EMPHASIZING MULTIDISCIPLINARY APPROACH OF LEARNING ENVIRONMENT IN PRESENT SCENARIO

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Introduction

The aim of this work is to study and implement a multidisciplinary learning environment focusing on the integrated curriculum to form a muti discipline platform with effective learner and facilitator relationship under various disciplines of different perspectives into a single content and approaches to implement such an active learning environment and its challenges.

Multidisciplinary Curriculum

The curicullum in which different area of study are integrated into a single subject matter framework based on the similarity, Nexus event, and different perspectives of Multiple Disciplines for a topic, theme or content is known as Multidisciplinary curicullum.

Ex: multiplication in maths nexusing to cell multiplication of biology leads to disciplines of maths and science inter related in a single theme Multiplication.

Learner - Facilitator - Curriculum Relationship

A Facilitator must act as a bridge between the Student and the Curriculum of Multiple disciplines. A Virtuoso Preceptor always tries to sync his Student with the Curriculum in all different perspectives of multiple disciplines, which Leads towards a gratifying Multidisciplinary Teaching-Learning Experience in a collaborative environment.

Emphasizing Multidisciplinary Approach in a Learning Environment

The term multidisciplinary is formed by interconnecting the words i) multi - meaning one or more and ii) discipline - relating to a particular field of study, which as a whole refers to combining or involving several academic disciplines and educational specifications in approach to a particular topic or a problem in academic program.

In multidisciplinary approach the currriculum is integrated in a manner, in which the initial or primary focus of different disciplines are brought together to illustrate a particular topic under diverse perspectives from the viewpoint of more than one discipline.

Thus under multidisciplinary approach one or more disciplines are combined together and collaborated to use as an effective tool in order to examine, analyse, interpret, realize, understand and figure out solutions, for an issue conciously .

Approach to Attain Multidisciplinary Learning Environment

Multidisciplinary education is an effective comprehensive approach that covers an wide range of ideas which integrates multiple knowledge domains out of boundaries of a certain discipline, to enhance the scope and depth of education to reach solutions for a particular theme of issue.

The multidisciplinary approach relies mainly on sharing of knowledge resource from different disciplines and field of domains.

The various approaches to attain multidisciplinary learning environment are as follows :

Curriculum Planning

The curriculum content, subject matter and educational material for the academic year must be framed with multidisciplinary constructive method focusing on, each topics under different perspectives of various disciplines.

Implementing Suitable Learning Teaching Methodologies

Learner centered teaching techniques with active learning process must be encouraged. Facilitator must be trained to handle multiple subjects effectively with required skill sets, in order to impart different perspectives of a topic with ease, coherent and clarity to the learners.

Imparting Knowledge in Different Perspectives

The facilitator must be highly skilled and trained to adapt and change the methods of teaching in accordance to the perspective of different domain and disciplines at correct frequency, to impart the multidisciplinary knowledge to the learner efficiently.
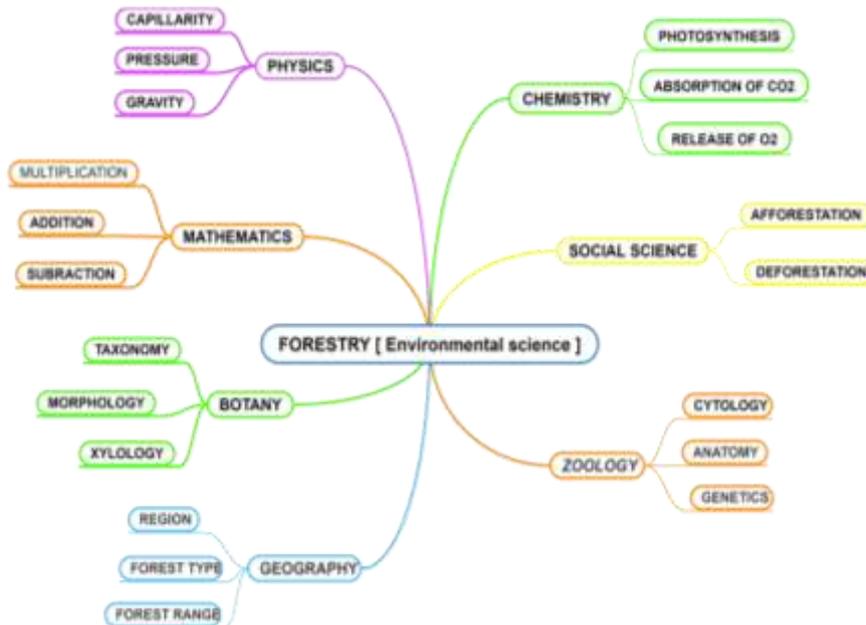
Encouraging Multidisiplinary Education among Learners

