

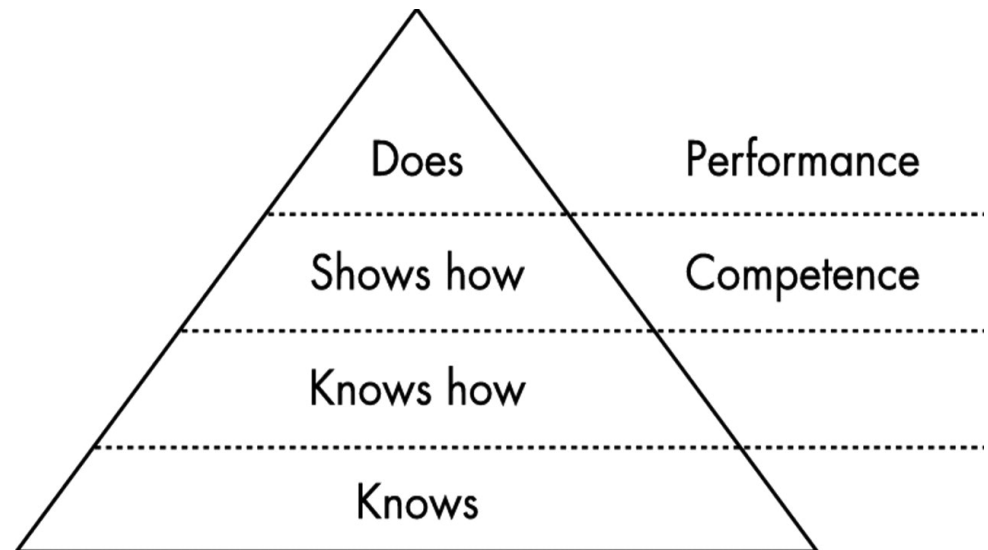
How to better integrate basic sciences in the Pharmacy curriculum - A UK perspective on Curriculum integration

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Politics, Regulation & Professional aspiration

- DoH
- GPhC
 - Outcomes driven



Necessity for integration - regulator

- Standard 10

- *‘In Standard 10 we make it very clear that **sound science is the basis of effective pharmacy**..... **Outcomes are primarily clinical in nature**....., which reflects the needs of the majority of students.... To make it clear that science is fundamental to the curriculum we have included an indicative syllabus in which **science figures significantly and unambiguously**’.(GPhC, Nov. 2010)*
- *‘Recognise the duty to take action if a colleague’s health, performance or conduct is putting patients or public at risk’*
- *‘Instruct patients in the safe and effective use of their medicines and devices’*
- *‘Demonstrate how the science of pharmacy is applied in the design and development of medicines and devices’*

- Concept of a spiral curriculum

Necessity for integration – the profession

- Professional debate
 - Education or training?; Profession or trade?
- Relevance
 - If pharmacists do not know how HPMC works would it make any difference to the efficacy of the matrix tablets they dispense? Or the information given to patients on safe use?
- Adequacy
 - European Community's *Directive 2005/36/EC*
- Context & Sequencing
 - Jesson et al (2006)

SoP response to a changing landscape

- Course re-design
- School A
 - 4 Themes
 - Each theme team broad
 - Common medicines (triggers) across themes
- School B
 - ‘full’ integration from yr 2
 - Linear progression around defined conditions

Examples of science & practice - integration

- **Pharmaceutical Chemistry – principles**
 - Functional gp chemistry
 - Phenols
 - Amides and amines
- **Pharmaceutics**
 - Problem solving re dose forms
 - Excipients
 - Articulate why and when

Examples of science & practice - integration

- Related to condition (Asthma) – yr 3
 - Anatomy & Physiology
 - Pathophysiology
 - Basic pharmacology
 - Pharmaceutics & Chemistry
 - Clinical pharmacology & Therapeutics
 - » Patient Focus

Examples of science & practice - integration

- Related to condition (H.Pylori) – yr 4
 - Anatomy & Physiology
 - Pathophysiology
 - Basic pharmacology
 - Pharmaceuticals & Chemistry
 - Clinical pharmacology & Therapeutics
 - Pharmaceuticals, Chemistry & Microbiology
 - » Patient Focus
 - Same approach but EBM & care planning

Genetics/Genomics

- ‘Genome Project team’
 - Accession number given

Challenges

- Planning & time
- University restrictions

Summary

- Relevance & Context is key