Farook Training College Innovative Academia (FTCIA)

Online Collaborative Learning Project (OCLP)

Pre-Edited Version of Study Materials.

(Chance for minor errors)

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Project Team:

Project Head: Dr. T. Mohamed Saleem. Principal
Project Director: Dr. K. Vijayakumari. Associate Professor

Associate Directors:
1. Dr. G. Manoj Praveen. Associate Professor.
2. Dr. Niranjana. KP. Assistant Professor

Student Directors:
Afrah B.Ed Natural Science
Anuraj B.Ed Social Science
Ranisha B.Ed Malayalam
Ayisha Jubna B.Ed Mathematics
Anjana B.Ed Physical Science
Rahma B.Ed English

The entire materials are prepared by the B.Ed students (2020-22) of Farook Training College, Calicut, Kerala.

It is expected that this will be a support for those who need simplified, concise but comprehensive study materials for their examination preparation. It is a smart footstep to self learning and peer learning.

A note of appreciation to all student teachers who are the workforce behind this great endeavor.

Team OCLP

FTC

B.Ed First semester Edu 04 Understanding Discipline and subjects.

MEANING OF SCHOOL SUBJECTS

- **A subject or a field of study is a branch of knowledge that is taught and researched at the school, college or university level.**
- **A school subject refers to an area of knowledge that is studied in school**
- **Humanist perspective - contribute to the pursuit of self-actualization, personal growth, and individual freedom**
- **Social efficiency - maintaining and enhancing economic and social productivity**
- **Social reconstructionist - emancipation and engender social agency**

DEFINITION FOR SCHOOL SUBJECT

- **A branch of knowledge or a body of knowledge that is being provided to its learner.**
- **A school subject refers to an area of learning within the school curriculum that constitutes an institutionally defined field of knowledge and practice for teaching and learning (Zongyi Deng, 2006).**
- **A school subject constitutes an organizing framework that gives meaning and shape to curriculum content, teaching, and learning activities (Karmon, 2007).**
- **Uniquely purpose-built educational enterprises, designed with and through educational imagination towards educative end (Deng & Luke, 2008).**

OBJECTIVES OF LEARNING SCHOOL SUBJECTS

- **To develop basic skills**
- **To enhance students' understanding of themselves, their society, their nation and the world**
- **To enable students to develop multiple perspectives on contemporary issues**
- **To help students become independent thinkers**
- **To develop in students a range of skills for life-long learning**
- **To help students appreciate and respect diversity in cultures and views in a pluralistic society and handle conflicting values.**
- **To help students develop positive values and attitude towards life**
- **To contribute to the pursuit of self-actualization, personal growth, and individual freedom.**

Nature of School Subjects

- **A learning tool**
- **Serves as criteria by which students learn**
- **Refers to a particular area of leaning within the school curriculum**
- **Has a specific code of conduct**
- **Aims to give intrinsically rewarding experience to students**
- **Contributes for self-actualization, personal growth and individual freedom**
- **Needs to be formulated according to the needs of students**
- **Derives content from a wide range of sources**
- **Constructed from the perspective of social efficiency**
- **Aims to maintain and enhance social productivity has close reference to the needs of occupation, profession, and vocation**
- **Involves the selection and arrangement of content of knowledge, skills and the transformation of that content**

A school subject constitutes an organizing framework that gives meaning and shape to curriculum content, teaching, and learning activities. School subjects are distinctive, purpose-built enterprises, constructed in response to different social, cultural, and political demands and challenges, and towards educational aims.

Major school Subjects: Languages

Role of Language in Human Communication

- **Vehicle of Thought**
- **Medium of Expression**
- **Medium of Communication**
- **Moral development**
- **Developing and Grooming One's Personality**
- **Child's Growth**
- **Bases of Education**
- **Medium of Literature**
- **Growth of Civilization**
- **Development of Peace**

Importance of language as school subject

- Develops the basic skills required in life
- Helps to develop concepts
- Constituent component of higher-order thinking skills
- The most important tool in daily living
- Basic means to understand different subjects
- Tool for making meaning
- Filter for assessing students' outcome

Areas of Languages Studies in School

- **Skills development in language learning – speaking, listening, writing, reading**
- **Teaching various texts of languages– drama/fiction, grammar, poetry, prose, narratives, etc.**
- **Creation and appreciation of language and literatures**
- **Multi and cross-cultural issues of languages**
- **Language research and current practices**
- **Socio-cultural issues in language learning**
- **Construction of language knowledge during the early years of life**

Areas of Languages Studies in School

- **Age wise language development.**
- **Differences between school and home language**
- **Usages of languages**
- **Language development and cognitive skills**
- **Development of languages**

Hence, language really does matter – not only in the language classroom, but across the whole curriculum. Language is more than communication skills. It is also linked to the thinking process. It is a tool for conceptualising, for thinking, for networking. Language supports mental activity and cognitive precision. It helps to express thoughts more clearly, to structure discourse and practise discourse functions

Academic Discipline

Meaning

- **The word ‘discipline’ is originated from the Latin word ‘disciplina’ , means *teaching or instruction*, which is rooted on another Latin word ‘discipulus’, means *pupil*.**
- **A branch of learning or knowledge**
- **It is a technical term for organization of learning and systematic production of new knowledge.**
- **Academic discipline pertains to the practice of study of a certain category of experience, its methodologies, how it goes about its pursuit of truth.**

Definitions

- **The study of any comparatively self contained isolated domain of human experience which possesses its own community of experts (Moti Nissani)**
- **A body of subject matter made up of concepts, facts, and theories, so ordered that it can be deliberately and systematically taught (John Walton)**
- **A field or branch of learning affiliated with an academic department within a university, formulated for the advancement of research and the professional training of researchers, academicians and specialists (Zongyi Deng)**
- **An academic discipline or field of study is a branch of knowledge that is taught and researched as a part of higher education (Anthony Biglan)**

- **According to M. S. Yadav and T.K.S Lakshmi (1995), discipline refers to a specific area of study, a branch of knowledge recognized by a certain distinctness, it reveals in its substance and methodology. A discipline is a deliberate differentiation of the knowledge base with a specific perspective in order to gain better understanding of the phenomenon under focus. According to them, the knowledge base represents the sum total of the human understanding of environment. Disciplines are derived from the knowledge base but get formulated in recognizable differentiated forms of both substance and methodology due to further specialization, diversification and differentiation**

Nature

- Discipline implies an order
- It involves deduction of more knowledge through organization of the existing knowledge
- It is related to construction of new knowledge
- Discipline is making some organization with the purpose of learning
- It is related to teaching learning process
- It is a body of specialised knowledge
- It has specific terminology

Characteristics of Academic Discipline

- **Disciplines have a particular object of research though the object of research may be shared with another discipline**
- **Disciplines have a body of accumulated specialist knowledge referring to their object of research, which is specific to them and not generally shared with another discipline**
- **Disciplines have theories and concepts that can organise the accumulated specialist knowledge effectively**
- **Disciplines use specific terminologies or a specific technical language adjusted to their research object**
- **Disciplines have developed specific research methods according to their specific research requirements**

- **Disciplines must have some institutional manifestation in the form of subjects taught at universities or colleges, respective academic departments and professional associations connected to it.**
- **A branch of learning or scholarly investigation that provides a structure for the students' program of study especially in the graduate and post-graduate levels.**
- **A field or branch of learning affiliated with an academic department of a university, formulated for the advancement of research**
- **Formulated for the professional training of researchers, academics and specialists.**
- **A branch of knowledge that is taught and researched as part of higher education.**
- **Individuals associated with academic disciplines are commonly referred to as experts or specialists.**

School Subjects and Academic Disciplines- Relationship

- **School subjects are derived from academic disciplines.**
- **School subjects are the basis for the development of basic information that will turn the learners into specialists in academic disciplines. School subjects constitute a faithful and valid introduction to the academic disciplines**
- **An academic discipline provides an end point for the formation of a school subject and school subject furnishes the avenue for getting to know the academic discipline.**
- **The central purpose of a school subject, like that of a discipline, is to initiate the young into the academic community of scholars. School subjects, therefore, are supposed to derive their life, from their related intellectual disciplines.**
- **Students are dealing with relatively simple ideas and methods in school subjects; they study the same ideas and methods known by experts in the academic disciplines.**

School Subjects and Academic Disciplines- Differences

Areas	School Subjects	Academic Disciplines
Aim	Aims at social reform and reconstruction	Development of the intellectual capacity of students and for the maintenance or reproduction of academic culture/knowledge.
Content	Formed by simple ideas and information. Includes practical knowledge, local community knowledge and technical knowledge	Complex theories and their implication, content related to the discipline and inter disciplines.
Focus	More concerned about meeting social, economic and political needs, takes care of the demands of the society and the individual.	More concerned about learning the content of the discipline, focus is narrow, but focused on in-depth knowledge of the discipline.
Competencies, skills	Skills required by the individual to live in the society like communication, comprehension etc	Competencies related to understanding and application of the discipline like experimentation, observation etc.

