
The University of Edinburgh Medical Teaching Organisation

Dr Michael Ross, Vilnius Friday 30th April 2010



4. Designs for Units of Learning

- Terminology and key concepts
- Unit structure, sequence & credits
- Designing and developing learning units

Tuning programme design process

- Needs analysis, support & resources
- Degree Profile
- Programme Learning Outcomes (LO)
- **Structure programme into Course Units, defining LO and ECTS for each**
- Teaching and learning methods
- Assessment
- Evaluation system & quality enhancement

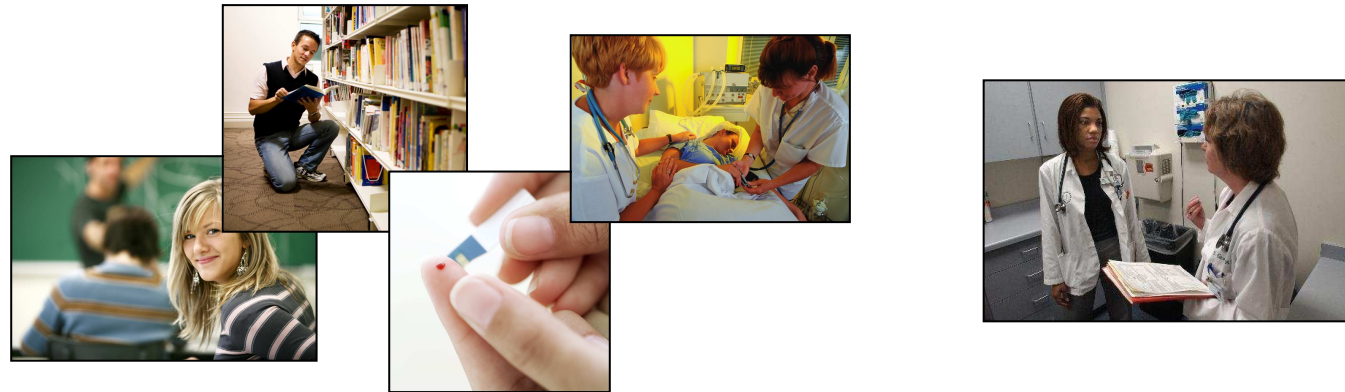


A course unit is “A self-contained, formally structured learning experience. It should have a coherent and explicit set of learning outcomes... and appropriate assessment criteria. Course units can have different numbers of credits... [and] are the building blocks of programmes.”

