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# SYMPOSIUM

**TOWARDS ACHIEVING UNIVERSAL  
HEALTH COVERAGE IN AFRICA- CREATING  
SYNERGIES AND CAPACITY THROUGH  
EDUCATION, RESEARCH AND QUALITY  
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Towards Research Leadership

**DRILL**

Developing Research Leadership, Innovation and Knowledge in Africa

INSPIRING GREATNESS

# **Promoting integrative learning in an undergraduate medical curriculum: Students' perceptions**

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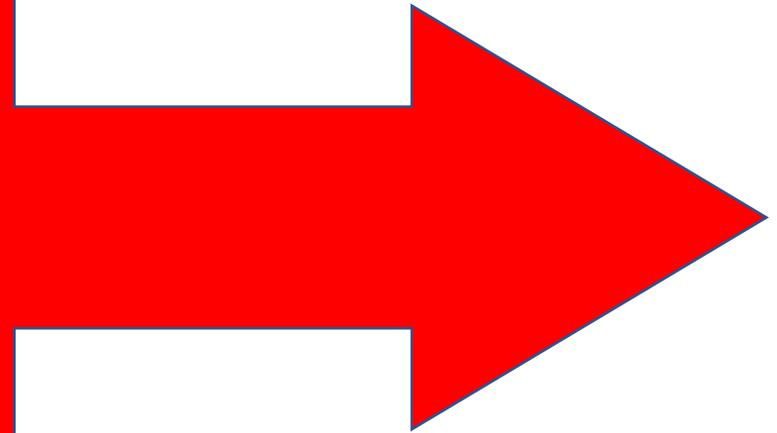
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# Background

- **Student diversity - background education - impact on:**
  - variations in language skills
  - study skills
  - confidence to participate
  - motivation to study
- **Evidence that many undergraduate medical students lack skills in:**
  - Conceptualisation of systems
  - Logic and critical thinking
  - Language (English) for conversational purposes
  - Report writing
  - Problem solving applying simple logic leading to medical errors
- **Evidence of problems with undergraduate medical curricula**
  - Lack of horizontal and vertical integration and spiralling in curricula
  - Teachers' role in integration unclear
  - Development of students' integration ability not monitored

Course designed to  
address diversity, learning  
skills and integration –  
introduced in 2010



# Medical Thought and Practice (MTP) Course components

## Module 1

### Health System Dynamics (HSD)

1. systems and how they function
2. thinking, modelling, computer-based simulation
3. lifelong way of thinking and problem solving
4. promoting horizontal and vertical integration of learning

## Module 2

### Integrating Skills

#### Learning and Language

1. English language skills
2. Reading and writing
3. Study skills

#### Medical Terminology

1. Help students master scientific and biological/medical jargon
2. Integrate medical terminology with anatomy, physiology etc