Areas	School Subjects	Academic Disciplines
Outcome	The result will be the formation of a better citizen involves basic skills. Scope is vast since the aims is broad based	Gives importance for the development of special skills, professional and vocational skills.
Scope	Flexible: changes as the aims of society change	Less scope for flexibility, working within the discipline, less scope for change of knowledge.
Nature	constructed based on the interests, attitudes and feelings of learners	Based on advancement of knowledge
Curriculum construction	Learner centered constructivist approach	Constructed according to the nature of discipline and advances according to the nature of disciplines
Area of operation	Limited to schools	For universities and other higher educational institutions.

Classification of Disciplines

Need and Importance of Classification of Disciplines

- To bring order to a chaotic world
- Assist in grasping relationships and trends
- Better understanding
- Makes study simple and clear
- Allows to gather more details about specific aspect
- Helps to formulate hypotheses
- Helps to produce knowledge easily

Different Classifications of Academic Disciplines

- The Approximate Classification of Academic Disciplines
- Aristotle's Classification
- Biglan's (1970) Classification
- Biglan-Becher typology

The Approximate Classification of Academic Disciplines

- **Fine Arts**
- **Humanities**
- **Social Sciences**
- **Sciences**
- **Mathematics**

Aristotle's Classification

- **Theoretical:** The aim of the theoretical is to know or to understand.
- **Practical:** Concerned with subject matter capable of change or alternation
- **Productive:** The aim of the productive is to make or create

BiglAn's (1970) Classification of Academic Disciplines

- **Pure vs applied**
- **Hard vs soft**
- **Concerned with life systems vs those not concerned with life systems**

Biglan-Becher typology

- **Hard-Pure disciplines**
- **Hard-Applied disciplines**
- **Soft-Pure disciplines**
- **Soft-Applied disciplines**

Interdisciplinary and Multidisciplinary

Interdisciplinary

- **Interdisciplinary involves the combining of two or more academic disciplines into one activity. It is about creating something new by thinking across boundaries.**
- **Interdisciplinary learning is required to solve complex problems and gain an understanding of issues as it may be beyond the ability of one single discipline**
- **To address an issue comprehensively and resolve a problem effectively**
- **Interdisciplinary Learning is a process of answering a question, solving a problem, or addressing a topic that is too broad or complex to be dealt with adequately by a single discipline, and draws on the disciplines with the goal of integrating their insights to construct a more comprehensive understanding**
- **A knowledge view and curriculum approach that consciously applies methodology and language from more than one discipline to examine a central theme, issue, problem, topic, or experience**

Characteristics

- **Interdisciplinary learning draws from more than one discipline. Various disciplines contribute towards interdisciplinary learning. The content drawn from each discipline enables the learner to understand varied perspectives of the issue being investigated.**
- **Interdisciplinary learning must have a definite focus which is beyond the sphere of a single discipline.**
- **Interdisciplinary learning is pragmatic in approach meaning it should promote new understanding or a new solution about the issue being investigated. Students using interdisciplinary approach to learn develop a problem-solving attitude.**
- **Interdisciplinary learning is a dialectical process requiring team work between people from more than one discipline.**
- **Interdisciplinary learning is integrative. Students and teachers integrate disciplinary perspectives deliberately and productively**
- **A remedy to the harmful effects of excessive specialization**

Examples

- **Women's studies**
- **Environmental studies**
- **Urban studies**
- **Ethnic studies**
- **Media studies**

Multidisciplinary

- **Multidisciplinary refers to the placing side by side of insights from two or more disciplines**
- **Different disciplines help to develop a detailed understanding of the topic being studied. These disciplines however make separate contributions unlike interdisciplinary learning where an interdependent relationship is emphasized. No integration between these disciplines is expected in a multidisciplinary approach**
- **According to Langa and Yost, multidisciplinary instruction is an approach that thoughtfully incorporates and connects key concepts and skills from many disciplines into the presentation of a single unit.**

- **According to Garner (1995), the term 'multidisciplinary' refers to a combination of various disciplines as independent and separate components of learning, which allows students to work within discipline specific parameters and attain discipline specific goals.**
- **Multidisciplinary learning "refers to the involvement of several different professional areas, though not necessarily in an integrated manner" (Shafritz, Koeppe, &Soper, 1988).**
- **"Multidisciplinarity", according to Klein, is a process for providing a juxtaposition of disciplines that is additive, not integrative; the disciplinary perspectives are not changed, only contrasted.**

CHARACTERISTICS

- **Multidisciplinary learning gives the learner varied perspectives of the topic. Different disciplines contribute towards enriched learning**
- **Same topic is studied from the viewpoint of more than one discipline**
- **Not integrative in its approach rather additive**
- **Highlights learning of topics from diverse disciplines**
- **Help the learner get a more comprehensive view of the topic of study**
- **Guided by holism rather than reductionism**

MULTIDISCIPLINARY	INTERDISCIPLINARY
Working with several disciplines	Working between several disciplines
Individual goals in different professions	Shared goals
Participants have separate but inter-related roles	Participants have common roles
Does not challenge disciplinary boundaries	Blurring of disciplinary boundaries
Summation and juxtaposition of disciplines	Integration and synthesis of disciplines
Participants maintain own disciplinary roles	Participants surrender some aspects of their own disciplinary role; but still maintains discipline specific base

Significance of Interdisciplinary and Multidisciplinary learning

- **Promote a broadened outlook based on the perspectives offered by more than one discipline**
- **Narrow allegiance to one discipline is prevented**
- **Encourage a more comprehensive way of looking at real life problems**
- **Bring an appreciation of other disciplines**
- **Foster sensitivity to ethical issues**
- **Enhance the ability to synthesize information**
- **Develop a new awareness of the meaningful connections that exist among the disciplines**

Multidisciplinary approaches have consistently showed positive learning outcomes, including increased creativity and innovation, critical thinking and higher-order thinking capacities, problem-solving abilities, teamwork, communication skills, more in-depth learning and mastery of curricula across fields, increases in social and moral awareness, etc., besides general engagement and enjoyment of learning. Research is also improved and enhanced through a holistic and multidisciplinary education approach.

