

PRINCIPLES OF LEARNING & TEACHING: INTRODUCTION TO THE SPICES MODEL

1. What is teaching?

- Interaction between teacher and students in order to bring expected changes behaviour of the student.
- What behavioral changed?
 - Acquire, retain and use knowledge
 - Understand, analyze synthesis and evaluate.
 - Achieve skills
 - Establish habit
 - Nurture attitude

2. General method of teaching

- Talk to student
- Talk with student
- Have them talk together
- Show students how
- Supervise them
- Provide opportunities to study
- “Teaching method which place the student in an **active** situation for leaning are more likely to be effective than those which do not.”

3. What is learning?

- A process resulting in some permanent modification of the students’ behaviour way of thinking, feeling and doing.

4. General principles of learning

- Learning is individual
- Motivation is the key
- Relevance of the learning experience should be clear to the students
- Feedback to the learner is important

5. Conditions to facilitate learning

- Encourage students to be active participants

- Emphasize the personal nature of learning
- Accepts that difference is desirable
- Recognizes students' right to make mistake
- Tolerate imperfection
- Encourage openness and trust
- Make everyone feel respected and accepted
- Facilitate discovery
- Emphasize self evaluation in cooperation
- Permits confrontation

6. What is SPICES?

- S – student centred
- P – problem based
- I – integration
- C – community based
- E – elective
- S – spiral and systematic

7. Educational strategy at PPSP (Pusat Pengajian Sains Perubatan)

- Innovative curriculum vs conventional curriculum
- Adoption of SPICES model
- In collaboration with Dundee, Flinders, Newcastle universities
- Aids from AIDAP, WHO, Network
- Develop own identity

8. Continuum of educational strategies

S = Student centered	—————>	Teacher centered
P = Problem based	—————>	Didactic based
I = Integration	—————>	Disciplines or subjects
C = Community based	—————>	Hospital based
E = Elective	—————>	Standard program
S = Spiral and systematic	—————>	Apprenticeship

9. Student centred vs. teacher centred

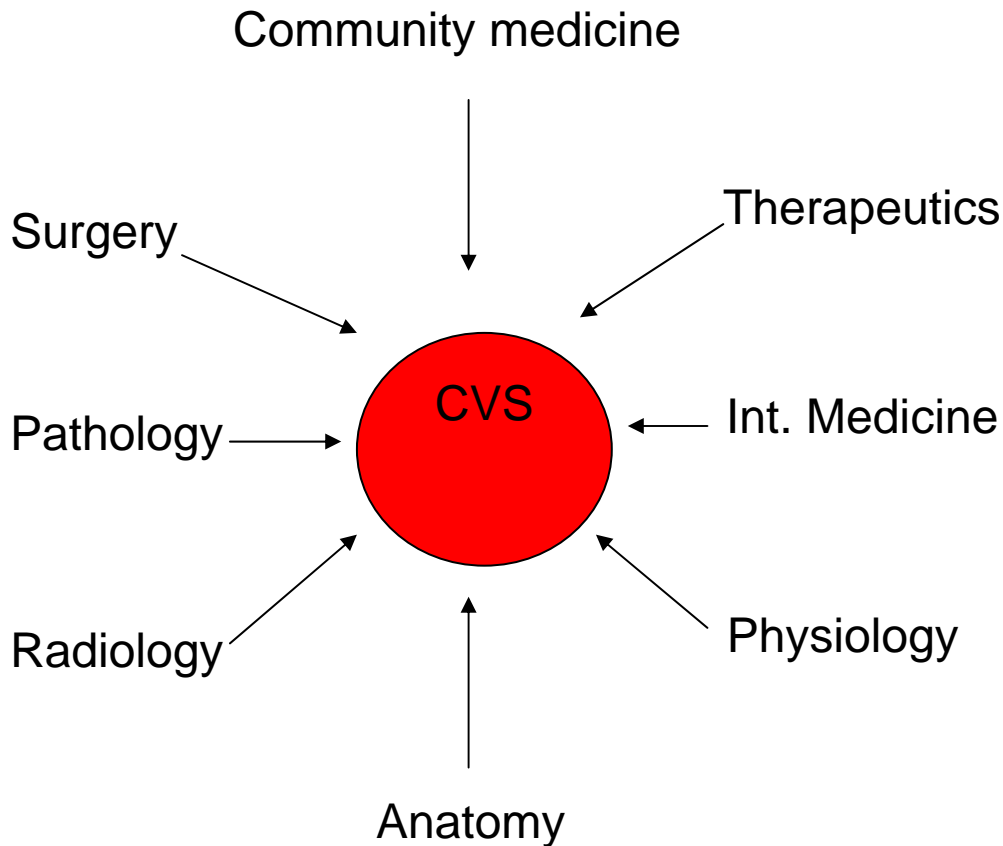
- Student under the guidance of a teacher decide:
 - Learning objectives
 - Course content
 - Learning method
 - Learning resources
 - Sequence and pace
 - Time assessment
- Student centred:
 - Focus on student learning
 - Student learn proactively
 - Collaborative learning
 - Teaching is exploratory
 - Learn by understanding
- Teacher centred
 - Focus is teacher teaching
 - Student learn passively
 - Individualistic learning
 - Teaching is dispensing
 - Understand by learning