- Learner must be made to realize why they need to view the subject at different perspective and understand them towards real time access of an issue.
- Practicing the minds of the learners to think in a different way in accordance to multiple disciplines with varied perspectives.
- Providing regular assignments to learners, which enables them to work on multiple field of domain and gain knowledge, on successful completion.
- Helping the learners to access real world concerns and develop real world skills, through multidisciplinary knowledge acquired in the academic program.
- To Foster collaboration of working skills in order to encourage sharing of knowledge among different disciplines.
- Helping the Learner to create connection between discrete disciplines .
- Enhancing multi - sensory ability of the learners to make them adapt to multi disciplinary education.

Feedback and Self Assessment

      Facilitator must train the Learners to integrate and synthesize their knowledge in multiple disciplines of different perspectives and should evaluate the outcomes conciously through formal feedback. The ability of self evaluation to view a topic from multiple angles must be skillfully developed among the learners to validate their progress in a efficient way.

Implementing Multidisciplinary Curriculum on Topic Forestry

      The multidisciplinary approach can be implemented on a single topic of environmental science: THE FORESTRY which is viewed under different perspectives of various disciplines involving

- Physics : capilarity, pressure, gravity, height, weight, size etc.,
- Chemistry : photosynthesis, absorption of co2, emission of o2, etc.,
- Maths : multiplication, addition, subraction, etc,.
- Botany : taxonomy, morphology, xylology, etc.,
- Zoology : cytology, anatomy, genetics, etc.,
- Social science: afforestation, deforestation, etc.,
- Geography : forest region, forest range, forest type, etc.,

      Thus under a single topic forestry, all these aspects from various perspectives can be studied through multiple discipline in mulridisciplinary learning environment which projects a clear knowledge and imparts the life skill to the learner.

Hierarchy of Curriculum Integration from Multiple Discipline

      The Facilitator must be concious with logical arrangement and reasonable integration of curriculum content, theme or topic following the similarity, Nexus event, and different perspectives of Multiple Disciplines while constructing a multidisciplinary

Learning environment. The Heirarchy of curriculum integration from multiple discipline are as follows

- Main subject content: 30%
- Secondary subject content (upto 7 discipline): 35% [5% each]
- Sub Topics: 20%
- Continuity and Nexusing: 15%

Thus the construction of an multidisciplinary content or theme or topic, under the above mentioned heirarchy will develop an effective learning tool from multiple discipline in various perspectives.

Celebrations of Multidisciplinary Approach

- Students are motivated towards the acquiring indepth knowledge on a topic in perspectives of all disciplines.
- utilisation of resources from various disciplines focused on a single content leads to higher efficiency skill acquisition.
- Improves socialization among learners of different disciplines while collaboration under multidisciplinary learning environment.
- Increases and motivates the learners towards research oriented activities in various disciplines.
- Improves the skill of investigative study and master multiple disciplines.
- Easy to understand and study various perspectives of a single topic under multiple disciplines in a short span of time.
- Fosters problem solving ability and knowledge to identify effective solutions to issues, in learners.

Challenges of Multidisciplinary Approach

- i)Implementation is difficult due to widely varying needs, aspiration of Learners, and requirement of highly talented facilitators.
- ii) It requires lot of fundings, donations and resources to set up and practice multidisciplinary learning environment.
- iii) A learner cannot focus on a content only in a single specific subject domain or discipline.
- iv) Training of Facilitators with indepth knowledge on multiple discipline is a difficult task and consumes huge time.
- v) Possibilities are there for late blooming learners to face congnitive difficulties and attain cognitive stress.
- vi) Planning and constructing a multidisciplinary view on each and every individual topic is not an easy task and requires a lot of time.
- vii) The accuracy on evaluation of knowledge acquistion of the learner under each discipline will not be certain and distinct.

Conclusion

Thus multi disciplinary learning environment ensures that the learners learns at their best when experiencing knowledge acquisition that are inter related to each other when studied under different perspectives of various field of domain or multiple disciplines. Even though challenges are there in implementation and approach of a multidisciplinary learning environment, the results will foster the skills and knowledge of the learners to greater extent undoubtedly.

References

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