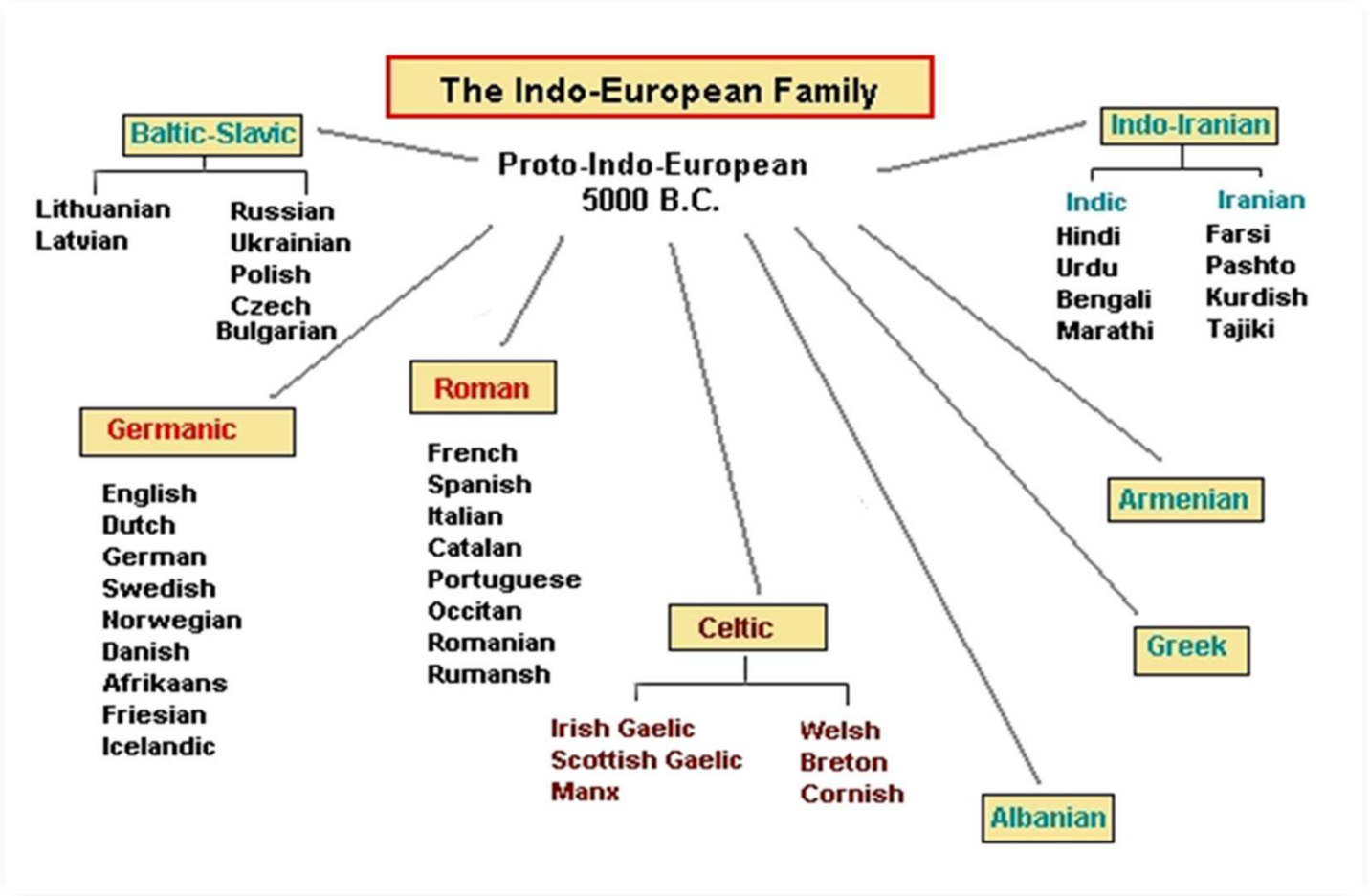
A holistic and multidisciplinary education would aim to develop all capacities of human beings -intellectual, aesthetic, social, physical, emotional, and moral in an integrated manner. Such an education will help develop well-rounded individuals that possess critical 21st century capacities in fields across the arts, humanities, languages, sciences, social sciences, and professional, technical, and vocational fields; an ethic of social engagement; soft skills, such as communication, discussion and debate; and rigorous specialization in a chosen field or fields (NEP 2020).

Unit 3

NATURE OF DIFFERENT SCHOOL SUBJECTS AND THEIR EVOLUTION

GROUP MEMBERS

1. Abhina.K
2. Aparna.T.T
3. Aysha Shadin.V.P
4. Hannalulu.M.S
5. Haritha.C
6. Harsha.U
7. Jaseela.P.K
8. Jineesh Kumar.K
9. Muhsina.V
10. Nourin Sharaf.K
11. Rahma.P
12. Raisa.C.N
13. Renu.G
14. Sahla.P.P
15. Shifali.R
16. Sreelakshmi


The Indo-European Family
Proto-Indo-European
5000 B.C.
Baltic-Slavic
Lithuanian
Latvian
Russian
Ukrainian
Polish
Czech
Bulgarian
Germanic
English
Dutch
German
Swedish
Norwegian
Danish
Afrikaans
Friesian
Icelandic
Roman
French
Spanish
Italian
Catalan
Portuguese
Occitan
Romanian
Rumansh
Celtic
Irish Gaelic
Scottish Gaelic
Manx
Welsh
Breton
Cornish
Albanian
Greek
Armenian
Indo-Iranian
Indic
Hindi
Urdu
Bengali
Marathi
Iranian
Farsi
Pashto
Kurdish
Tajiki

LANGUAGE

Language originated from the Latin word ‘Lingua' (tongue)

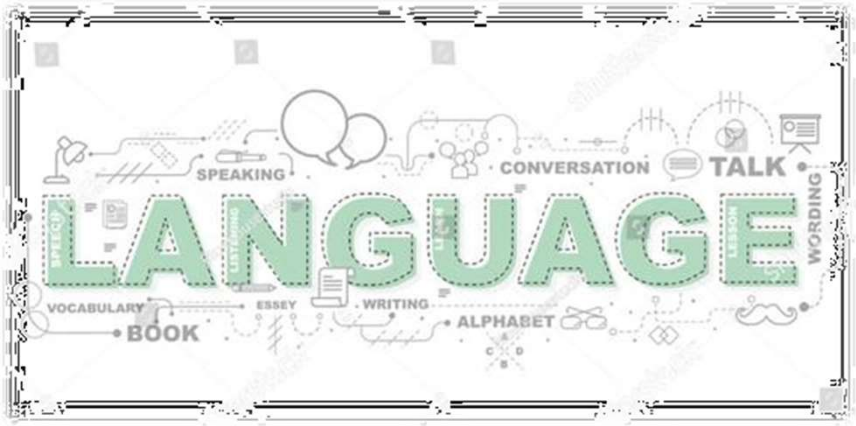
Medium for communication

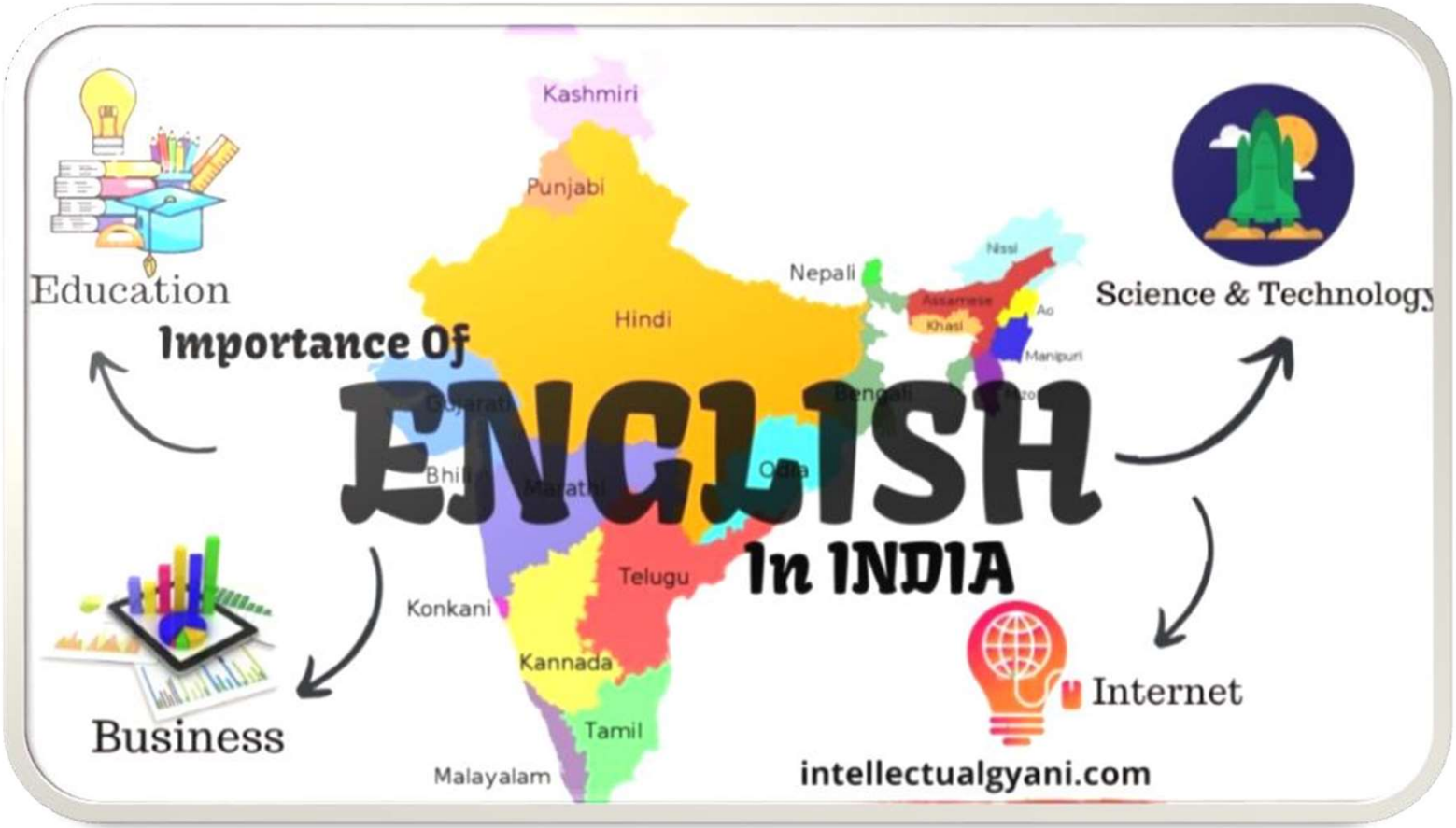
“Language is purely human and non instinctive method of communicating ideas, emotions and desires by means of voluntarily produced systom of symbols”

-Edward Sapir

NATURE OF LANGUAGE

- **Medium of communication**
- **Language is a system**
- **Unique**
- **Even changing/dynamic**
- **System of symbols**
- **Arbitrary**
- **Heterogeneous**
- **Universal**
- **Related to culture & society**
- **Language is creative**




Education
Science & Technology
Business
Internet
Importance Of
ENGLISH
In INDIA
Kashmiri
Punjabi
Nepali
Hindi
Nissi
Assamese
Khasi
Ao
Manipuri
Bengali
Gujarati
Bhili
Marathi
Odia
Telugu
Konkani
Kannada
Tamil
Malayalam
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IMPORTANCE OF ENGLISH IN INDIA

- Library language.
- Language for higher studies.
- Academic language.
- As an international language.
- It is a language of technology & science.

