UNIT – III

INTEGRATED CURRICULUM AND LANGUAGE EDUCATION

Integrated curriculum types, meaning, key features, objectives, levels of curriculum integration- Models of Curriculum integration: Multidisciplinary inter-disciplinary trans disciplinary and spiral curricula - coyel's 4C's of curriculum - content and language integrated learning approach in the classroom - National curriculum framework (NCF-2005) - Recognition of Mother tongue.

Curriculum

Refers to the lessons and academic content taught in schools. A set of guidelines for the educators – what should be taught, how and why something has to be taught.

Refers to overall academic, content and Educational experiences provided by an educational institutions.

Definition of Curriculum

The curriculum must consist essentially of disciplined study in five great areas: 1) command of mother tongue and the systematic study of grammar, literature, and writing. 2) mathematics, 3) sciences, 4) history, 5) foreign language.

Caswell and Campbell (1935)

Curriculum is composed of all of the experiences children have under the guidance of the teacher.

Integrated Curriculum- Meaning

I**s** made of two words curriculum + integration

Integration focus on making connection for students allowing them to engage in relevant, meaningful activities that can be connected to real life. Bringing various subjects together for learning in a single classroom is called integrated curriculum.

Content is drawn from several subject areas to focus on a particular topic or theme.

Integrated curriculum binds multiple subjects into a common theme and strives to provide a depth of knowledge at all levels. In early childhood programs it focuses upon the inter-relatedness of all curricular areas in helping children acquire basic learning tools. It recognizes that the curriculum for the primary grades includes reading, writing, listening, speaking, literature, drams, social studies, maths, science, health, physical education, music and visual arts. Integrated teaching and learning process enable children to acquire and use basic skills in all the content areas and to develop positive attitude for continued successful learning through out the elementary grades.

Features of Integrated curriculum

a) Experiences to develop children's attitudes, skills and knowledge, and to help them make connections across the curriculum.
b) Activities that provide for a range of abilities.
c) Teacher-initiated and child-initiated activities.
d) Whole class, small group and individual learning experiences.
e) Opportunities for critical and creative thinking.
f) Teacher, peer and self-assessment.
g) Opportunities to experience learning as a meaningful whole.

Objectives of Integrated Curriculum

- To enable the student understand the world in a real manner.
- To enable personalized inquiry learning and make learning motivating.
- To enable deeper understanding.
- To bring about cooperation in teaching. (Team teaching)
- To enable group learning.

Characteristics of Integrated Curriculum

- Incorporates a variety of learning styles
- Relates new knowledge to real life situations
- Eliminates barriers between subjects
- Helps students better understand and retain information
- Integrated curriculum encourage depth and breadth in learning

Benefits of Curriculum Integration

(i) Allows for flexibility

- Teachers can plan for the development of important skills that extend beyond the curriculum.(Critical thinking, creativity, collaboration)

(ii)Building on prior knowledge and experiences

- Meaningful connections are formed among subject areas.
- Recall of prior knowledge and experience.
- Holistic view of the world is formed.
- Learning becomes meaningful.

(iii)Identify the distinct qualities and related elements of subject areas.

(iv)Become more involved in learning, because context is more understandable and meaningful.

(v)Application of knowledge in various contexts.

(vi)Making connections between subject content and out of school experiences.

Types of Integrated curriculum

1. Connected

   Within each subject area, course content is connected topic to topic, concept to concept, one year's work to the next, and relates ideas explicitly. Example: Teacher relates the concept of fractions to decimals.

2. **Sequenced**

   Topics or units of study are rearranged and sequenced to coincide with one another

   Eg: English teacher presents a historical novel depicting a particular period while the History teacher teaches that same period

3. **Webbed**

   This is when a teacher decides to base all subject areas around a central theme which motivate students to see the connection to theme within the different subjects. Eg: Topic: Environmental Pollution.

