### INTEGRATED TEACHING



#### **Presentation outline**

Concept of integrated teaching
Different levels of integration
Integrated teaching of MBBS Curriculum in
Bangladesh

#### H-shaped curriculum

Clinical years Preclinical years

#### Z-shaped curriculum



### 1<sup>st</sup> year student of H curriculum



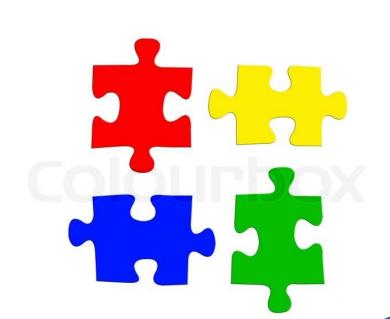
কেন এত এনাটমি পড়তে হয় ?

### 5<sup>th</sup> year student of H curriculum

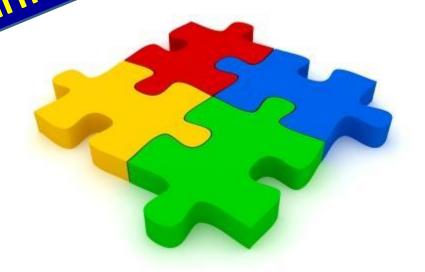


# The ultimate Goal of Medical Education

To ensure that students can be transformed into the most effective deliverers of patient care that is possible...

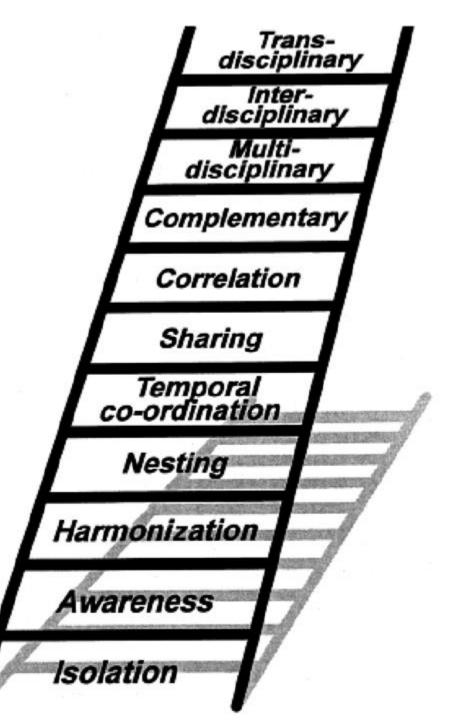


Integration means coordination of different Integration means couraination of affectioning functioning activities to ensure harmonious functioning



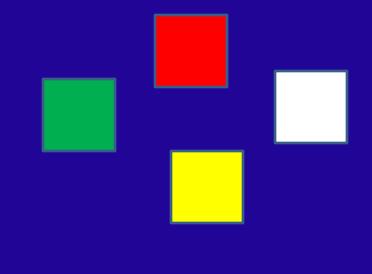
# "Integrated Teaching"

 "The organization of teaching matter to interrelate or unify subjects frequently taught in separate academic courses or departments." Harden, 1984 11 steps on the integration ladder



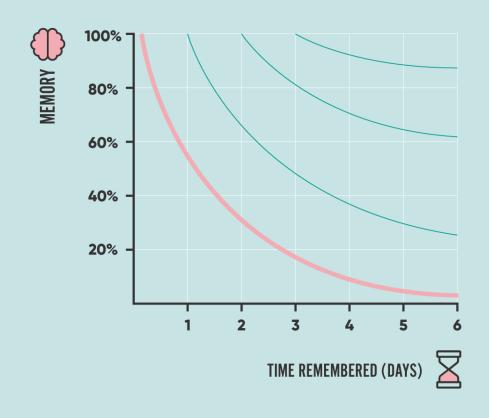
### Step1: Isolation

Faculty organize their teaching without considering other subjects



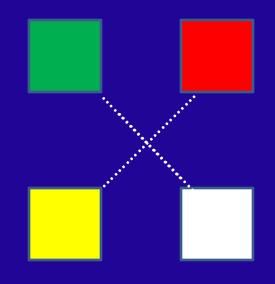
(Synonym: fragmentation)

#### THE FORGETTING CURVE



### **Step 2: Awareness**

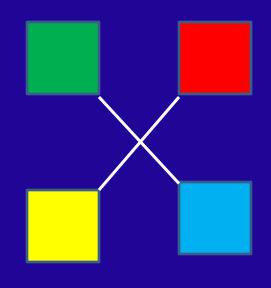
Teacher of one subject is aware of what is covered in other subjects



(Synonym: acquaintance)

### Step 3: Harmonization

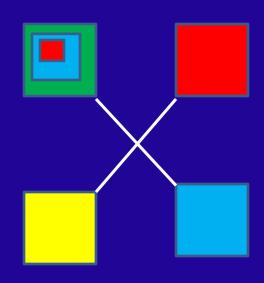
Teachers
communicate &
consult with each
other and adapt their
programs