- Window of the world
- Language for employment
- Language for trade.
- As an international link language.
- As a foreign language.

ENGLISH EDUCATION IN PRE-INDEPENDENT INDIA

INTRODUCTION OF WESTERN EDUCATION AND MODERN IDEAS

- First Phase (1758-1812)
- Second Phase (1813-53)
- Third Phase (1854-1900)
- Fourth Phase (1901-20)
- Fifth Phase (1921-47)

FIRST PHASE (1758-1856)

1. **The English East India Company showed very little interest in the education of its subjects during this period.**
2. **Two minor exceptions :-**

Calcutta *Madrasah* set up by Warren Hastings in 1781 for the study and teaching of Muslim law and related subjects.

- **Sanskrit College at Varanasi by Jonathan Duncan in 1792 for the study of Hindu law and philosophy.**
- **3. Schools by Christian Missionaries**
- **4. *The Tutor* by John Miller published in 1797 from Serampore in Bengal**

SECOND PHASE(1813-1853)

1. The Charter Act of 1813

1. Macaulay's Minute on Education

- **According to Macaulay, from the new system would emerge a class who though Indian in blood and the colour of the skin, would be 'English in tastes, in opinions, in morals and in intellect'.**
- **English became the official language**

3. In 1844, Lord Hardinge decided to give government employment to Indians educated in English schools.

"I have travelled across the length and breadth of India and I have not seen one person who is a beggar, who is a thief such wealth I have seen in this country, such high moral values, people of such caliber, that I do not think we would ever conquer this country, unless we break the very backbone of this nation, which is her spiritual and cultural heritage and therefore, I propose that we replace her old and **ancient education system,** her culture, for if the Indians think that all that is foreign and English is good and greater than their own, they will lose their selfesteem, their native culture and they will become what we want them, a truly dominated nation".

2-2-1835

Lord Macaulay's Address to the British Parliament on ***2nd Feb 1835***

THIRD PHASE (1854-1900)

The Educational Despatch of 1854, also known as Wood's Despatch

- **Primary schools must adopt vernacular languages, high schools must adopt Anglo-vernacular language and at college-level English should be the medium of education, i.e. it recognised the importance to teaching of English, but at the same time, it also stressed on the teaching of Indian languages.**
- **In his despatch, he emphasised on the education of art, science, philosophy and literature of Europe.**
- **Provision was made for a systematic method of education from primary level to the university level.**
- **Vocational and women's education were stressed upon.**
- **Setting up new institutions like the University of Calcutta, the University of Bombay and the University of Madras in 1857 as well as the University of the Punjab in 1882 and the University of Allahabad in 1887**
- **Promotion and stress on teachers' training at all levels.**

The Indian Education Commission of 1882 or The Hunter Commision

- Appointed by Lord Ripon to enquire into the manner in which effect had been given to the principles of the Despatch of 1854

The Commission recommended that the newly founded local bodies (district boards and municipalities) should be entrusted with the management of primary schools.

FOURTH PHASE (1901-1920)

- Raleigh Commission – 1902
- 2. Sadler Commission – 1917

FIFTH PHASE (1921-1947)

- During this phase, education for the first time officially came under Indian control

- 1. **Wardha Scheme of Basic Education (1937)**
- A committee was appointed under the chairmanship of Dr. Zakir Hussain to formulate the scheme of basic education in India. The report submitted by the committee and published in March 1938, came to be known as Wardha scheme of education.

- Nationwide provision of free and compulsory education.
- Mother tongue should be the medium of instruction.

The conference endorsed Mahatma Gandhi's proposal that education should be centered around some productive form of manual work and be integrally related to the central handicraft.

- English was not included in the curriculum.

Sargent Plan of Education 1944

British Indian government had set up a committee with 22 members to prepare a comprehensive report on education. The report was submitted to the Central Advisory Board of Education (CABE) in 1944. The report was accepted by CABE, and it recommended for its implementation. This scheme of education came to be known as sargent plan of education 1944.

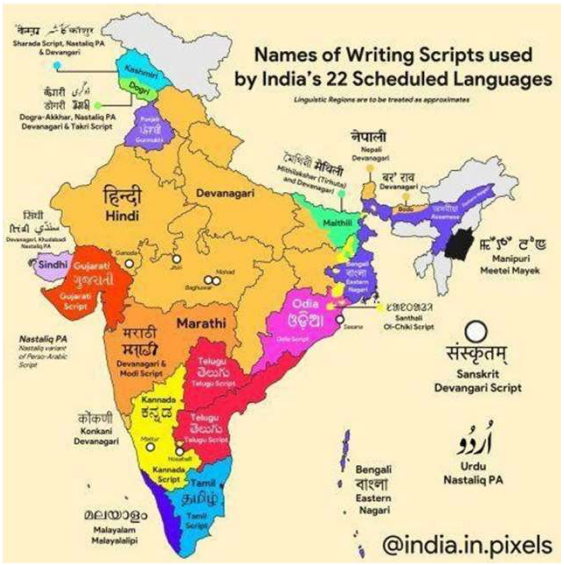
- It had 12 chapters which covered education from pre-primary to university level.
- The education was to be given in the mother tongue. English was not the part of junior basic schools, but the provincial governments had the power to take the final decision for the provision of English at the senior basic stage.
- Sargent commission recommended for Mother tongue to be made the medium of instruction. However, English was made a compulsory second language.

STATUS OF LANGUAGE

- The constitution of India adopted on November 26, 1949 in the constituent assembly.
- Came into effective on January 26, 1950
- ***Provisons about Language***

✓part XVII deals with the official language of union chapters

1. **Chapter 1 :** Language of the Unions (Articles 343, 344)
2. **Chapter 2 :** Regional languages (article 345-347)
3. **Chapter 3:** language of the supreme court, high court(article 348’349)
4. **Chapter 4:** Special Directives (articles 350-351)



THREE LANGUAGES FORMULA

- The first language to be studied must be mother tongue or the regional standard.
- The second language : In Hindi speaking states will be some other modern Indian language (MIL) or English, and, in non-Hindi speaking states will be Hindi or English.

  The third language in Hindi speaking states will be English or an MIL not studied as second language, and in non-Hindi speaking states English or Hindi not studied as the second language.

  Implications: Teaching of the **first** language commenced from class I, the teaching of the **second** language was recommended from Class VI or a bit earlier from class III, or at a convenient stage depending upon the resources of a state. The **third** language was also recommended to be taught from Class VI

LANGUAGE IN EDUCATION

- The Three Language Formula was first devised for school education by the Central Advisory Board of Education in 1956, subsequently modified by the Conference of Chief Ministers in 1961, and formalized by the (Kothari) Education Commission (1964-6).

✓Based on the following three factors:

- (a) recognition of the right of ethnic minorities to get educational instruction through their MT,
- (b) promotion of state official language as a major regional language for bringing the different ethnic groups of the region into the socio-cultural mainstream,
- (c) development of pan-Indian official language of the Union for the integration of the country as a polity.

LANGUAGE IN HIGHER EDUCATION.