4. **Shared**

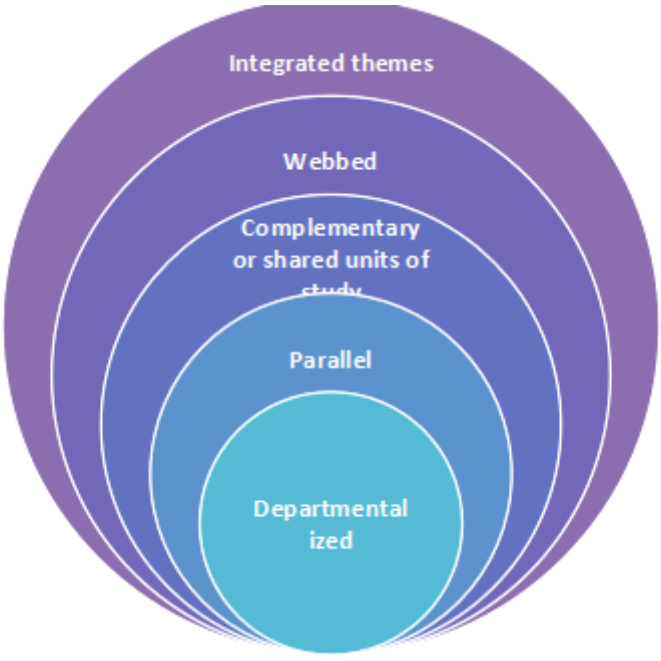
   Means the teacher uses their plan to create an integrated unit among two disciplines. This method requires a lot of communication and collaboration between two teachers. Eg: Topic Human Eye taught by Biology teacher whereas the topic long sight and short sight could be taught by Physics teacher.

5. **Nested**

   Means within each subject, the teacher targets multiple skills: a social skill, a thinking skill, and a content-specific skill.

   Eg: Teacher designs the unit on photosynthesis to target consensus seeking, sequencing, and plant life cycle.

Levels of Curriculum Integration



Departmentalized Integration

- It is a traditional model-Separate and distinct disciplines are taught different from one another.

- Students study 6 to 7 subjects everyday, concepts not connected to one another.
- It is the process of grouping subjects into departments
- Students receive instruction from several different teachers, each specializing in a different subject

Eg.

A student may study prose in language, friction in science, Indian freedom struggle in history, and ratio in mathematics.These concepts are all different ideas.

Parallel integration

Topics or units are rearranged to coincide with one another. Similar ideas are taught in different subjects, for better understanding.

Eg:

Social studies teacher teaches about World War II, language teacher teaches about "The Diary of Anne Frank", economics teacher teaches about "The Great Depression."

Complementary Integration (Supportive) or Shared Units of Study

- Related disciplines are brought together to learn about a topic.
- Teachers plan the ways to support instruction.
- Complementary activities are related to the subject.

Eg.

Physics theory & Practical classes.

Computer Science theory & Practical classes.

Psychology theory & Practical classes.

Webbed Integration

- Connections or webs are made between curriculum contents & disciplines related to a theme.
- Appropriate concepts and ideas related to the theme are studied in all the disciplines.
- Flexible methods of instruction are used.

Eg.

A Topic "Marine life" is selected and teachers from different disciplines teach from their perspective.

Integrated themes

- These themes are generated by students, based on their personal & social concerns.
- Longer time periods for study are needed.
- Skills & competencies are taught based on students' questions.

Eg. Project – based learning

Models of Curriculum Integration

Multidisciplinary approach

- Multidisciplinary approach means working together, but remaining within the discipline, ideas & plans are different
- Multidisciplinary teams of teachers organize their instruction so that students are encouraged to make meaningful connections across subject areas. English, mathematics, science, social studies, and career technical teachers all collaborate to plan and present lessons that center around a central, career themed issue or problem.
- Focus on separate discipline with same theme
- In other words multi-disciplinary approach involves drawing knowledge from different disciplines to study a topic or problem fully, in all its dimensions; but knowledge of each discipline stay within its boundaries.

