

## **SUBJECT CENTRED VS. INTEGRATED TEACHING**

1. Related terms:

- Interdisciplinary
- Multidisciplinary
- Transdisciplinary
- Integrated
- Thematic

2. Jacobs (1989) contends that multidisciplinary integration describes a unit of instruction based on a theme approached from two or more traditional discipline.

- e.g. hypertension (theme) is taught (related to the theme) by many different department such as medicine, pathology, biochemistry, etc.

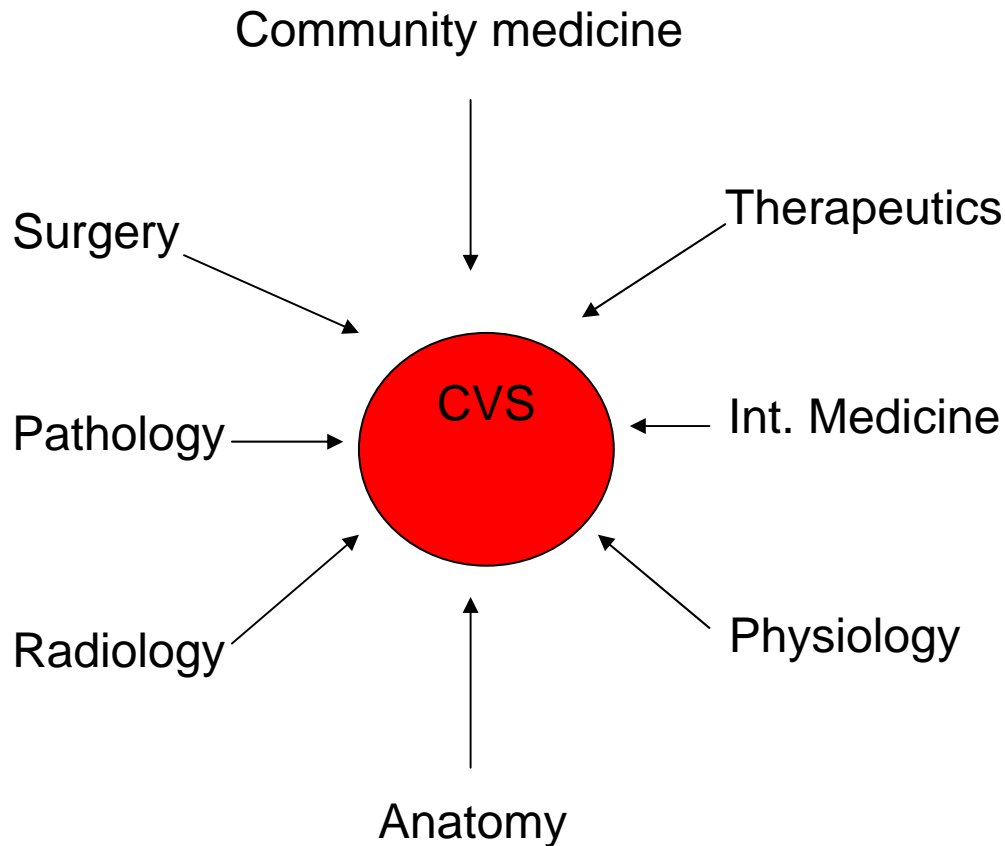
3. Fogarty (1991) identifies a variety of models integrating curriculum within disciplines, across disciplines, and within and across learners.

- e.g. of within and across learners is bringing different health profession student learn together.

4. Integrated curriculum involves elements from more than one discipline and somehow relates to a problem, theme, or situation from the real world.

5. Identify criteria for the selection of powerful themes and concepts around which they can organize interdisciplinary teaching.

For example of integrated teaching:



6. There are 2 type of integration

- Horizontal integration
  - For example unifying of basic (preclinical) subject.
    - In respiratory system → involves physiology, biochemistry, anatomy, microbiology, pathology, and immunology.
  - This involves one level of integration which is only basic subject.
- Vertical integration
  - For example unifying of preclinical and clinical subject.
    - Peripheral and central nerves → involve medicine, physiology, anatomy, neurosurgery, physical examination, pharmacology.
  - This involves two level of integration which is preclinical subject (1<sup>st</sup> level) and clinical subject (2<sup>nd</sup> level).

7. Rationale for integration of curriculum

- Psychological/developmental
- Sociocultural
- Motivational
- Pedagogical

8. Research has shown that learning is more powerfully enabled when curricula are integrated such that connections are established between subject areas rather than as fragmented island of information or knowledge. (Drake, 1993; Edling, 1996; Lewis & Shaha, 1999)

9. Student can attempt interdisciplinary work only after they have mastered some elements of disciplinary knowledge

- However recent evidences suggest that integration can be introduced as earlier as possible into the learning process.

10. Issues in the integrated teaching

- The teacher knowledge problem
  - It means those teachers are not the expert in every subject so it is difficult to find such integrated teacher.
  - However it can be improved by participating the entire related teacher in the system.
- The school structure problem
  - It is difficult to incorporate integration when there are many departments in the school because every department has its own way of management.
  - Furthermore every one has their own opinion regarding the integrated teaching.
  - How to ensure the departments are integrated? Because integrated teaching best work in the integrated environment.

- The assessment problem
  - The assessment must also be integrated too.
  - It is difficult to bring the entire related teacher to sit down together to plan assessment which is integrated in nature.
  - Commonly the assessment is more on subject based rather than integrated based.
- Is it change or is it progress?
- Develop integrated form of assessment

11. Establish teacher preparation programs that focus on disciplinary and interdisciplinary knowledge.

12. Integrated curriculum and student achievement

- Reviews by Cotton (1982) and St. Clair and Hough (1992) suggest that few studies conclusively show that multi-, cross- or interdisciplinary teaching enhances student learning in measurable ways.