(Synonym: connection, consultation)

## **Step 4 Nesting**

Contents drawn from different subjects are used to enrich the teaching of one subject



(Synonym: infusion)

### Step 5: Temporal coordination

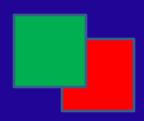
Timetable is adjusted so that similar topics of different subjects are scheduled at the same time



(Synonym: parallel teaching, concurrent teaching

# Step 6 Sharing

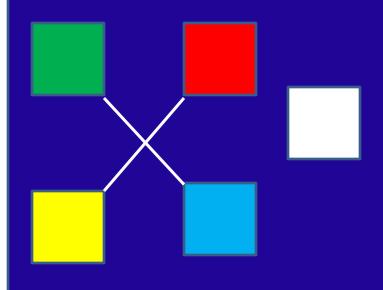
Teachers of two subjects jointly implement a teaching session



(Synonym: joint teaching)

### **Step 7: Correlation**

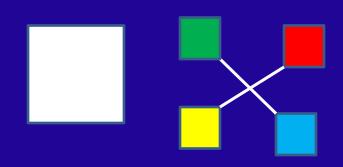
Integrated teaching session is introduced in addition to the subjectbased teaching (subject based teaching taking up most of the curriculum time)



(Synonym: Concomitant programme)

# Step 8 Complementary programme

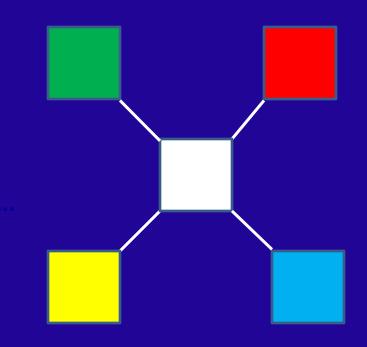
Both subject based & Integrated teaching are present (integrated session represent a major feature of the curriculum)



(Synonym: Mixed programme)

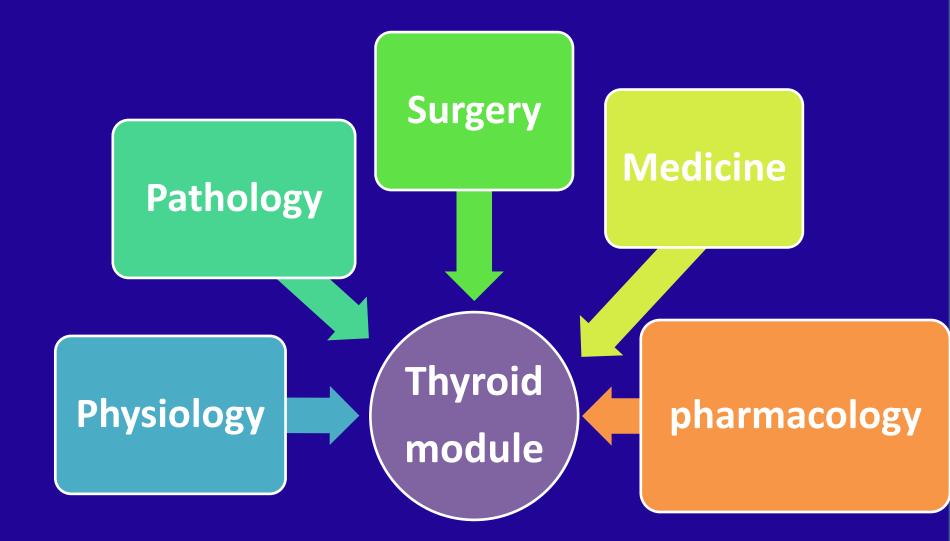
## Step 9 Multidisciplinary

Brings together a number of subject areas in a single topic



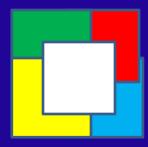
(Synonym: Webbed, contributory)

### Multidisciplinary



### Step 10 interdisciplinary

Study of a phenomenon/theme that involves use of two or more subjects simultaneously



(Synonym: monolithic)

# Step 11 Transdisciplinary

Integration is done in the mind of the student based on situations in the real world of clinical care

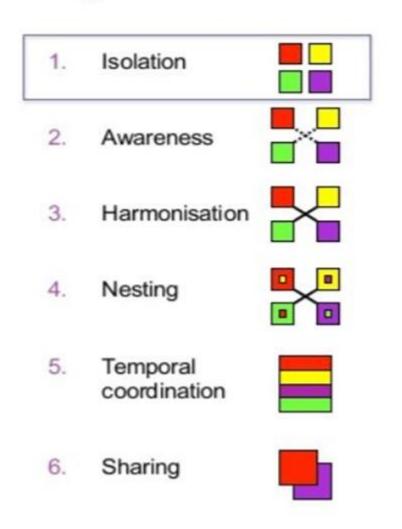
(Synonym: immersion)