10. Problem based learning

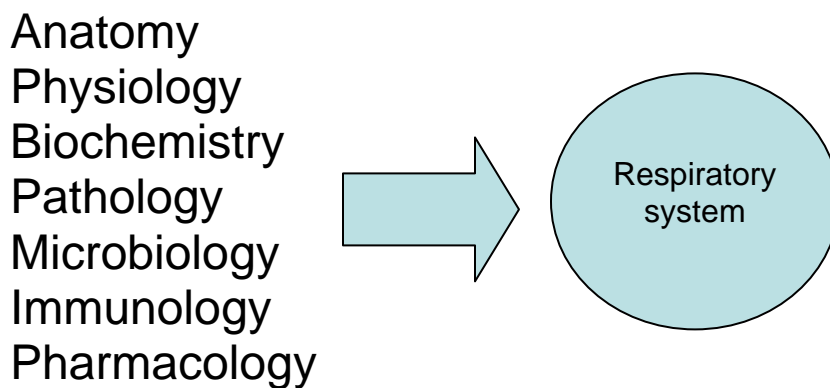
- Problem based learning
 - Problem is encountered first
 - Self directed learning
 - Multidiscipline integration
- Didactic based learning
 - Problem is encountered after
 - Teacher directed learning
 - Discipline based or subject based

11. Integrated versus discipline (subject)

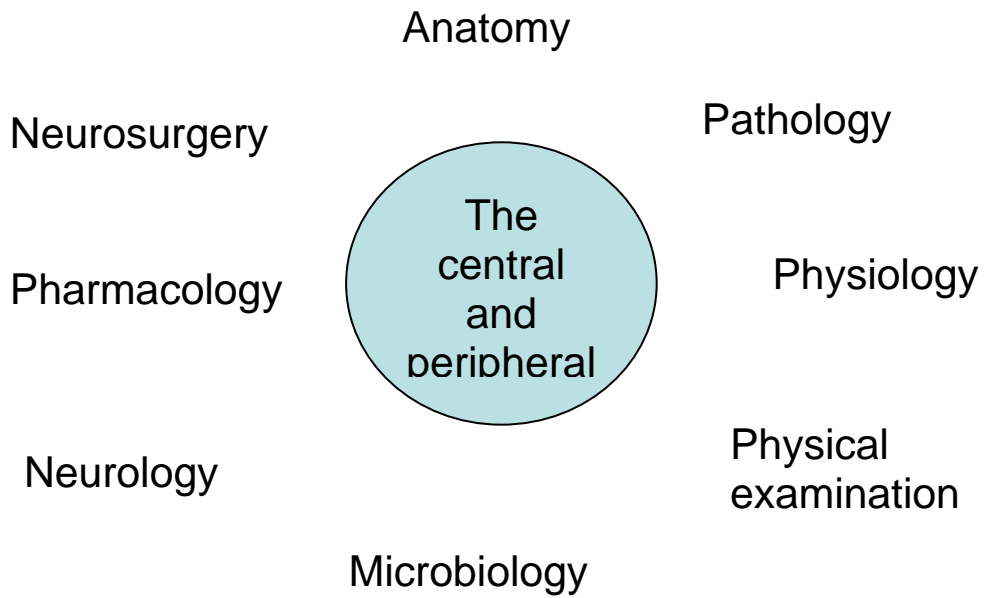
- Integration is the organization of teaching to interrelate or unify subjects as one whole.
- Integrated module in cardio vascular system for example:



