

SEMESTER II
Paper CC5: Educational Studies and System

Unit-II Education as Interdisciplinary Knowledge

- *Interdisciplinary nature of education; relationships with disciplines and subjects such as philosophy, psychology, sociology, management, economics, and anthropology.*
- *Dynamic relationship of education with the social and political process.*
- *Contribution of science and technology to education.*
- *Issues related to planning, management and monitoring of education*

Dear M.Ed. II SEM. students

Let us start the discussion with the first point:

- *Interdisciplinary nature of education*

What is interdisciplinary study?

This type of study allows the student to learn by making connections between ideas and concepts across different disciplinary boundaries. Students learning in this way are able to apply the knowledge gained in one discipline to another different discipline as a way to deepen the learning experience. The most effective approach to interdisciplinary study enables students to build their own interdisciplinary pathway by choosing courses which make sense to them.

For example, it is not too difficult to find a theme which crosses over disciplinary boundaries in literature, art and history or science and mathematics. Studying topics thematically is one way to bring ideas together resulting in more meaningful learning. This can occur by allowing students to choose their own subjects and their learning is deepened when they reflect on the connections between what they are learning in different disciplines.

One of the biggest barriers to achieving true interdisciplinary study in education environments is the necessity for collaboration of educators. This can be difficult to achieve, but not impossible. Interdisciplinary teaching and learning is maximized when professionals from different disciplines work together to serve a common purpose and to help students make the connections between different disciplines or subject areas. Such interaction is in support of the constructivist paradigm which allows for new knowledge construction and a deeper understanding of ideas than disciplinary study.

Interdisciplinary nature of education:

Early instances of interdisciplinary education can be traced back to the curriculum integration concept promoted in the 1930s. But interdisciplinary education really emerged in the 1970s, with a rich literature and the development of key definitions.

Kockelmans defines interdisciplinary as: “to solve a set of problems whose solution can be achieved only by integrating parts of existing disciplines”.

All later attempts at defining this concept always came back to the need for the synthesis of two or more disciplines, and the idea of a problem that cannot suitably be resolved with a single approach, allowing to construct new ways of creating knowledge. The need for interdisciplinary idea arises from the ever increasing complexity of the problems to solve, and modern challenges are very much interdisciplinary.

Dezure stated as: “life is interdisciplinary”. It is therefore critical for education, and indeed higher education to consider the benefits of an interdisciplinary approach, and for the maritime industry to implement its practice.

Benefits of the concept of interdisciplinary education:

Perhaps surprisingly, one of the main, and often neglected benefits of interdisciplinary education is allowing the students to reflect on their specialty and realize what their discipline really is.

Indeed, the argument brought forward by Eckert is that: “Students really aren’t that clear about what the various disciplines do. What students really need to know is what a discipline is.”

The most encountered benefit is the opportunity for the students to link ideas and concepts across varied disciplines, prompting a constructive paradigm that makes for a deeper understanding.

A non-exhaustive list of the benefits of interdisciplinary learning and teaching as reported by Nissani and completed by Appleby includes:

- Students are highly motivated as they have a vested interest in pursuing topics that are interesting to them. As a result, the content is often rooted in life experiences, giving an authentic purpose for the learning and connecting it to a real world context. Consequently, the learning becomes meaningful, purposeful and deeper resulting in learning experiences that stay with the student for a lifetime.
- Students cover topics in more depth because they are considering the many and varied perspectives from which a topic can be explored.
- Critical thinking skills are used and developed as students look across disciplinary boundaries to consider other viewpoints and also begin to compare and contrast concepts across subject areas.
- Students begin to consolidate learning by synthesizing ideas from many perspectives and consider an alternative way of acquiring knowledge.
- Exploring topics across a range of subject boundaries motivates students to pursue new knowledge in different subject areas.
- Transferable skills of critical thinking, synthesis and research are developed and are applicable to future learning experiences.
- Interdisciplinary knowledge and application of different disciplines can lead to greater creativity.
- Worthwhile topics of research can fall in the ‘spaces’ between the traditional disciplines.

- More meaningful learning experience.
- New opportunities resulting from the cross-over between two disciplines.
- Demonstrating real life applications.
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- Varied perspectives.
- Flexibility in problem solving.
- Bridge the communication gap between professionals.
- Critical thinking.
- Building confidence.
- Greater creativity.
- Transferable skills.

Interdisciplinary refers to the combination of two or more academic disciplines into one.

Today, we have so many social problems that their solution is not possible in one discipline; therefore, the interaction between different disciplines is needed to solve this problem. This interaction between two or more disciplines is called an interdisciplinary approach. Through an interdisciplinary approach, students can make connections between disciplines in education and see the correlations which improve overall learning. The students also receive a more relevant, timely, less fragmented and enriching learning experience.

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