Characteristics of Multi-disciplinary Integrated Curriculum

Achievement of academic goal

Curriculum units are designed to address key learning standards identified by the educational authorities.

Authenticity

Units use a real-world context (e.g., community and workplace problems) and address issues that matter to the students.

Applied Learning

Units engage students in solving problems (e.g., teamwork, problem-solving, communication, etc.).

Active Exploration

Units extend beyond the classroom by connecting to internships, field-based investigations, and community explorations.

Connections

Units connect students with mentors and coaches from the required fields.

Assessment Practices

Units involve students in regular performance-based exhibitions and assessments of their work.

Inter-disciplinary Curriculum integration (working together, and bringing ideas under one integrated plan)

Inter-disciplinary Curriculum integration means integrating different aspects of more than one academic discipline to examine a theme, issue, question or topic. It helps students to explore various perspectives and views on the problem or topic in consideration.

Sharing of knowledge from separate disciplines around common themes, issues, or problems.

Similar to multidisciplinary curriculum integration.

Several other instructional approaches are used.

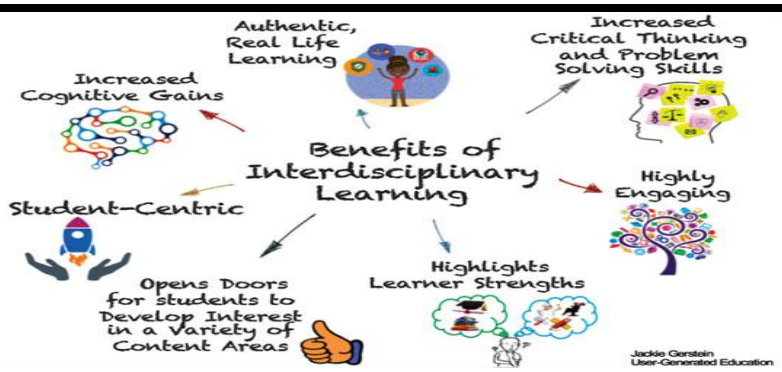
Includes a combination of subjects.

Uses a wide variety of learning material.

Highlights relationships among concepts.

Eg. Science – Physics, chemistry, biology, Agricultural Science

Social Science – History, Geography, Civics, Sociology, Anthropology



Trans-disciplinary Curriculum integration

An approach to curriculum integration which dissolves the boundaries between the conventional disciplines and organizes teaching and learning around the construction of meaning in the context of real-world problems or themes.

It encourages a curriculum that makes connections between the subjects, not only through explicit and conceptual ties, but also through the personal experiences of the learners.

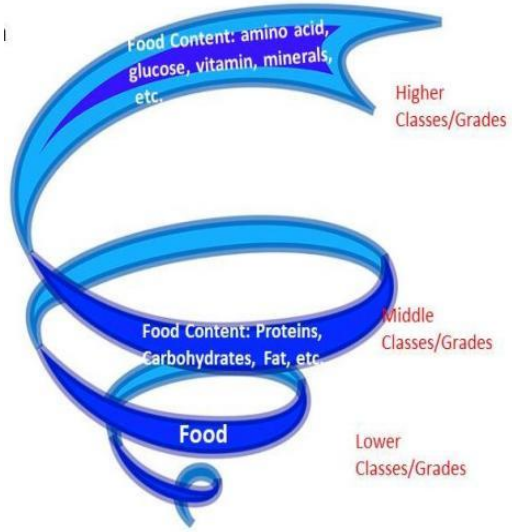
Importance of trans disciplinary learning

- Students develop divergent thinking and creativity.
- Students see more meaning in what they learn.
- Students are more motivated.
- Students learn more ways to solve a problem.
- Students build up confidence.

