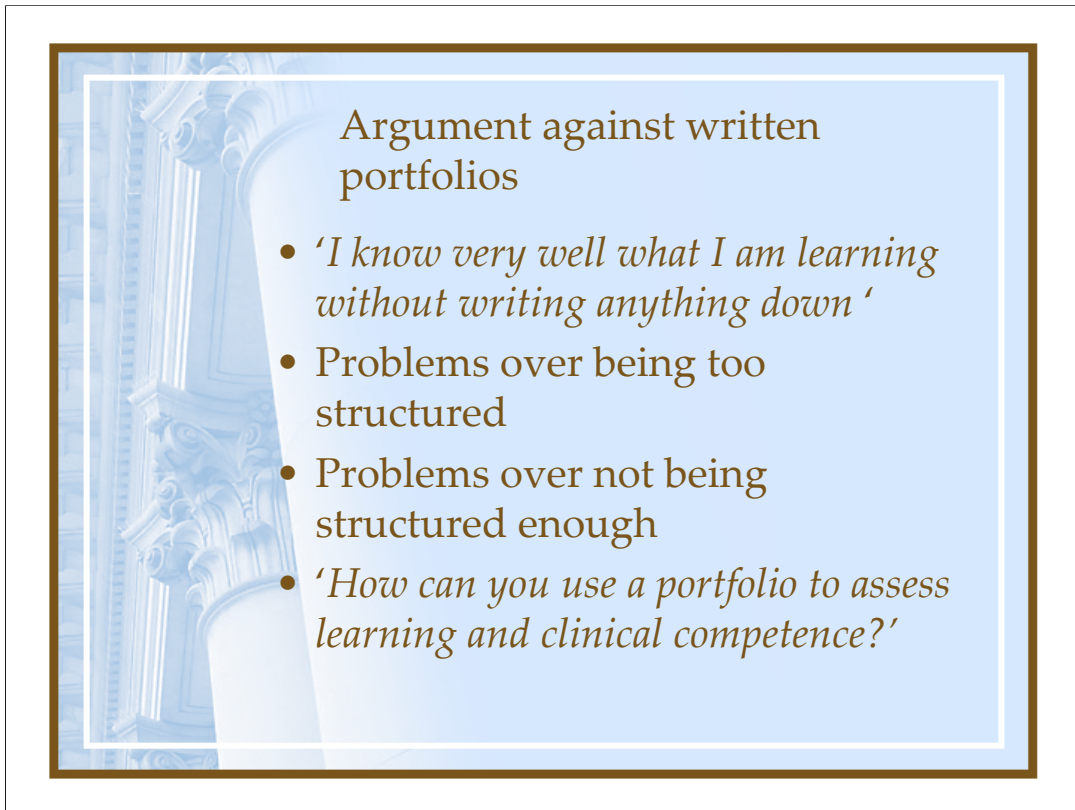
- To plan and implement CPD
- To identify learning needs
- As an assessment tool- at undergraduate level and for CPD purposes



### Portfolio aims

- To capture the reflective 'spin offs' of experience
- Must be analytical
- Provide evidence of the learning that has occurred
- Should NOT be simply a description of the experience

Experience alone does not amount to learning.  
Not purely an introspective process  
Close the learning loop



Argument against written portfolios

- *'I know very well what I am learning without writing anything down'*
- Problems over being too structured
- Problems over not being structured enough
- *'How can you use a portfolio to assess learning and clinical competence?'*

Writing down seems counter intuitive.

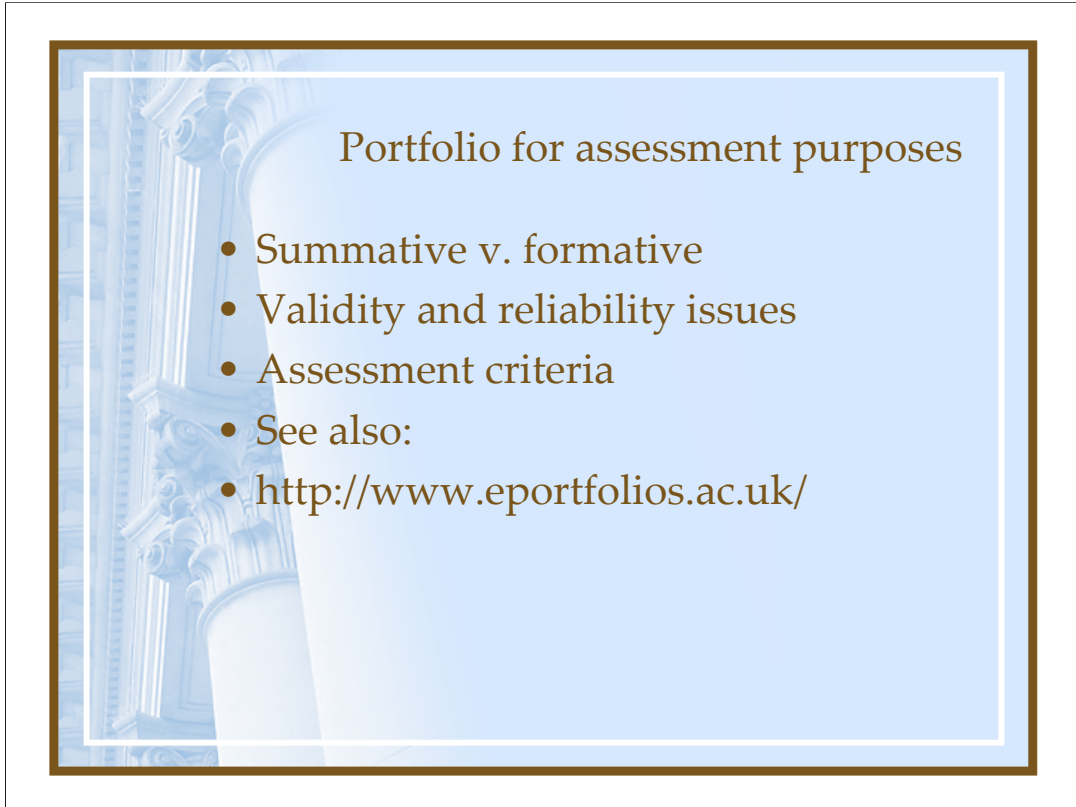
Students/ professionals initially often show anatagonism.