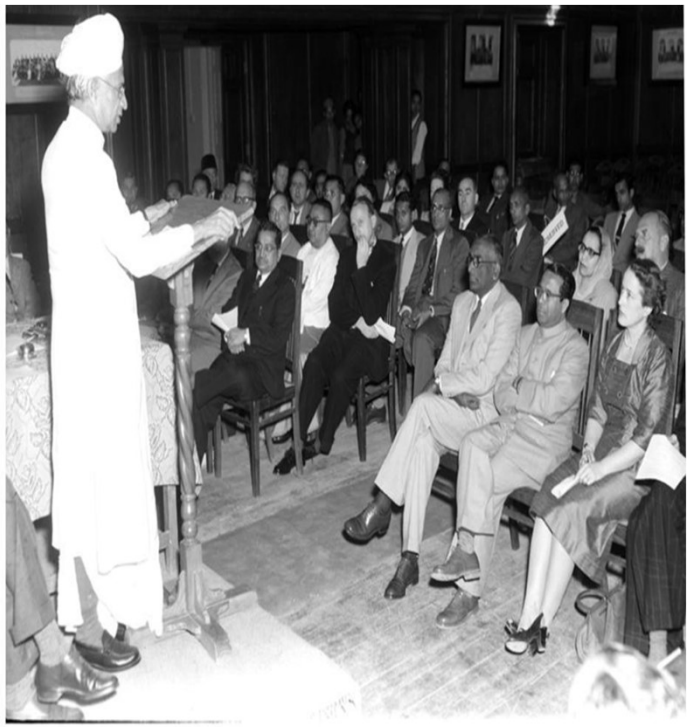
- Presently - an increasing trend to begin teaching of English as a subject from Class I, e.g. Delhi, Haryana and Bihar have begun to teach English as an additional subject from Class I from the year 2000, 2002 and 2003 respectively.
- The 1967 Official Language Amendment Act has ensured the continuation of English and this has affected the domain of education.

Debates regarding the medium of instruction in education in India since independence:

EducationCommission(1948) :

Dr . S. Radhakrishnan

"… English has become so much a part of our national habit … English cannot continue to occupy the place of state language as in the past"



- Higher education should be imparted through the regional language with the option to use the federal language as the medium of instruction either for some subjects or for all subjects.
- English Should be studied in the Higher Schools and in the Universities for keeping the students in touch with the livingstream of ever-growing knowledge.

2. Muthaliyar Commision

- **1952-1953**
- Secondary Education Commission
- Dr. A. Lakshmanswami Muthaliyar
- Three language formula
- Study of language
- Focus on English
- Sanskrit as third language
- Medium of instruction was regional language

3. KunzruCommittee(1955):

(a)Change in the medium of instruction at the university stage should not be hastened;

(b)Even after the change English should continue to be studied by all university students;

(c)English should be retained as a properly studied second language in our universities

4. Kothari Commission(1964-66):

* ***Daulath Singh Kothari***

* **National Education Commision**

(a)Concerted effort needed for Hindi/regional languages as the media of instruction;

(b)The medium of examination should be the same as the medium of instruction;

© English should be studied and taught as a library language;

d) No student should be allowed to graduate unless he is proficient in English

e). The universities should offer special courses in remedial English and English for Special Purposes

5. NationalIntegrationCouncil (1962):

- Jawaharlal Nehru
- Need to make regional languages as media of instruction at the university stage.

6. TheWorkingGroupof theUniversityGrantsCommission(1978):

(a)English has the advantage in publications and reference materials over RLs

(b)Employment prospects of students educated through English medium are better

(c)The shift from RLs to English in universities (instruction) ia a problem

(d)English continues to be the status symbol in society

NPE (1968) AND POA(1992)

- National Policy on Education and Programme of Action

  It also mentions that the Education Commission of 1964-66 “had called for a changeover to the regional language media over a ten-year time frame;” but that “progress in this regard has not been uniform or satisfactory

- The Ministry’s document Programme of Action (1992: 178-179) acknowledges that
  “university teachers having received education through English find it difficult to teach
  through Indian languages,” and that “Indian language-medium courses are generally not popular amongst the students because of lack of professional comparability and poor employment potential.”

- It is true that the higher we move in education and the more we aspire for professional

NPE (1986)

- English in higher education was viewed as India's window to' the world's technical and scientific information and knowledge'
- The Report of the Committee for review of *National Policy on Education 1986* notes that "the regional languages are already in use as media of education at the primary and secondary stages. Urgent steps should now be taken to adopt them as media of education at the university stage"

Proper coordination between Kendriya Hindi Sansthan, CIEFL, CIIL,CBSE and NCERT for ensuring uniformity in acquisition of language competency in the school system

- **Improvement in English Language competency through strengthening of Central Institute of English and Foreign.Languages (CIEFL), Regional Institute ofEnglish (RIE), English LanguageTraining Institutes (ELTIs) and DistrictCentres**

NCF (2005)

•Chairman Prof. Yash Pal, formerly

Chairperson of University GrantsCommission

- Assisted by Twenty-one focusgroups
- **Methodology**:

1. Analysis of existing curriculum,
2. consultation of commission and committees documents,
3. consultations withEducationists , planners,Administrators, Principals,headmasters, teachers, parents,students, general public

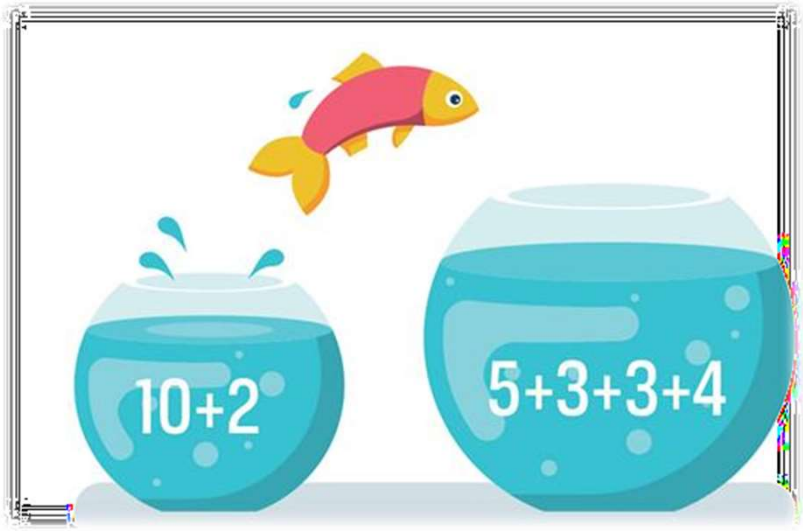
The importance of English language study has been well articulated in The National Curriculum Framework (2005) in the following words:

“English in India is a global language in a multilingual country. A variety and range of English teaching situation prevail here owing to the twin factors of teacher proficiency in English and pupils’ exposure to English outside schools.”

English in India is no longer a language of the colonial rulers rather it has become an integral part of the Indian multilingual repertoire.

NEP 2020

- **Language is linked to art and culture**
- **Different language 'see' the world differently**
- **Unfortunately Indian languages have not received their due attention and care**
- **India lost 220 languages in the last 50 years**
- **Teaching and learning of Indian languages need to be integrated with school and higher education at every level**



PERCEIVED BENEFITS OF ENGLISH LANGUAGE

1. English is a highly developed language and is at present best suited for the country's industrial and scientific progress
2. English is less divisive because of its neutral character
3. English enables the educated Indian to move about inside and outside the country
4. English brightens the students' prospects of getting prestigious jobs
5. English is still the language of administration at the Center and in many States.
6. Beneficial for good effective education
7. Helps the country in maintaining a competitive edge in the production technical manpower

PROBLEMS FACED

1. Very large population does not use English in daily life
2. Those who come through the RL medium find it difficult to cope with English medium at higher levels
3. There is a need for creating effective intermediate language courses so that the shift in

   medium at any stage doesn't remain a major hindrance
4. Need to perceive English as a functional language rather than as an elite language that creates socio-political conflict.