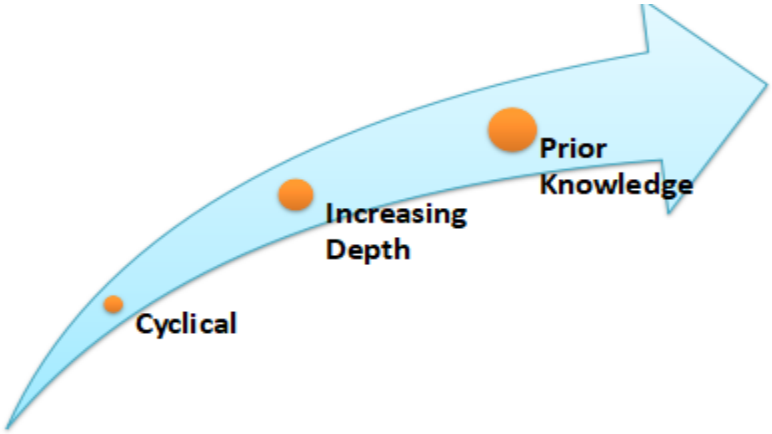
Spiral Curriculum

- Propounded by Jerome Bruner.
- Refers to a curriculum design in which key concepts are presented repeatedly throughout the curriculum, but with deepening layers of complexity, or in different applications.
- Beginning stages - Mastery in learning fundamental principles.

- Later stages - More specialized courses are included.
- Burner believes that children learn when they are exposed to a subject many times in different ways
- In this ways teachers move from basic concepts to more complex ones over time
- This theory is the basis for the way most school curricula and text books are organized



Principles of the Spiral Curriculum



- **Cyclical:** Students should return to the same topic several times throughout their school career.
- **Increasing Depth:** Each time a student returns to the topic it should be learned at a deeper level and in a complex manner.
- **Prior Knowledge:** Students' prior knowledge should be utilized when a topic is taught so that they understand from their foundations.
- Better understanding: The student studies the topic or subject several times throughout school life.
- Logical progression: Basic or simple ones are presented first leading to the complex ones, which leads to better sequencing in the thought process.
- Application of knowledge: Learning to apply prior knowledge to the new knowledge acquired.

Features of Spiral Curricula

- Topics are revisited
- Presence of increasing levels of difficulty
- New learning is related to previous learning
- The competence of students increases

Values of Spiral Curricula

- Reinforcement
- Moving from simple to complex
- Integration
- Logical sequence
- Higher level objectives
- Flexibility

Advantages of Spiral Curricula

- Spaced repetition occurs
- Developmentally appropriate learning
- Prior knowledge is central to learning
- Teachers focus on structuring work to follow logical progression

Disadvantages of Spiral Curricula

- Time consuming
- Curriculum crowding
- Irrelevant of short term and crash courses

Coyle's 4C's of Curriculum

The 4C's of curriculum by Do Coyle are the founding principles of the Content and Language integrated Learning (CLIL) approach. CLIL is an approach towards integration of subjects or specific contents from many disciplines, where the students learn the subject and a second language at the same time.

For Eg:

A Science course can be taught to students in English and they will not learn about contents in Science but they will also gain relevant vocabulary and language skills.

4C's

- Content (Subject matter/project/theme)
- Communication (Language)
- Cognition (Thinking)
- Culture (Citizenship)

Content

Content refers to the subject or theme of the lesson of course. Examples of different content areas include history, science, mathematics, geography and cookery. When planning the content of our lessons it is essential to think of the knowledge, skills and understanding we want our students to learn and not only the knowledge they should acquire.

Cognition

Cognition refers to the critical thinking skills that students use to engage with and understand course content, to solve problems and to reflect on their learning

Communication

Communication refers to students using the target language to communicate their thoughts, opinions, attitudes and discoveries related to the lesson content. Both speaking and writing are emphasized as students "learn to use and use language to learn" The aim is for students to produce authentic language not to memorize grammar rules and parrot the teacher. The teacher serves as a guide facilitator.

Culture

Culture (also known as community and citizenship) refers to the learning community of a class and school and more broadly to local and global cultures. Students are encouraged to understand themselves as citizens of the world and understand both their own culture and other cultures. The ultimate goal is to promote international awareness and understanding.