But may focus the mind knowing oneself emotionally is an important feature of professionalism



## Structure

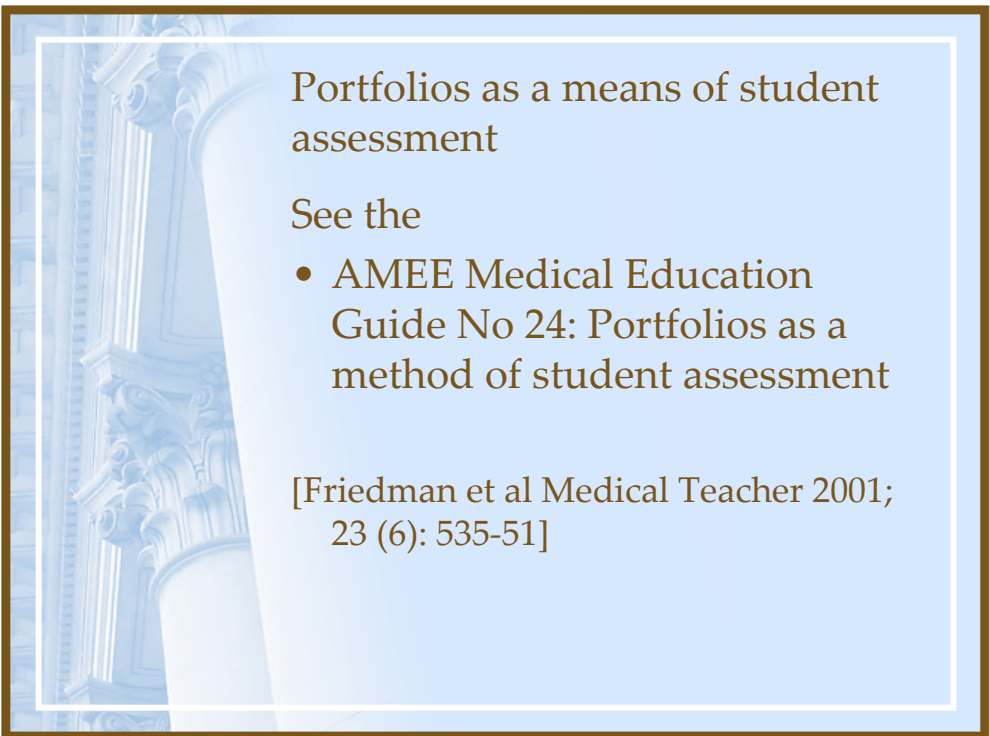
- Flexible learner centred approach
- Explicit guidelines for portfolio construction
- [McCready (2007)]
- Rigid structure elicits negative reactions and is counter productive
- [Driessen et al (2005)]
- Too much structure can be worse than too little structure
- Too much obligatory content may fail to serve any educational purpose



Portfolio for assessment purposes

- Summative v. formative
- Validity and reliability issues
- Assessment criteria
- See also:
- <http://www.eportfolios.ac.uk/>

Summative at UG level and for revalidation/continuing practice



Portfolios as a means of student  
assessment

See the

- AMEE Medical Education  
Guide No 24: Portfolios as a  
method of student assessment

[Friedman et al Medical Teacher 2001;  
23 (6): 535-51]



## Effective Portfolios require:

- Proper introduction and mentoring
- Integration within context and procedures
- Provision of information to students and teachers
- Provision of clear guidelines that do not curtail students' freedom
- User friendliness that includes limited time demands on students and mentors
  - Driessen et al (2007)

Use of a mentor important to help the learner crystallize their understanding of their style of learning

The background of the slide features a light blue gradient with a faint, semi-transparent image of classical architectural columns on the left side. The columns are white with dark shadows, creating a sense of depth and structure. The overall design is clean and professional.

## References

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