

CORRELATION IN SCIENCE SUBJECTS

Unit V

Science education

INTRODUCTION

"No subject is ever well understood and no art is intelligently practiced, if the light which the other studies are able to throw upon it is deliberately shut out."

Ramont

INTRODUCTION

- Education is a **co-ordinated process**
- Major aim of Education-“unification of knowledge” existing in the different branches of learning
- Teaching of various subjects is hence correlated.
 - correlation-connect or connected
 - The reciprocal relationship between different subjects of a curriculum for making the knowledge concrete and permanent
- A conscious effort is made to integrate various subjects-synthetic whole

CONTD....

- Herbert was the first to conceive correlation idea in teaching
- "The power of the mind does not depend upon the amount of information accumulated in pieces, not related to one another, but is rather on well-organized system on which all these pieces of knowledge are taught, showing their relationship with one another. This is known as the principle of correlation."
- John Dewey laid stress on integration in the teaching of various subjects.

SIGNIFICANCE OF CORRELATION

- The most significant development of 21st century education-
Emphasis on "unified, integrated and meaningful knowledge of the pupil."
- Imparting knowledge in isolated manner is obsolete
- A child's mind-integrated whole, receives experiences in an integrated manner.

ADVANTAGES

- Students realize the importance of a particular topic, more interested in learning
- realizes the basic unity of knowledge
- realizes about the similarity in the method of investigation in different subjects.
- widens the mental horizon of students
- Transfer of learning

TYPES OF CORRELATION

INCIDENTAL CORRELATION

The connections between different disciplines are made by the teacher in the classroom learning context

not intentionally inbuilt in the curriculum

SYSTEMIC CORRELATION

Achieved through explicit and deliberate connection made between disciplines

at the time of planning of the curriculum

related topics in physics and biology -single text book

CORRELATION OF SCIENCE WITH OTHER SUBJECTS

- Science and language
- for it's learners to be able to express their views and ideas in clear and attractive form
- prepare biographies of scientists
- description of experimental set-up.

Science and Mathematics

A large number of scientific principles and rules are represented in the form of mathematical expressions

Ratio in genetics, equations in Physics

Science with Social Science

History-scientific discoveries; major events in history

Geography - shape of the earth, layers of earth and atmosphere

Scientific thinking affects the standard of living of human beings to considerable extent

Science and Art craft

science teacher is required to draw various kinds of diagrams, models and charts, which cannot be performed unless he does not have sound artistic skills

Science and Music

the students of music, knowledge of resonance, vibration systems in strings and air columns is very necessary and important.

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