

INTEGRATED LEARNING IN TEACHER EDUCATION COURSES: AN UPDATE

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Abstract-Traditionally, the students in teaching schools are taught in various departments, subject-wise without an attempt to interlink or unify the various subjects. Lack of integration results in compartmentalisation of knowledge whereby the resultant students are often seen succumbing to the realities of the practical world. Moreover, traditional didactic lectures overload the students with only bookish knowledge which they cram and eventually pass as masters of the subject. Thus, the author feels that the student teacher of today's generation must be taught in a manner where they will be able to present the evidence based learning in planned, organised and integrated manner. With this idea, the present study was planned to systematically review and present the pros and cons of integrated learning and its efficacy in teaching methodology.

Keywords: lecture, integrated, holistic, pedagogy

Introduction

"Knowledge Learnt in Isolation is rapidly forgotten."

This famous quote clearly illustrates the importance of integration. The word "*integrated*" comes from Chinese language and it literally means putting different cultures together, based on positive moral concepts. In order for cultures to become integrated, they must know and understand each other. In addition, they should appreciate and respect each other. Therefore, integration does not require the parties to give up their own characters, nor to focus on their differences. This is the proper form of integration.

Thus, Integration is defined as organization of teaching matter to interrelate or unify subjects frequently taught in separate academic courses or departments.¹ In another definition, the term integration in education means coordination in the teaching learning activities to ensure harmonious functioning of the educational processes.²

According to the above definition, the concept of integrated education emphasizes methods which concentrate on viewing the student as a whole person. The goal is not about how to find a good job or make big money, but about how to develop a complete human being. Every part of the individual - mind, body, emotion and spirit, should be developed at the same time and be integrated into the whole person. Further, the idea of integrated education is not only about how to make a smart person, but to make a good person as well. It is not only about giving people knowledge, but also helping them to translate that knowledge into true wisdom. With integrated education, there is no division between school and society, study and human life, knowledge and goodness.^{1,2}

Teaching the curriculum is not an easy task as from student's site they have to learn many subjects at a time and teachers also having multiple roles to perform apart from teaching like administrative work, research work etc. In doing so, in most of the education colleges' teachers impart knowledge in conventional way not in integrated way.

Origin

Whitehead's philosophy of education was built on the concepts of the organism and process thought. Thus, Whitehead always believed that appreciation of the relation of the whole to the part was central to understanding reality. Relatedness is fundamental. Whitehead stressed, "Nothing is in isolation". All things depend upon on each other. "Everything in this world is in some way connected with every other thing in this world; "Everything is a part of the whole. Whitehead gave us innumerable examples that emphasize the importance of wholeness and relationship.^{2,3}

Whitehead applied this thought to education. He liked to use the term "nature alive" which enabled him to look at both of physical and biological science from a unique perspective. In his view, "the students are alive." The body contains both the mental and physical attributes of unified experience. "No separation of mind and body in this philosophy; the body includes the mental state. That mental state-the mind, perception, and reasoning-is our concern as educators. Students do not present to us isolated minds or bodies but themselves as integrated human beings whose relations in the world are experiences that Whitehead's philosophy of organism explains." Whitehead's philosophy "urges us to turn from reductionism and, instead, to think of the whole in relation to the parts and the parts in relation to the whole. A student viewed from a process perspective is a student viewed holistically. Teachers do not confront a mind, or a body, or cognition, or affect, but, a totality; learners bring their whole being to the situation." To be brief, the idea of integrated education is based on Whitehead's philosophy of organism.^{1,3}

Integrative learning in today's scenario

Integrative learning is a well known learning theory that describes a movement toward integrated lessons, that mean the concept of 'brought together in to a whole' and thus helping students make connections across curricula.⁴