The 4C's Framework holds that it is through progression in knowledge, skills and understanding of the subject matter, engagement in associated cognitive processing, interaction in a community context etc.,

Content and Language integrated learning approach in the classroom

In the digitilized world, various approaches have adopted, implemented and utilized to disseminate information to the learners in the world. One of the most promising method to teach both content and the target language is Content and Language Integrated Learning (CLIL).

CLIL approach leads to greater linguistic proficiency and it also boosts the motivation of the learners.

CLIL Aims

- To develop learning strategies
- To stimulate critical thinking
- To develop creativity
- To raise motivation

Basics of CLIL

- Students learn a subject and a second language at the same time.
- A science course, for example, can be taught to students in English and they will not only learn about science, but they will also gain relevant vocabulary and language skills.
- Integration of language and content is needed for CLIL to be successful.
- Both the language and subject matter is learned at the same time.

Target group for CLIL

- It is for all age groups, from primary level to University & beyond.

- Course content & language aims are designed based on students' needs, to benefit everyone.
- Language acquisition – prime focus in primary & secondary school contexts.

Benefits of CLIL

CLIL helps with:

- Improving overall and specific language competence.
- Preparing for future studies and/or working life.
- Developing multilingual interests and attitudes.
- Diversifying methods & forms of classroom teaching and learning.
- Increasing learner motivation.
- Integrating language into the broader curriculum.
- Long-term learning: Students become academically proficient in a language after 5-7 years in a good bilingual program. This is because CLIL focuses on fluency rather than accuracy, treating errors as a natural part of language learning.
- Introducing a wider cultural context to content lessons.
- Enhancing the school profile.

Importance of CLIL

- To prevent disappearance of languages.
- With increased contact between countries, there will be an increase in the need for communicative skills in a second or third language.
- Languages will always play a key role in curricula.
- Attention needs to be given to the training of teachers and the development of frameworks and methods which will improve the quality of language education.
- Develops listening and reading which are the essential skills.

Techniques of CLIL in the classroom

Repetition

- Repeating crucial words & phrases helps in getting the right definition & usage.
- Good auditory practice, improves listening skills.
- Helps in grasping the correct pronunciation of words.
- Students themselves use critical thinking skills to find out the meanings of words.

Use of visual aids and props

- A picture is worth a thousand words.
- Using interesting and colourful images grabs attention.
- Props or demonstrations help in retention of the concept.

Pre- teaching vocabulary

- Teaching vocabulary before teaching the lesson helps in understanding the meaning of the context.
- If we want to teach about sports, we could start with a sports-related vocabulary session, before starting the lesson.

Direct translation

- Supporting technique
- Time saving
- It would still be much better for students to discover for themselves the meanings of words and concepts, because the brain retains the information it has worked for, much better.
- Providing a list of vocabulary words with translation in the mother tongue, before the teaching of the content.

Show and tell (Demonstration)

- Asking the student to talk about the subject (concept) in their own words in the second language.
- Students experience conversing, interacting & conveying a message in the second language.
- The presentation should not be interrupted even if the grammar is wrong.
- Builds confidence in using the second language.

Role playing

- Allowing the students to work in pairs or groups for role playing certain events taught in the subject.(History, language)
- Helps students in language practice.
- Helps the teacher in evaluating the language efficiency of students.
- Helps in determining which students need extra support.
- Encourages active participation.

Challenges in using CLIL in the classroom

- As CLIL is subject-focused, language teachers may also have to develop their own knowledge of new subjects in order to teach effectively.
- Careful structuring of classes by subject teachers, to focus on language and content.
- Enabling students to understand the content of the lesson, as well as the language through which the information is being conveyed.
- Educators need to be very aware of individual student understanding and progress.
- Provision of appropriate content-related supportive materials.
- Ensuring that both the language and content are being learned simultaneously.

