

Perspective of Integrated Teaching

Integration means the coordination of different activities to ensure the harmonious functioning of the educational process.

Integration can be defined as the organization of teaching matters to interrelate or unify subjects frequently taught in separate academic courses or departments. In other words, it correlates various subjects to create interest, reduce fragmentation and enable students to learn a topic /subject effectively. In medical education integration between different disciplines and phases of academic years help students to connect concepts & experiences thus ensuring effective long-lasting learning. Integration may be described as horizontal integration and Vertical integration. Horizontal means Integration between the various disciplines within any one or each year of the course and vertical Integration depicts integration of disciplines taught in different phases of the course.

Curricular integration can be viewed as a ladder, with discipline-based teaching (isolation) at the bottom of the ladder and full integration (trans-disciplinary teaching) at the top. The first four steps emphasize the subjects or disciplines. The following seven steps emphasize

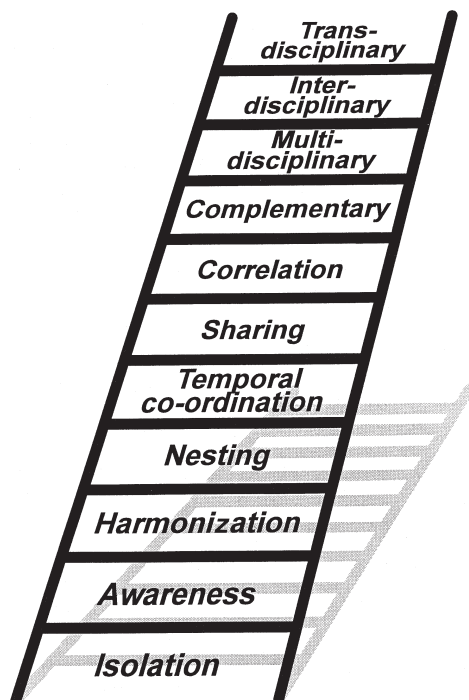


Fig.-1: Integration Ladder by Harden

integration across several disciplines. In the final step, the students take more responsibility for the integration.

It's a time-demanding method in medical education and has been incorporated in different countries of the world. In traditional discipline-based teaching, disciplines are taught separately, emphasizing basic sciences in the early years and clinical subjects in later years, On the contrary, integrated teaching causes blending/ combination of the disciplines from the very beginning to acquire knowledge, skill & attitude to address case management. Sequential and stepwise bridging of a topic involving teachers from different phases helps the students to get long-lasting knowledge and a better understanding of a topic along with developing good skills and attitude.

Various integrated medical curricula have been adopted by many medical schools all over the world to ensure a holistic approach rather than a fragmented one which in turn encourages meaningful learning in medical education.¹ Comparing effectiveness of integrated teaching with traditional teaching in the study revealed Ninety-four percent of Faculties agreed that integrated teaching was an effective mode of training. Ninety percent of faculties rated the program on a higher scale. Ninety-five percent students liked the concept of integrated teaching.² Medical educationists realized that there was a need for integrating basic and clinical medical sciences and an integrated approach with strong clinical relevance captures students' attention and creates more excitement in learning.³ Integrated curricula have been widely adopted, fuelled by dissatisfaction with the way basic sciences have been taught as individual disciplines with no clinical application and by growing recognition that traditional instructional modes no longer meet current demands for interdisciplinary inquiry and practice in medicine.^{4,5}

A few studies reported program outcomes: students trained within an integrated curriculum made more accurate diagnoses than did students trained in a conventional curriculum.⁶ Vertical integration between basic sciences and clinical medicine in problem-based learning curricula stimulated better understanding of biomedical principles than did conventional curricula⁷, and a high degree of horizontal integration occurred in the early years, but more input from clinicians was needed throughout the curriculum to achieve vertical integration.⁸

There might be barriers to implementing integrated teaching but it's the need of time and should be followed by all medical colleges to ensure better outcomes for students as a medical doctor. A few drawbacks are different subject identity crisis, it requires inter-departmental planning, costly in comparison to discipline-based teaching. On the counterpart, Integrated teaching brings a higher level of objectives, minimizes repetition, avoids information overload, and makes learning effective. In Bangladesh medical colleges have started following integrated teaching according to the direction of Bangladesh Medical and Dental Council (BMDC) MBBS curriculum 2021. Integrated teaching involving different disciplines makes learning enjoyable, meaningful and ensures deeper learning rather than surface learning. To make learning student-friendly, gain knowledge, skill, and attitudes by students for effective patient management; thereby serving the community integrated teaching is the most demanding approach.

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