GUIDELINES

- **Connecting knowledge to outsideworld**
- **Shifting focus from rote learning**
- **Enriching curriculum beyond textbooks**
- **Making evaluation/monitoring moreflexible and integrated to classroomwork**
- **Nurturing and overriding identityinformed by caring concerns with indemocratic polity of the countryPrinciples**

- Constructivism: Believing in ability of child to construct the knowledge.
- Freedom to learn and participate
- Teacher as an autonomous facilitator
- Evaluation as tool to find strength rather than weaknesses
- Quality, Quantity andUniversalisation
- Commitment to democratic values and ways

OBSERVATIONS ABOUT INDIAN SCHOOL

- **Inflexible and resistant tochange**
- **Learning is isolated activity**
- **Discourage creative thinking**
- **Human capacity to create isignored**
- **Pretends to make futureignore present**
- **Lack of Equality, Equity and Quality**

- **Language: Rationale-**
- **Primary be covered in home language.-**
- **Allow multilingual expression-**
- **English need be studied.-**
- **In English medium schools Indianlanguages need be valorized.**
- **Performance should be assessed as language proficiency.**
- **Language teacher need to have high proficiency.**
- **Language skills cut across all subjects.-**
- **Three language formula be revitalized.**

CONCLUSION

- **English occupies a special place in the domains of education, law and administration.**

  It is widely believed that one cannot become an engineer, doctor, lawyer, scientist, pilot etc. Without proven proficiency in English.I

- **It has been absorbed in the multilingual fabric of India.**
- **Creative writings reveal that English in India is undergoing a process of decolonization.**
- **The main Educational goal is to minimize social and economic disparities and to create a positive discrimination in favor of the weak by giving each person an opportunity to learn this language.**

- **Intermediate programs of English need to be created which may enable students to smoothly switch overfrom a regional language to English as a medium of instruction in higher education.**
- **.The present system of English Language education is unable to meet the growing aspirations of the people in the new globilized contexts. Hence, the mushrooming of private English medium schools.**

മലയാളം ;

സ്വഭാവവും പരിണാമവും

ബിഎഡ്
മലയാളവിഭാഗം‘2020-22 ‘

- അഖിഷ
- അക്ഷയ
- അലീന
- അനുഷ
- ആ തിര
- ആയിഷ ഫിദ
- ബീവി ഷിഫാന
- ഫസീല
- ഹസ്ന
- ജിനി ത
- മിഥുൻ ഗോപി
- നീതു
- രനിഷ
- ഷിഹാബുദ്ദീൻ
- സ്വഫ് വാന

ചേരമാൻ പെരുമാക്കൾ
കേരള രാജ്യം
കൊണ്ടുനാട്
കൊല്ലം

ചെറിയ നാട്ടുരാജ്യങ്ങൾ
(ഉദ്ദേശം 1000 മുതൽ
ബ്രിട്ടിഷ് കാലം വരെ)

മലയാളം - പദോ ല്പത്തി

- മല + അളം (സ്ഥലം)
- മല + ആഴം = മലയാഴം -> മലയാളം
- ചേറളം (ചേറ് + അളം) -> ചേരളം -> കേരളം-> കേരള ഭാഷ

ഭാഷോല്പത്തി വാദങ്ങൾ

- സംസ്കൃതത്തിൽ നിന്ന് ജനിച്ചതാണ് മലയാളം (സംസ്കൃതജന്യ വാദം)
- മിശ്രഭാഷയാണ് മലയാളം (ഭാഷാ**മിശ്രവാദം)**
- **തമിഴിൽ നിന്ന് ജനിച്ച, തമിഴിൻ്റെ ഒരുപ ഭാഷയാണ് മലയാളം**
- **മൂല ദ്രാവിഡ ഭാഷയിലെ സ്വതന്ത്ര ശാഖ**

മറ്റ് ഭാഷയിൽ നിന്ന് പദ സ്വീകരണം

- സംസ്കൃതം – ആകാശം, സമുദ്രം
- പോർച്ചുഗീസ് - മേശ, കസേര
- ഇംഗ്ലീഷ് – വാച്ച്, സ്കൂൾ
- ഫ്രഞ്ച് – കഫേ, ബാങ്ക്
- ഹിന്ദി – ജവാൻ, കോടാലി

- പേർഷ്യൻ - തക്കാളി, പർദ , ഗുസ്തി
- അറബി - വർക്കത്ത്, നികുതി

മലയാളം - **ചരിത്രം**

- മലയാളം എന്ന **പേരിന് അത്ര പഴക്കമില്ല**
- **പാണ്ടി തമിഴ്, മലയാള തമിഴ്**
- **ദ്രാവിഡ ഭാഷ യുടെ പരിണിത രൂപം**
- **ദ്രാവിഡ ഭാഷാ ഗോത്രം- മലയാളം, തമിഴ്, കന്നട, തെലുങ്ക**
- **വിപുലമായ സാഹിത്യ ശേഖരം**

വിദ്യാഭ്യാസ ചരിത്രം

- **പ്രാചീന കാലത്തും ശക്തം**
- **സൂചന - സംഘകാല കൃതികൾ**
- **ക്ഷേത്രം**

1.കുലശേഖര കാലം
2. സ്വതന്ത്ര ഭാഷാ പദവി
3.വൈദികവിദ്യാലയങ്ങൾ

- കാന്തളൂർ ശാല
- പാർത്ഥിവപുരം ശാല
- തിരുവല്ല
- മൂഴിക്കുളം

പഠന വിഷയങ്ങൾ

- വ്യാകരണം
- **ദൈവശാസ്ത്രം**
- **ദർശനം**
- **നിയമം**

- ക്ഷേത്രങ്ങളിൽ വേദപാരായണവും മതപഠനവും
- മധ്യകാലത്ത് **പുതിയ തരം വിദ്യാഭ്യാസ സ്ഥാപനങ്ങൾ**
- **കർമ്മ സഭാമങ്ങൾ**
- **ശാസ്ത്ര സഭാവം**
- **സന്ന്യാസസഭാവം**

- അബ്രാഹ്മണർക്ക് എഴുത്തുപള്ളി
- വേദപഠനം
- **19ാം ശതകത്തിൽ ഇംഗ്ലീഷ് വിദ്യാഭ്യാസം**

കളരികൾ

- ആയോധന കലയോടൊപ്പം വടക്കൻ പാട്ടുകൾ
- വീരാ പദാനം
- വാമൊഴി

ബുദ്ധ വിഹാരങ്ങൾ

- ബുദ്ധ ദർശനം
- വിദ്യാഭ്യാസ രംഗത്തെ മാർഗ്ഗദർശനം

മദ്രസ്സ

- പ്രാഥമിക വിദ്യാഭ്യാസം
- മതപഠനം
- ഖുറാൻ
- **ഗണിതം**
- **കൃഷി**
- **വൈദ്യം**

ക്രിസ്ത്യൻ പള്ളികൾ

- സംഘടിത വിദ്യാഭ്യാസം
- നിരവധി സ്വകാര്യ വിദ്യാലയങ്ങൾ

മലയാള ഭാഷയുടെ പരിണാമം

- ശാസന ഭാഷ

1. തരിസാപ്പള്ളി ശാസനം

“ സ്വസ്തി കോത്താണു ഇരവിക്കുത്തൽ പല നൂറായിരത്താണ്ടു... ”

- **ഭാഷാ പരമായും ചരിത്രപരമായും പ്രാധാന്യം**

2. പാലിയം ശാസനം

- 3. വാ ഴപ്പള്ളി ശാസനം

1. **മലയാളഭാഷാ സ്വഭാവം വ്യക്തമാക്കുന്ന ഏറ്റവും പ്രാചീനം**

1. **നമഃശിവായ - മലയാളത്തിൽ തുടങ്ങുന്നു . മറ്റുള്ളവ സ്വസ്തി ശ്രീ**

1. **പ്രാചീന ലിഖിത രേഖ**

1. **കാവതി , പന്നിരണ്ടു**

4. ജൂത ശാസനം

- ചെമ്പു പട്ടയം
- ചരിത്രരേഖ

മലയാള ലിപി

- ലിപി – മാനവ ചരിത്രത്തിൻ്റെ താക്കോൽ
- ലിപി **പഠനത്തിന് സഹായകമായ പ്രഥമ രേഖ – അശോക ശാസനം**
- **BC 250**
- **ഒരു ഭാഷയുടെ പ്രായം നിർണയിക്കാൻ പഴക്കം ചെന്ന ലിഖിതങ്ങൾ**
- ബ്രാഹ്മി ലിപി

- വട്ടെഴുത്ത്
- കോലെഴുത്ത്
- മലയാണ്മ
- ആര്യ ലിപി

വട്ടെഴുത്ത്

- മലയാള ഭാഷയ്ക്ക് സ്വന്തമായുണ്ടായിരുന്ന ലിപി
- തെക്കൻ മലയാളം, നാനം മോനം
- എഴുത്താണി, ഉളി എന്നിവ ഉപയോഗിക്കുന്നു.