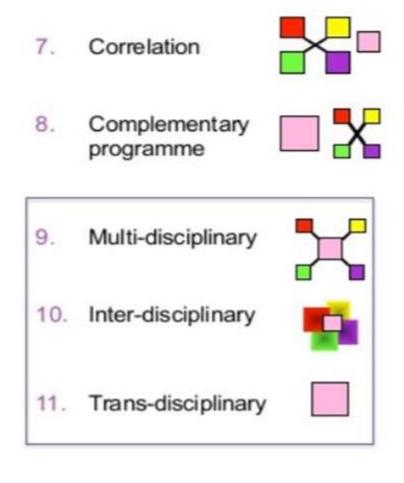
# Trans-disciplinary integration in the final phase of the medical curriculum at Dundee

A set of 113 clinical problems or tasks provides the students with a framework for integrating their experiences

Study guide is a key element in helping the students

# Integration of disciplines: The Integration Ladder (Harden, 2000)



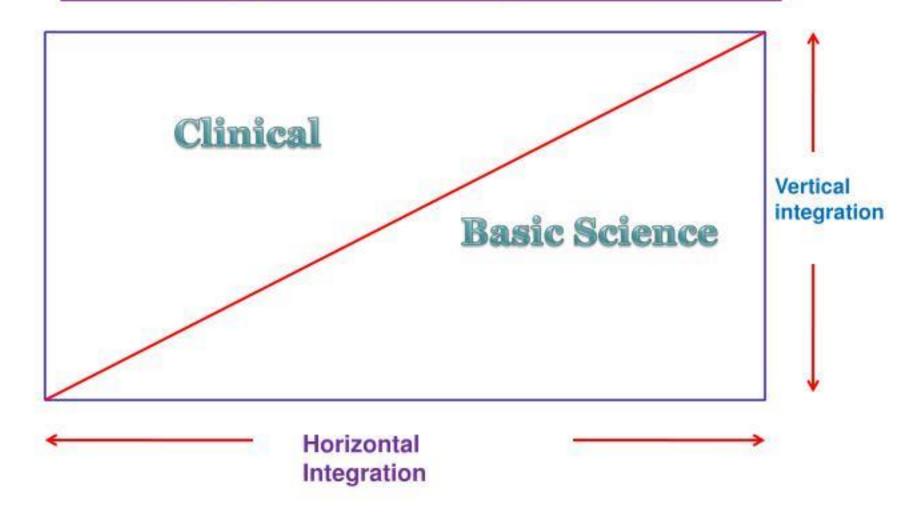


## Types of integration

**Horizontal integration** 

**Vertical integration** 

### **Types of Integration**



### Examples:

- Horizontal: Combined teaching-learning of renal structure and function by Anatomy and Physiology.
- Vertical: Combined teaching-learning of renal failure by Pathology and Medicine departments.
- Both: Combined teaching-learning of renal failure by the departments of Physiology, Pathology, Medicine and Surgery.

# Why integration----



- Reduce fragmentation
- Students learn to apply their knowledge to clinical practice
- Promotes interdepartmental collaboration

# Integrated teaching in MBBS Curriculum 2021 in Bangladesh

Phase-I: 12 Topics

Phase-II: 8 Topics

**Phase-III: 9 Topics** 

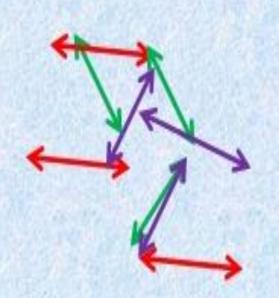
Phase-IV: 42 Topics

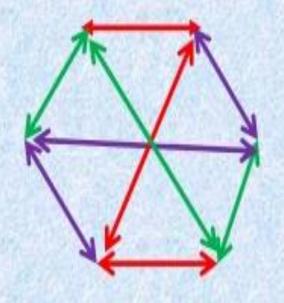
Departmental integrated teaching for phase IV:

Medicine & allied: 10 Topics

**Surgery & allied:11 Topics** 

**Obstetrics & Gynaecology: 10 Topics** 





"To learn is to connect thoughts and ideas. If there is no connection, there is no learning."

- Lord Chesterton

### References

- Harden RM, Sowden S, Dunn WR. Educational strategies in curriculum development: the SPICES model. Med Educ. 1984.18 (4):284-97
- Brauner DG, Ferguson KJ. The integrated curriculum in medical education: AMEE Guide No 96. Medical Teacher.2015:37(4):312-22
- Harden RM, the integration ladder: A tool for curriculum planning and evaluation. Medical education, 34, 551-557
- Harden RM, Davis MH, Crosby JR. The new Dundee medical curriculum: a whole that is greater than the sum of the parts. Med Educ 1997; 31:264-71

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