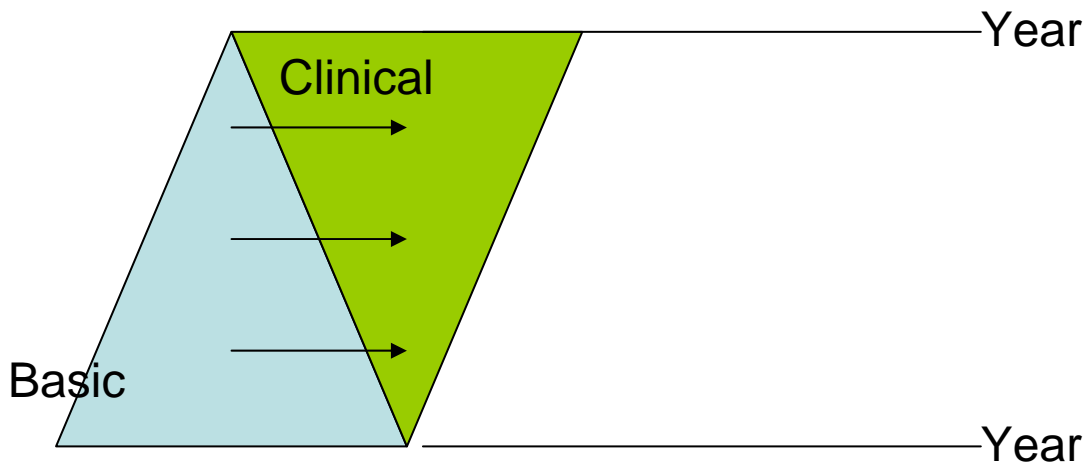
- Horizontal integration for example the unifying of preclinical subject:



- Vertical integration for example the unifying the preclinical subjects with clinical subjects:

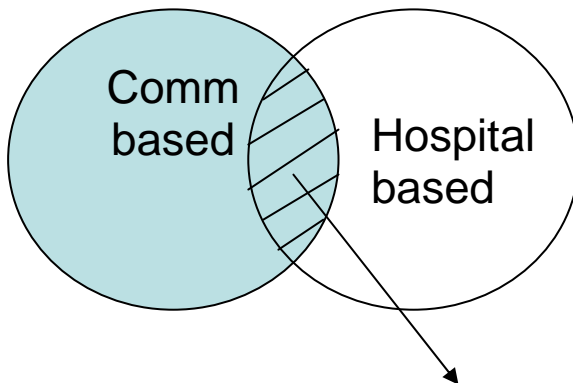


- Concept of vertical integration:



12. Community based vs. Hospital based

- Learning in a variety of setting
- Distributed learning

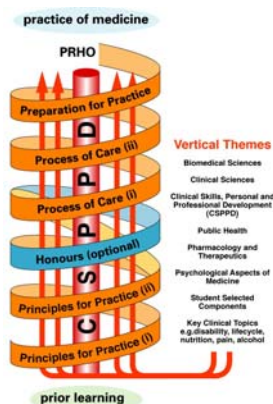


Learning experience gained from hospital and Community practice: health center, private practice special programs and clinics, community based

13. Electives vs. uniform program

- Flexibility
- Providing increasing responsibility for learning
- Options for individual aspirations
- Window for other aspects of medicine
- Coping with overburdened curriculum

14. Systematic vs. apprenticeship



SPIRAL CURRICULUM

- Curriculum is designed for all student to have similar learning experience
- Ensure learning objectives are delivered