കോലെഴുത്ത്

- വട്ടെഴുത്തിൻ്റെ വകഭേദം
- കോലുകൊണ്ട് (നാരായം)
- പനയോലകളിൽ
- **അറബി മലയാളം , സർക്കാർ രേഖകൾ**

മലയാണ്മ

- കോലെഴുത്തിൻ്റെ വകഭേദം
- 1819 വരെ സർക്കാർ വക എഴുത്തുകൾക്ക്
- മലയാം തമിഴ്
- തെക്കൻ മലയാണ്മ
- സുഗമം

ആര്യ ലിപി

- ആര്യ എഴുത്ത്
- ഗ്രന്ഥ ലിപിയുടെ പരിഷ്കൃത രൂപം
- തുളു മലയാളം
- 1819- സ്വാതി തിരുനാൾ

മാനകീകരണം

- 1970- **1980. ലളിതവത്കൃത ലിപി**
- **രേഖീകൃത ലിപി**
- **അച്ചുകൾ**
- **1973 – പ്രായോഗികതലം**
- **അക്ഷര സംഖ്യ**

മലയാളം അക്ഷരമാല

- സ്വരാക്ഷരങ്ങൾ

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എ ഏ ഐ ഒ ഓ **ഔ അം അഃ**

വ്യഞ്ജനാക്ഷരങ്ങൾ

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ത ഥ ദ ധ ന

പ ഫ ബ ഭ മ

യ ര ല വ ശ ഷ സ ഹ ള ഴ റ

മലയാള ലിപി - യൂണികോഡിൽ

- 1993 **ൽ**
- **ISCII**
- **കമ്പ്യൂട്ടർ മാറുമ്പോൾ പ്രശ്നം**
- **2004 ൽ യൂണികോഡ്**
- **മലയാളം ഇൻ്റർനെറ്റിൽ വ്യാപകം**

മിഷണറിമാരുടെ സംഭാവന

- ലക്ഷ്യം – മത പ്രചരണം
- വിദ്യാഭ്യാസം, അച്ചടി വിപുലമായി
- പ്രാദേശിക ഭാഷയിൽ വിദ്യാഭ്യാസം നടത്താൻ വിദ്യാലയങ്ങൾ
- പത്രം, മുദ്രണാലയങ്ങൾ, നിഘണ്ടുക്കൾ, വ്യാകരണഗ്രന്ഥങ്ങൾ
- **രാജ്യ സമാചാരം 1847**
- **C MS press**
- **ബഞ്ചമിൻ ബെയ് ലി**

- ജ്ഞാന നിക്ഷേപം
- ഗുണ്ടർട്ട്

1. ചാർട്ടർ ആക്ട് 1813

- **പൗരസ്ത്യ – പാശ്ചാത്യ വിവാദം**

2. **മെക്കാളെ മിനുട് സ്** **1835**

- വിദ്യാഭ്യാസത്തിൻ്റെ **പാശ്ചാത്യ വത്ക്കരണം**

- 3. വുഡ്സ് **ഡെസ് പാച്ച് –(1854)**
- **4.ഹണ്ടർ കമ്മീഷൻ (1882)**
- **5.ഇന്ത്യൻ യൂണിവേഴ്സിറ്റി കമ്മീഷൻ (1902)**
- സ്ത്രീ വിദ്യാഭ്യാസം
- നാട്ടു വിദ്യാലയങ്ങൾ

- 6. **കൽക്കട്ട യൂണിവേഴ്സിറ്റി കമ്മീഷൻ (1917)**
- **ഇംഗ്ലീഷും ഗണിതവുമൊഴി കെ ബാക്കിയെല്ലാം മാതൃഭാഷയിൽ**
- **7.സഹീർ ഹുസൈൻ കമ്മിറ്റി (1937)**
- 7-14 വയസ്സ് വരെ **നിർബന്ധിത വിദ്യാഭ്യാസം**
- **ബോധന മാധ്യമം മാതൃഭാഷ**

- 8 .സാർജന്റ് കമ്മീഷൻ (1944)
- ബോധന മാധ്യമം മാതൃഭാഷ
- ഇംഗ്ലീഷ് – രണ്ടാം നിർബന്ധ ഭാഷ

സ്വതന്ത്ര ഭാരതത്തിൽ

1. രാധാകൃഷ്ണ കമ്മീഷൻ 1948-49

- സെക്കൻ്ററി, സർവകലാശാലാ തലത്തിൽ മാതൃഭാഷയ്ക്കും

ഹിന്ദിക്കും പുറമെ ഇംഗ്ലീഷും

- ബോധന മാധ്യമം ഇംഗ്ലീഷാ വണം
- പ്രാദേശിക ഭാഷയ്ക്കും പ്രാധാന്യമുണ്ട്.

2. സെക്കന്ററി എഡ്യുക്കേഷൻ കമ്മീഷൻ 1952- 53

- മുതലിയാർ കമ്മീഷൻ
- ത്രിഭാഷാ പദ്ധതി
- സെക്കൻറി തലം മുഴുവൻ മാതൃഭാഷ
- ബോധന മാധ്യമം - മാതൃഭാഷ

- 3. **ഇന്ത്യൻ എഡ്യുക്കേഷൻ കമ്മീഷൻ 1946-66**
- **കോത്താരി കമ്മീഷൻ**
- ബോധന മാധ്യമം – പ്രാദേശിക ഭാഷ

- 4. ദേശീയ വിദ്യാഭ്യാസ നയം 1968
- **5. ദേശീയ വിദ്യാഭ്യാസ നയം 1986**
- **6.NPE പ്രവർത്തന പരിപാടികൾ 1992**

- 7. **NCF 2005**
- ത്രി ഭാഷാ ഫോർമുല
- ആദ്യം പഠിക്കേണ്ടത് മാതൃഭാഷ / പ്രാദേശിക ഭാഷ
- ഹിന്ദി
- ഇംഗ്ലീഷ്

- കേരള പാഠ്യപദ്ധതി ചട്ടക്കൂട് 2005
- പ്രശ്ന മേഖലകളെ ക്രോഡീകരിക്കുന്നു
- വിശ്വമാനവൻ എന്ന കാഴ്ചപ്പാട് രൂപപ്പെടാത്ത അവസ്ഥ
- അധ്യാനശേഷി വികസനത്തിൻ്റെ അഭാവം
- സാംസ്കാരികം, സ്വാതന്ത്ര്യം , കൃഷി എന്നതിലെ അജ്ഞാനം

- 9.ദേശീയ വിദ്യാഭ്യാസ നയം 2020

- അഞ്ചാം ക്ലാസ്സ് കഴിയുന്നവരെ മാതൃ ഭാഷ

മലയാളം: ബോധന മാധ്യമം എന്ന നിലയിൽ

- ബോധന മാധ്യമം മാതൃഭാഷയാവണം
- ശാ സ്ത്രീയമായത്
- ചിന്താശേഷി **വികാസം**
- **മാതൃഭാഷയെ അറിയുന്നു**
- **ജനാധിപത്യപരം**

- പുരോഗതിയിൽ മുന്നിട്ടു നിൽക്കുന്ന. നിൽക്കുന്ന രാഷ്ട്രങ്ങളിൽ ഉന്നത

വിദ്യാഭ്യാസവും ഭരണവുമെല്ലാം മാതൃഭാഷയിൽ

- പഠ നം സുഗമമാക്കുന്നു.

- മാനസിക വികാസം

വിപുലമായ പഠനമേഖല

- പുസ്തക കമ്മിറ്റി
- ചരിത്രം
- സംസ്കാരം
- വിനോദം
- കത്ത്

- ആംഗ്യപ്പാട്ടുകൾ
- കഥകൾ
- കടങ്കഥ

- നിവേദനം
- യാത്രാക്കുറിപ്പുകൾ
- പ്രസംഗം
- അനുഭവക്കുറിപ്പുകൾ
- സമസ്യാപൂരണം

- നാടൻ പാട്ടുകൾ
- മറ്റ് ഫോക് ലോർ ഇനങ്ങൾ
- വിവിധ സാഹിത്യ മേഖലകൾ
- ഗവേഷണം
- കലകൾ

സ്ത്രീയ കലകൾ

പഠന വിഭാഗങ്ങൾ

- വ്യാകരണം
- ഭാഷാശാസ്ത്രം
- താരതമ്യ സാഹിത്യം
- പാശ്ചാത്യ – പൗരസ്ത്യ സാഹിത്യ സിദ്ധാന്തം
- നിരൂപണം

- വൃത്തശാസ്ത്രം
- അലങ്കാരം
- വിവർത്തനം
- പ്രാചീന സാഹിത്യം

ശ്രദ്ധയിലേക്ക്.....

- ഭരണഘടന മലയാളത്തിൽ
- സാങ്കേതിക പദങ്ങളുടെ പരിമിതി
- ഭാഷയെ മനസ്സിലാക്കണം
- പ്രവർത്തനങ്ങളെ ഊർജസ്വലമാക്കണം

MATHEMATICS

Group Members

- Neethu. P
- Nasereena EK
- Sruthy

Meaning of Mathematics

Etymology:

The word mathematics comes from the Geerk word ‘mathema’ which means ‘that which is learnt’. The word mathema is derived from ‘manthano’, in Greek it is ‘mathiano’ which means ‘to learn‘.