Types of CLIL

According to Bentley (2010) there are three types of CLIL in the curriculum. They are

1. Soft CLIL

It is practiced as part of a language course

2. Modular CLIL

In this type, a subject is taught for a certain number of hours in the target language

3. Hard CLIL

It is practiced as a partial immersion program, almost half of the curriculum is taught in the target language

Disadvantages of CLIL

- The teachers have to share a single mother tongue.
- The teacher has to be highly proficient in the second language as well as the mother tongue.
- There is a doubt as to who should teach language – the subject teacher or the language teacher.
- Teachers use the second language without fluency.
- Students learn the concepts in the second language, without knowing about them in their mother tongue.
- Parents find it difficult to help students with their homework, as they do not know the second language.

- Lack of appropriate teaching learning materials, that enable both language and content learning.

NCF (National Curriculum Framework-2005)

The main features of the NCF 2005 are strengthening a National System of Education with special focus on:

- Reduction of curriculum load
- Ensuring quality of education for all (EFA)
- Systematic changes, common school system.

It provides framework for making syllabi,textbooks and teaching practices within the school education programmes in India. Prof.Yashpal have developed NCF-2005

The document submitted by NCF has five divisions, they are:

- Perspectives of NCF
- Learning and knowledge
- Curricular Area, School stages and Assessment
- School and classroom Environment
- Systematic reforms

Basic Principles of NCF 2005

The following five basic principles formed the perspectives of NCF

- Connecting knowledge to life outside the school
- Ensuring that learning is shifted away from rote methods
- Ensuring the curriculum to provide for overall development of children rather than remain textbook centric
- Making examination more flexible and integrated into classroom life and
- Nurturing an over-riding identity informed by caring concerns within the democratic policy of the country

Objectives of NCF 2005

- Introducing the concept of learning without too much load by reducing the syllabus
- All children should have access to quality education without any discrimination

- Curricular practices should be in alignment with secularism, social justice and equality
- Strengthening a national education system in the society

Recommendations of NCF - 2005

- Educational practices should suit the present and future needs.
- Subject boundaries to be made flexible, leading to integrated knowledge and understanding.
- Schools should provide a stimulating environment that responds to the child's home and community environment.

Language education in NCF-2005

- NCF 2005 gives a fresh stimulus to Language Education:
- Implementing the three language formula.
- Children's mother tongues, including tribal languages should be considered as the best medium of instruction.
- Proficiency in multiple languages including English should be encouraged in children.
- Reading should be emphasized throughout the primary classes.
- Language teaching needs to be multilingual not only in terms of the number of languages offered to children but also in terms of evolving strategies that would use the multilingual classroom as resource
- Home language of children should be the medium of learning in schools

Recognition of mother tongue in NCF-2005

- Language skills – Listening, Speaking, Reading, Writing(LSRW) are for all school subjects.
- Language skills play a basic role in children's construction of knowledge.
- Three language formula needs to be implemented to encourage multilingualism.
- Children's mother tongue – best medium of instruction.
- Success in learning English is possible only if it is based on proficiency in the mother tongue.
- Medium of instruction in the Home language/mother tongue applies to tribal languages also.

- Multi-lingual character of Indian society is a resource for promoting language proficiency.

Importance of Mother Tongue

- Mother tongue for a child involves more than a language and includes the child's personal, social and cultural identity
- When children develop their mother tongue, they are simultaneously fostering whole host of essential skills such as critical thinking and literacy skills that take with them into formal education
- When an individual knows his/ her mother tongue well, it is easier for him/ her to learn a new language

Advantages of Mother-tongue in Education

- Mother tongue makes it easier for children to pick up and learn other languages
- Mother tongue develops a child personal, social and cultural identity
- Using mother tongue helps children develop their critical thinking and literacy skills
- Children learning in mother tongue adopt a better understanding of the curriculum
- Skills learnt in mother tongue do not have to be re-taught when the child transfers them to a second language
- Self-esteem is higher for children learning in mother tongue
- Parent child interaction increases