#### Logic & Critical Thinking

Help students learn to draw correct conclusions from facts

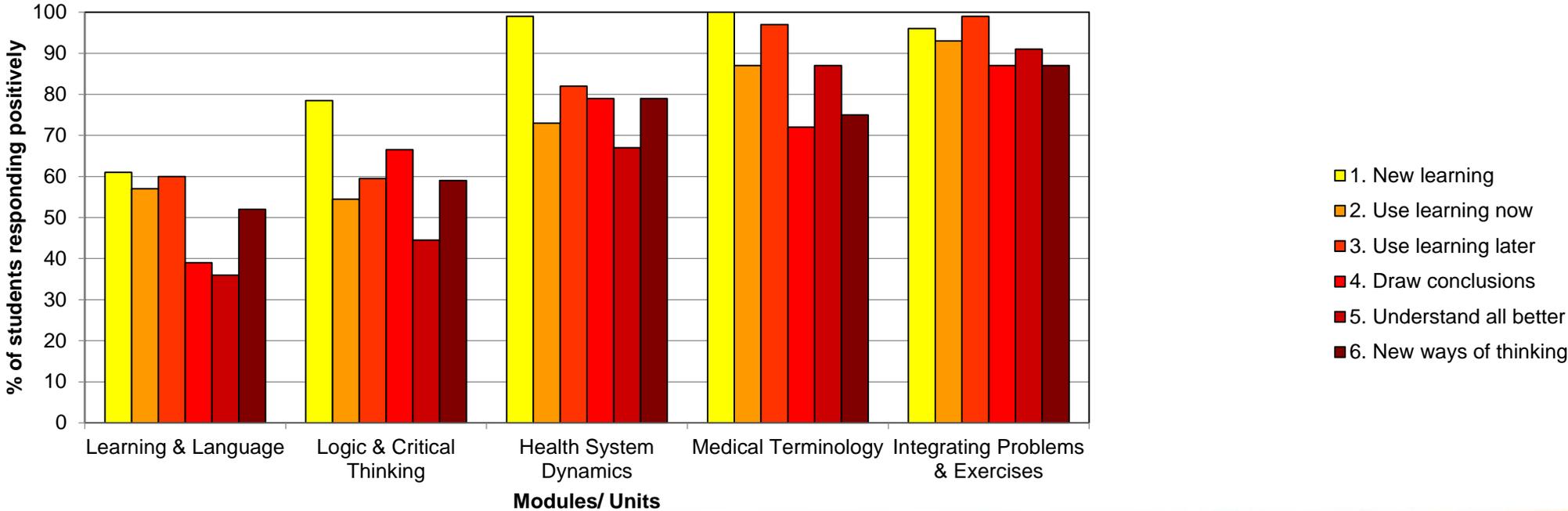
#### Integrating Problems

Scenarios that integrate learning vertically and horizontally

# Students' end of year feedback – Questionnaire (N=250)

- I have learnt some new things that I did not know before.
- I will use what I learnt in my day to day life.
- I will use what I learnt in other modules and courses of this year.
- I will use what I learnt in my further studies next year
- What I have learnt from this module will help me draw conclusions from facts
- What I have learnt in this module will help me understand all the other subjects in this year and later years.

### Student evaluation of aspects of modules: year-end



# Conceptions of students on MTP

- Phenomenographic study (N=25)
- 4 years of course implementation (2013)

# . Experiences 4 years after course introduction

## . 4 sets of conceptions

- Acquisition of lifelong skills
- Promotion of integration in the curriculum – horizontal and vertical
- Integration in focus of learning -----focal awareness
- Role of the teacher in development of integration ability

# Life long skill

*So, as I was saying that with Health Systems Dynamics with Medical Thought and Practice the basis of how I was taught to approach questions and stuff; those things still haven't left me... [Student 4, MBBCh 4]*

*....the skills that we have developed through those subjects have I think made us into people who think differently about problems and approach problems differently ..... we ....now question more and when we get just given a problem or a lecturer says something, we will say "But why" .....  
[Student 15, MBBCh 2]*

# Promotion of horizontal and vertical integration in the curriculum

*... I know last year, what did help was if you did medical terminology ...there is a lot of anatomy that has Latin names and stuff, that was interesting because you could work out what something did... it helps a lot...[Student 17, MBBCh 2].*

# Integration a deliberate activity

*And there was a project we did in MTP last year that was really helpful. That was the time we actually started talking about the integration with my friends....where we have a session maybe in MTP because they are the ones I see are involved in integrating [Hmm] where we like a have a session where we just talk about integration*  
[Student 12, MBBCh 2]

*....I think that having these opportunities to integrate... at an earlier level in the university system ... one would hope...it, will play out in them being able to do it effectively....[Teacher 1]*

# Role of the teacher in integration

*... honestly for me the best way for me to learn sometimes is not just hearing about the concept but to see it put into action. So when I see how the integration is actually done, it opens my eyes to the possibilities you know to links that may exist to other subjects. [Student 16, MBBCh 2]*

# Lessons learnt

- 'Unconscious incompetence' leads to perception that some modules not useful
  - Overcome perceived stigmatisation of students who need this course
  - Novel content and structure of the course may be perceived as extra work
  - Securing teachers and parents buy-in takes time
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**THANK YOU – for listening**  
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