Tuning general brochure



'Constructively Align' Learning Units



**Define
LO**

**Student-centred
Teaching & Learning**

**Appropriate
assessment**

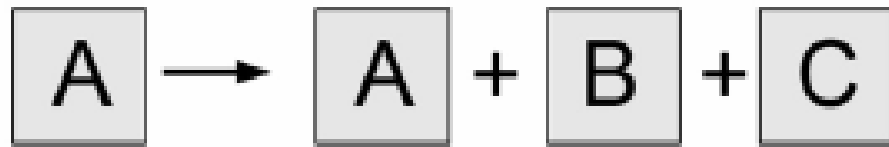
Evaluation

Biggs J (1996) Enhancing teaching through constructive alignment. HE 32:347

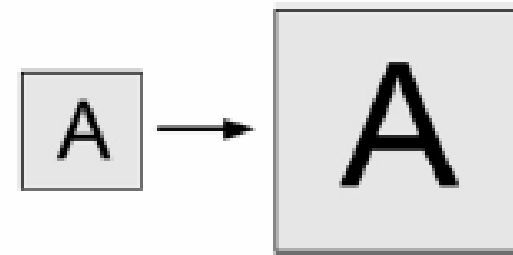


LO and progression

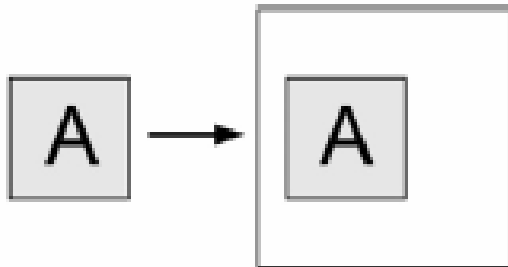
1. Increased breadth



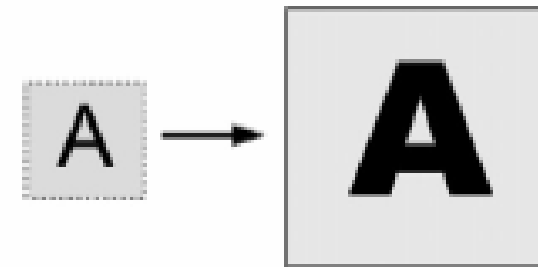
2. Increased difficulty



3. Increased utility and application to practice



4. Increased proficiency



Harden RM (2007) Learning outcomes as a tool to assess progression. *Medical Teacher* 29:678-682



The 'SPICES' criteria

<u>S</u> tudent-centred	-	Teacher-centred
<u>P</u> roblem-based	-	Information-orientated
<u>I</u> ntegrated	-	Subject or discipline-based
<u>C</u> ommunity-based	-	Hospital-based
<u>E</u> lective-driven	-	Uniform
<u>S</u> ystematic	-	Opportunistic

Harden RM, Sowden S, Dunn WR (1984) ASME Booklet 18: Educational strategies in curriculum development: the SPICES model. Med Ed 18:284



Other dimensions

- | | | |
|-------------------|---|--------------------|
| Online | - | Face-to-face |
| Distance | - | Campus-based |
| Undergraduate | - | Postgraduate - CPD |
| Continuous | - | Discontinuous |
| Planned | - | Taught - Learned |
| Interprofessional | - | Medicine-specific |
| Formal | - | Informal |
| ... | - | ... |



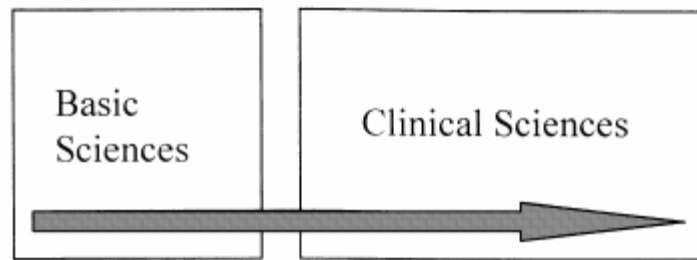
Curriculum Process vs Outcome



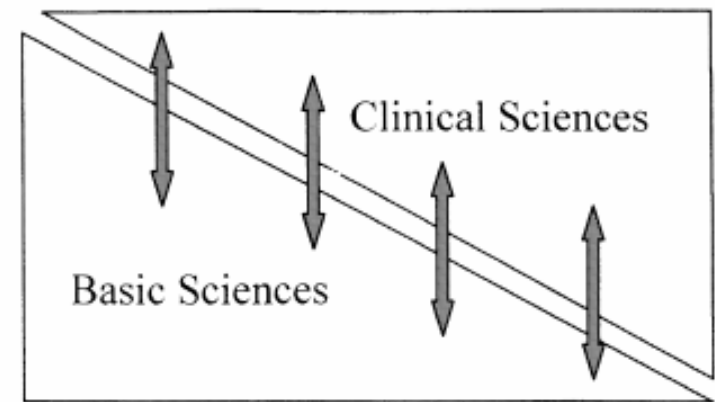
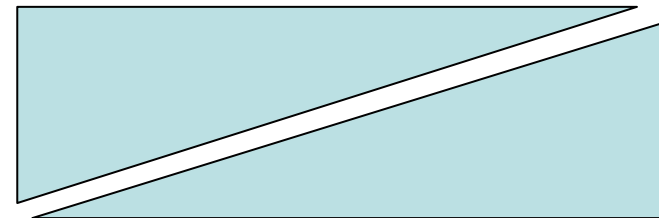
VS