The integrated curriculum, a dimension of teaching and learning process in developed countries, and is defined as 'an education system that interlinks different area of learning with a definite line across subject-matter requirement on unifying concept. The concepts of integrated curriculum had traced back in 1960 among educators, but introduced increasingly into health professions education in recent years particularly in the developing countries. It has been agreed upon that the integrated

curriculum possess several advantages such as, reduced duplication of skills and concepts in different subject areas; increase relevance for the learner, given a real-life context; allow for the learner to see the big picture, rather than just the fragmented parts; allow for teaching interdisciplinary life skills for the 21st century; and focus on skills that can be transferred to other disciplines and to life.^{3,5} Though integration of curriculum, allows learner to engage in relevant and meaningful activities of real life, still it is not exempted from drawbacks and criticism. Hence, there is an absolute need for refinement on existing structure, principle of integration and implementation owing to pitfalls and make it more suitable to developing countries.

Pros and Cons of integrated learning

The researches have documented that the integrated curriculum is also not free of certain 'pros' and 'cons'. For example, Rafiq demonstrated that 'vertically integrated teaching approach' to be superior to 'traditional non case based teaching' since it creates interest among and facilitates deep learning.⁶

On contrary, it has been documented that 'traditional medical curriculum' students develop a peak of knowledge in basic subjects over the period of time and overtake the 'PBL based curriculum' trained students.^{4,6}

The results of various studies have shown that the overall performance of graduates from integrated curriculum on standardized achievement tests compared to traditional curriculum was significantly improvised. The better organization of teacher in teaching and learning process leads towards career development. It was seen that the overall psychological burden of the students was reduced and thereby increasing the self-development and career development potential of graduates.^{7,8}

The added benefit was better approach to link the integration of one unit of course to entire program i.e. applying basic subject's principles in all aspects of student care.

Current challenges and future prospects

In this article, we tried to identify the current challenges and opportunities associated with integrated curriculum particularly in the aspects of diminishing science courses, need of improvised implementation strategies and gaps in teaching practice of teaching education program. In addition, we also provide brief information on pros and cons associated with integrated teaching.

In our view, the most common disadvantage associated with integrated curriculum is diminished knowledge of basic subjects that are covered extensively in exclusive graduation courses. The knowledge of basic subjects is mandatory for a complete and thorough understanding of the fundamental concepts and scientific principles governing any given discipline. In brief, the overall challenges and pitfalls of integrated curriculum that are needed to be resolved with warrant discussion are enlisted below:

1. Due to reduced focus of basic subjects in curriculum design, there may pose a challenge for post graduate program that demands additional learning such as pre-requisites courses.
2. In purview of Instructors, contents of basic subjects are defined with limitations.
3. It is true challenge for students to integrate a narrow content of basic subject, across the discipline.⁹
4. Integrated learning in simulated class room teaching (practical), demands the presence of different specialist i.e., warrants infrastructure refinement in teaching institutes.
5. Though, integrated curriculum develops critical thinking among students, but is fenced by isolated contents; this leads to the problem i.e., course contents.
6. Overall fundamental knowledge and self -development competency provided by integrated curriculum is quite debatable though terminal competencies are achieved.
7. An insecurity is developed when a student undertaken integrated curriculum practice eg: Problem Based Learning (PBL), Case Based Learning (CBL) and Task Based Learning (TBL), as these learning methods are still nascent stages in developing countries.
8. When one teacher instructs more than one subject as integration, expertise of knowledge may not be unified in all dimensions. Gap analysis for missing links in course content and remedial options is to be further explored.¹⁰
9. This integration reduces faculty position as compared to traditional curriculum, which is quite contradictory for availability of intellectual resources in developing countries.
10. Comparative Strength Weakness Opportunities and Threats (SWOT) analysis between integrated and traditional curriculum are needed to be updated

Conclusion

Thus, it is evident that the implementation of integrated programs requires case by case analysis, based on international and national focus, institutional and faculty readiness and learners needs. A generic way of integrating curricula without an in-depth analysis may pave way for discrepancies and leads to pitfalls in the curriculum on a longitudinal evaluation and thus needs a meticulous analysis and a thorough discussion among the active partners.

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