Describing process - 1



Year 1 **'Traditional'** Year 5

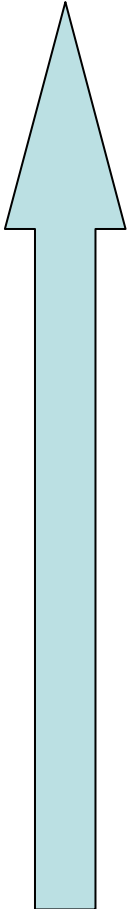


Year 1 **'Integrated'** Year 5

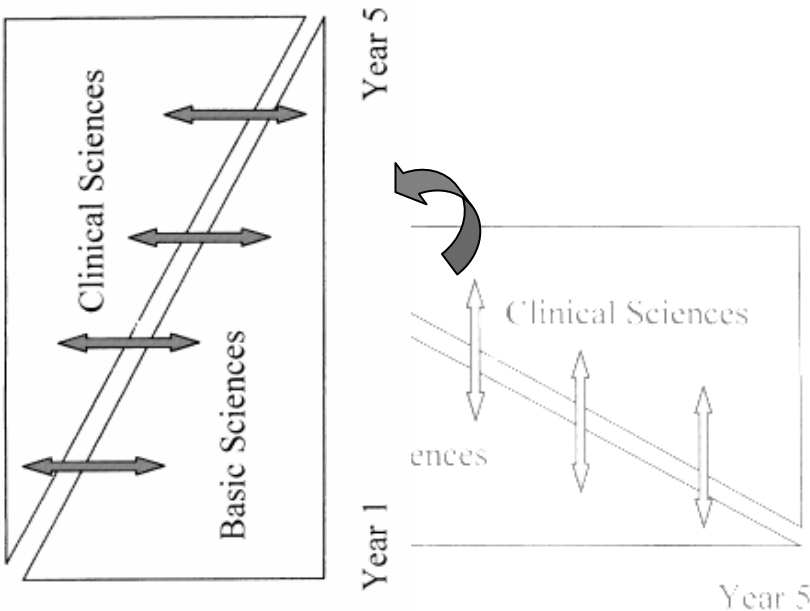




Horizontal integration between parallel disciplines, e.g. anatomy, physiology & pharmacology



Vertical integration between different phases of the curriculum, e.g. basic sciences and clinical practice



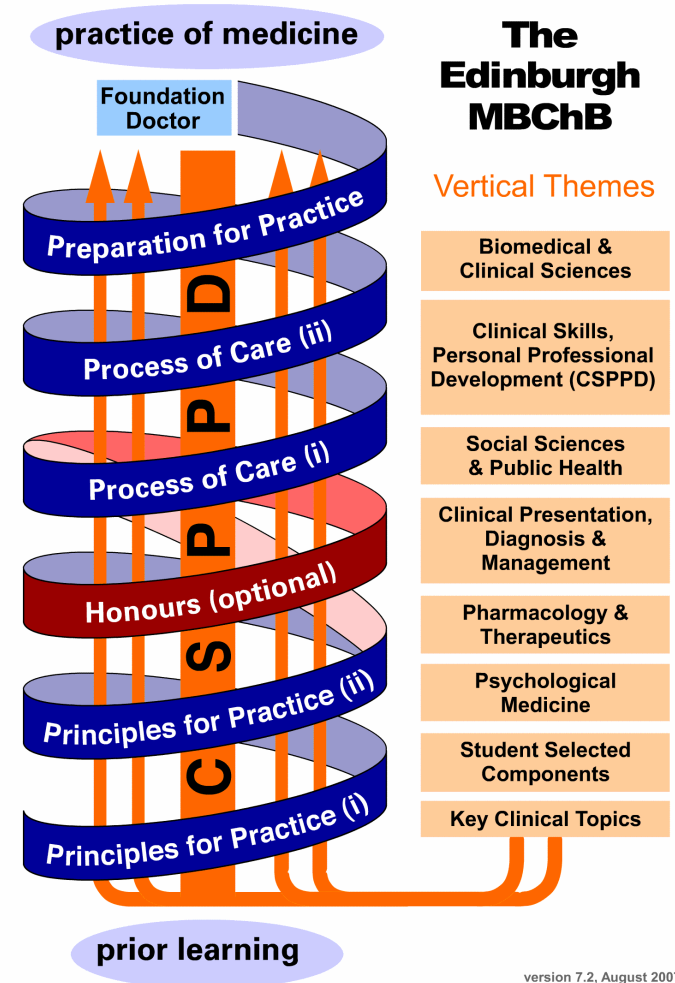
Harden RM, Sowden S, Dunn WR (1984) ASME Booklet 18: Educational strategies in curriculum development: the SPICES model. Med Ed 18:284



Describing process - 2



Spiral design,
Constructivist
'long thin' themes



Describing process - 3

Year 1	Year 2	Year 3	Year 4	Year 5
Principles for Practice (i)	Principles for Practice (ii)	Process of Care (i)	Process of Care (ii)	Preparation for Practice
Molecules to Society		Respiratory system	Obstetrics & Gynaecology/GUM	General Medicine
Introduction to life	Neuroscience	Gastrointestinal system		Geriatric Medicine
Cardiac health	Nutrition	Cardiovascular system	Haematology	General Surgery
Respiration	Genetics	Locomotor system	Oncology	Accident & Emergency
Bones and Joints	Renal Function	Vertical Theme Weeks	Renal Medicine/Urology	Anaesthetics
	Endocrinology		Dermatology	Intensive Care
	Virtual Clinic		Otolaryngology	Child Life & Health
			Ophthalmology	General Practice
Clinical skills, Personal and Professional Development	Introduction to Clinical Practice		Psychiatry	Preparing for Practice
			Clinical Neurosciences	
			General Practice	Common Shadowing Period (End of June)

Sequence of focussed 'short fat' courses



Describing process - 4



Year 1 timetable template

	am	pm
Mon	Lectures and tutorials	Problem based learning 1
Tues	Practical	Option project or Skills
Weds	Lectures and tutorials	
Thurs	Lecture / study time	Problem based learning 2
Fri	Lecture and tutorials	Study time

Student workload



Process / Outcome grid

Learning outcomes and competences in study programmes



Example

Course unit/ learning outcome	Competence									
	A	B	C	D	E	F	G	H	I	J
Unit 1		X			X					
Unit 2	X			X			X			
Unit 3		X				X			X	
Unit 4	X		X							X

X = This competence is developed and assessed and is mentioned in the learning outcome of this unit

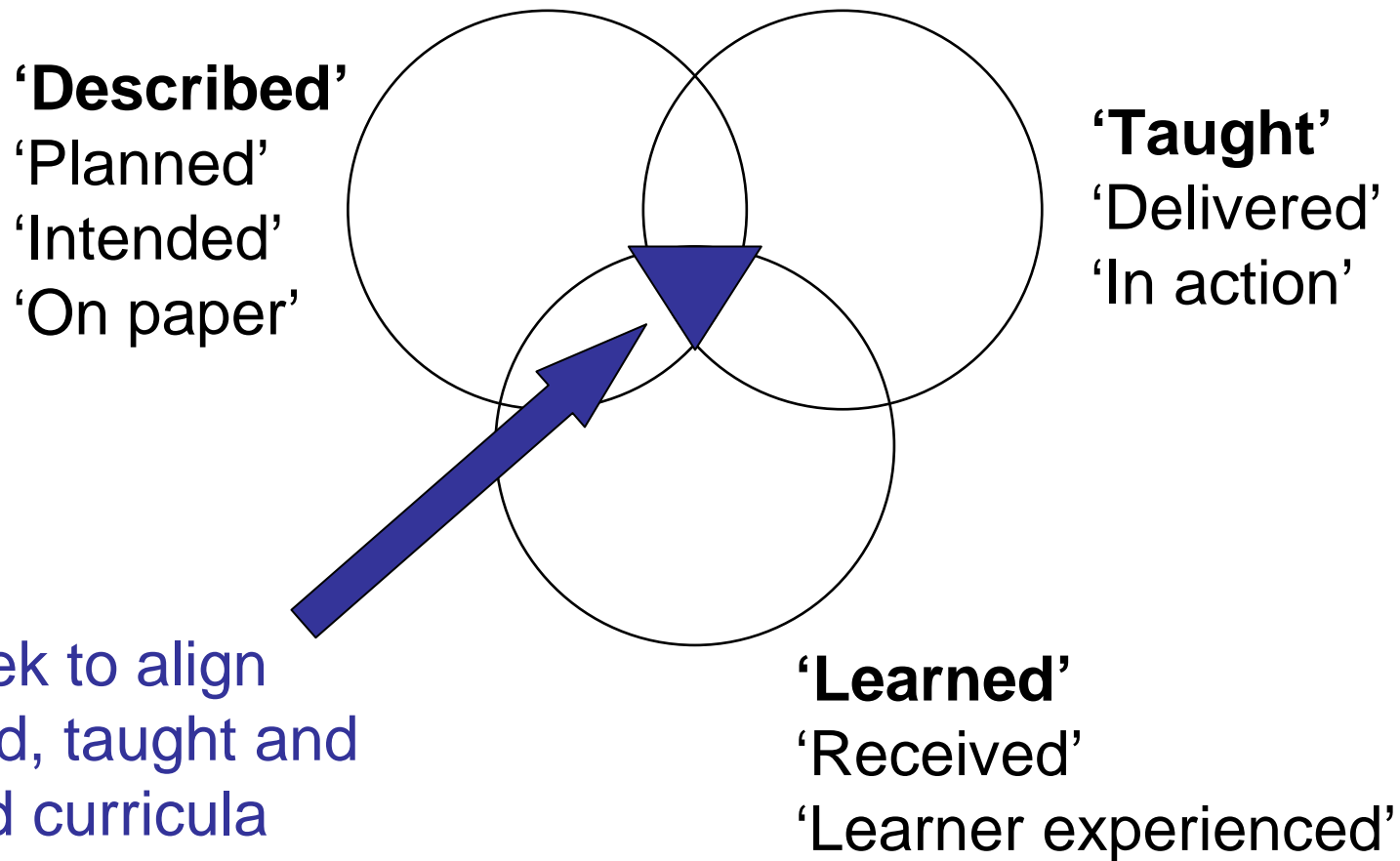


Student Work + Success = Credit

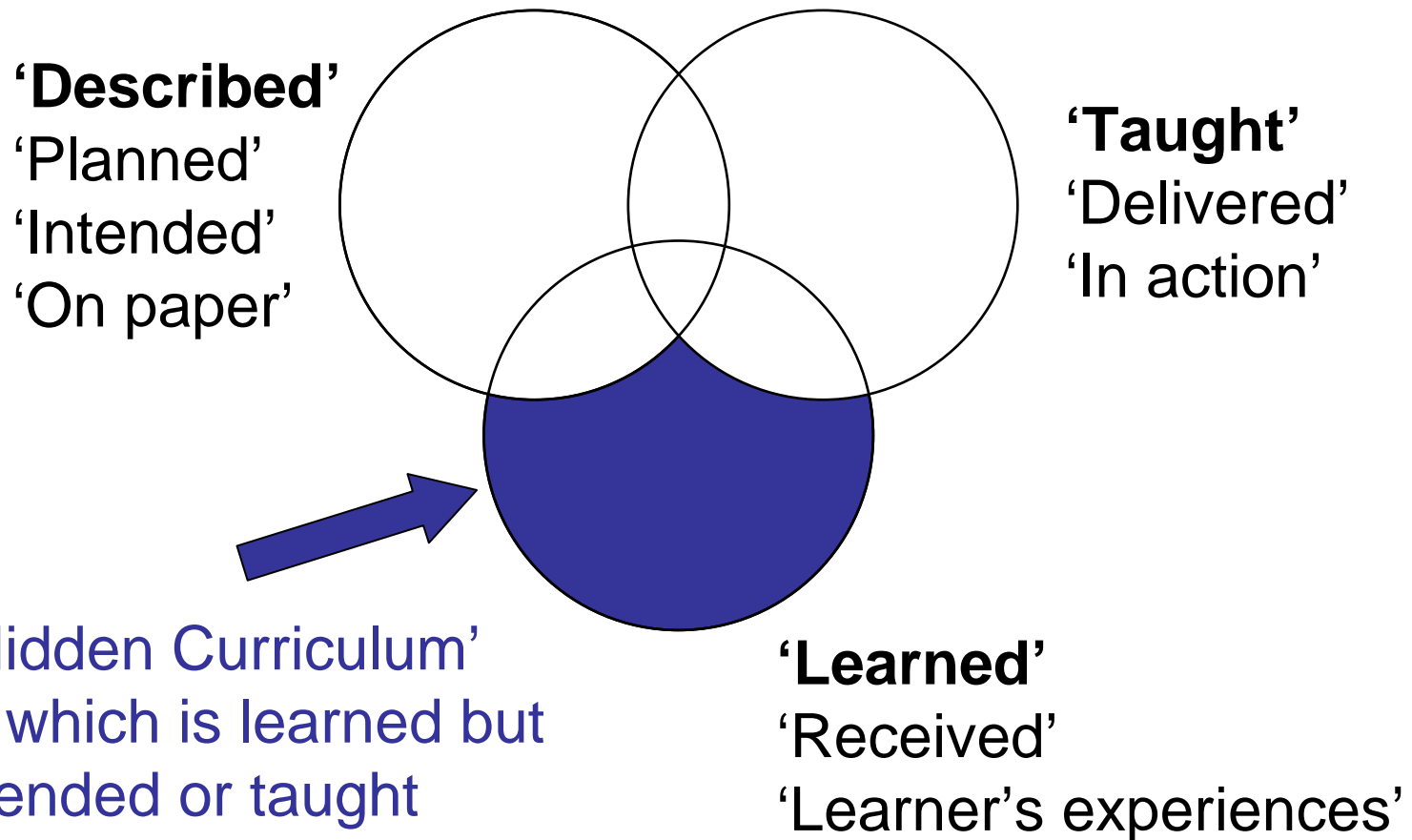
- 60 ECTS Credits = 1 year full time work
- 1 ECTS = 25-30 hours of work
- Satisfactory achievement in assessments
- Dublin Descriptors of 3 Cycles
- Accreditation of prior learning



Apparent & 'hidden' curricula



Apparent & 'hidden' curricula



The 'Hidden Curriculum'
is that which is learned but
not intended or taught

Snyder (1970) The Hidden Curriculum



PROGRAMME AND COURSE STRUCTURE / CREDITS

For students starting the programme in September 2009 and finishing 36 months later in September 2012 the timetable will be as follows:

Group B Courses (2009-10)

	When	Value
1. Appraising and developing the individual	Sept-Nov 09	20 credits
2. Research in Clinical Education	Nov-Jan 10	20 credits
3. Policy, Leadership and Management	Feb-Mar 10	20 credits

Group A Courses (2010-11)

	When	Value
4. Principles of Teaching and Learning	Sept-Nov 10	20 credits
5. Assessment, examinations and standard setting	Nov-Jan 11	20 credits
6. The Curriculum	Feb-Mar 11	20 credits

Year 3: Dissertation (2011-2012)

	When	Value
Research report of approximately 15,000 words.	Sep11-Sep12	60 credits



The Curriculum (P01598)

? Credit Points : 20 ? SCQF Level : 11 ? Acronym : MED-P-P01598

The course will consider, what is a curriculum, how is it created and what impact it has on students, institutions and professional development in the undergraduate and postgraduate phases.

The course will refer to evidence in the literature and case studies illustrating issues around curriculum planning, particularly with respect to:

- Philosophy, policy and practice.
- The definition of the clinical practitioner.
- Recommendations and guidelines with international status, examples include the World Health Organisation, and the European Tuning Projects.
- Recommendations and guidelines at national level, examples include the General Medical Council, Royal Colleges, "Scottish Doctor Project" and government agencies.
- The explicit and hidden curriculum and the notion of constructive alignment

The course will also explore the limitations of competency-based programmes and will ask participants to consider the difference between competency, capability and performance in medical practice.

Entry Requirements

? Pre-requisites : None other than the programme entry requirements

? Co-requisites : Students must be registered on the e-Masters Programme in Clinical Education