Definition of Mathematics

Oxford Dictionary: Mathematics is the science of measurement, quantity and magnitude.

Aristotle: Mathematics is the study of quantity.

Galilieo: Mathematics is the language in which God has written the universe.

Locke: Mathematics is a way to settle in the mind of children a habit of reasoning

Gauss: Mathematics is the queen of science and arithmetic is the queen of all mathematics.

NATURE OF MATHEMATICS

- Has its own language structure
- To develop self confidence, self reliance, sense appreciation and scientific attitudes among children
- Proper calculation will give an effective thinking power
- Science of logical reasoning
- Deals with theories and principle, which does not make doubt in the learner.
- Mathematical rules, formula and laws are universal
- Related with human life
- Science of precision and accuracy
- Transformation of abstract to concrete one
- It draws numerical inferences on the basis of given information and data

History of mathematics

PREHISTORIC PERIOD

- History of mathematics is the history of mankind
- No recorded historical data before 4000 BC

ANCIENT PERIOD (3000 BC-260 AD)

- Development of number system
- Creation of arithmetic techniques, tables, abacus and other calculation tools
- Measurement units devised to qualify distance, area, volume and time
- Calendar invented to predict seasons and astronomical events
- Geometrical forms and patterns appeared in art and architecture

GREEK ROMAN PERIOD (600BC-500 AD)

- Thales contributed deductive proof.
- Pythagoreans contributed much to arithmetic, algebra and geometry.
- They introduced the concept of irrational number
- Plato made a rule that only a ruler and pair of compasses need for geometric construction

- Hipparchus discovered the sun's annual orbit is eccentric
- He introduced the concept of similar triangle in trigonometry
- Hipparchus calculated the circumference of earth

MIDDLE AGES (ABOUT 500 AD-1440AD)

- This period is characterized by the contributions of Hindus and Arabs
- Concept of zero, negative numbers and decimal notation are introduced
- Brahmagupta, Aryabhata, Bhaskaracharya are major mathematicians of this period

RENAISSANCE PERIOD

- The 15^{th} and 16^{th} centuries are considered as renaissance period
- Algebra and trigonometry got attention during this period
- Copernicus's claim that the sun and planets do not revolve round the earth but the earth and other planets revolve round the sun gave astronomy a new dimension

17TH CENTURY

- John napier introduced the algebraic concept of logarithm
- He invented the mechanical computer
- Galileo Galiliei, John Kepler are some major mathematicians of this period
- Projective geometry (Deargues, Pascal)
- Algebraic geometry (Rene Descarte, Fermat)

- Algebraic geometry (Rene Descarte, Fermat)
- Probability (Fermat, Pascal)
- Statistics (Jahn Graunt)
- Calculus (Newton, Leibniz)
- Pascal invented an adding machine which can be used for adding or subtracting numbers upto six digits

18TH, 19TH CENTURY

- 19th century was consider as golden era of modern mathematics
- Refinement of existing branches like calculus, probability, statistics
- Introduction of new branches like set theory and abstract algebra
- Charles Babbage constructed a calculating machine

20TH CENTURY

- Abstract Algebra, Calculus, Topology got more levels of advancement
- First fully automatic electro mechanical computer was developed in 1994
- Operation research, Linear programming, Game theory were the new developments in Mathematics

Mathematicians

Arybahata

- He was the first among the greate indian mathematicians.
- He lived from 475 to 550 AD.
- He was the first person to present arithmetic, algebra, and geometr his astronomical calculations.
- He suggested the use of letters to represent unknowns.
- He gave a general solution of a linear indeterminate equation by the method of continued functions.
- He was the master of astronomy.

Bhaskaracharya

- He was born in 1114 AD.
- He wrote Sidhanta Siromani in 1150 AD at the age of 36 years.

- He presented a complete and systamatic explanation of the Indian method of Solving determinate and indeterminate problems.
- He is known for the poetic presentation of complicated and abstract problems.

Brahmagupta

- He was born in punjab in 598 AD
- He wrote Brahma- Sphuta-Siddhanta at tge age of 30.
- He was perticularly concerned with series and permutations.
- He was the first indian writer, who applied algebra to astronomy.

Ramanujan

- He was born in 1887 in Tamilnadu.
- He produced a number of results in the field of Definite integrals in the form of general formulae.
- Gobbacki conjecture is one of the importent illustrations of Ramanuja's contribution.

Euclid

- He was a Greek mathematicians who worked in Alexandria.
- The book 'Elements'which is a series of 13 books was his major work.
- LCM and GCF, prime numbers are infinite, introduction of prime and composite numbers, intresting account of theory of numbers, are the major contributions.

Pythagoras

- Between the year 580 and 568 BC he was born in samos.
- He was the first who discovered that earth is a sphere in space.
- He discovered the harmonic progression in the musical scale
- He invented the term odd and even numbers.
- Theory of irrational quantities, çonstruction of mundane figures, explanation of musical harmony was the major contribution.

SCIENCE

Group Members

- Ayisha Parveen N. P. (Physical Science)
- Bhavana P. (Physical Science)
- Megha T. (Physical Science)

Title

- **Subject nature and subject history of science**
  - Science
  - Nature of science
  - History of science education
    - A global view
    - Science education in India

Science

- ## Meaning
  - from Latin word *Scientia*- means knowledge
  - A systematic enterprise that builds and organizes knowledge in the form of testable explanations and predictions about the universe.
- ## Definition
  - “Science is a cumulative and endless series of empirical observations which result in the formation of concepts and theories, with both concepts and theories being subject to modification in the light of further empirical observations.Thus, science is both a body of knowledge and the process of acquiring and refining it”. - **Fitzpatrick**

Nature of Science

The modern vision about science has 3 dimensions ;

- **a method of enquiry (science as a process)**
- **a body of knowledge (science as a product)**
- **an attitude towards life**

- **Science as a process**

Science is more a cerb than a noun. In science, the way of gathering information,

thinking, measuring, problem solving are called process of science.

Observation, comparison, classification, communication, measurement, estimation and prediction are basic processes. The quality of

- **Science as a product**

Information acquired through various processes of science form the body of knowledge or product of science. Represents the “end” of scientific persuit**.**The cumulative nature of scientific knowledge indicates that it is added in a systematic way**.** Basic components are facts,concepts,principles, theories and laws. Since science is dynamic, existing theories shall be modified to incorporate new findings.

- **An attitude towards life**

A person who has learnt science has a scientific outlook in life. He believes in cause effect relationship- free from superstitions, false believes and prejudices. Has a methodical way of solving day to day problems. Has ope mindedness,curiosity, respect to others’ opinion if convincing.

History of Science Education

1. **A global view**
   - Roger Bacon was the first to lay emphasis on the value of experiments and inductive enquiry**.**
   - The establishment of the Royal society (1664)- a landmark
   - Established various scientific academies(17th century)
   - Industrial revolution(18th century) - brought science closer to the common man.
   - The university of London(1827) - taugt natural science

Contd...

- Rugby school of England(1849) - Botany, Geology, Chemistry, Physics
- British government appointed Sir. J.J.Thomson Committee(1916)
  - Report titled ‘ Natural Science in Education’ emphasised on Heuristic atmosphere in science classrooms.
- With the introduction of modern science curriculum and many methods and techniques of teaching science - rapid propagation of science education (20th century)

Science Education in India

- **Ancient Period**
  - Many famous higher education institutions
    i. Taxila (600 BC- 500 AD) - Medicine, Astronomy, Sociology, Law
    ii. Nalanda(425 AD- 1205 AD) - Medicine, Mathematics, Astronomy
- **Modern Period**
  - **First medical college-** Calcutta (1835) - Anatomy, Physiology, Chemistry, Botany, Natural philosophy and Medicine
  - **The first research institution in science** - ‘ The Indian Association gor the Cultivation of Science’ (1876) - Physical science
  - **First University College of Science**

Contd...

- **Report of Secondary education commission** (1953) - recommended teaching of general science as compulsory in secondary classes.
- **All India seminar on teaching of science** (1956) - discussions on almost all the aspects concerning the teaching of science in schools
- **National Science Policy Resolution** (1957) - envisaged the cultivation of science and scientific research in all its aspects.
- **Indian Parliamentary and Scientific Committee** (1961) - took up tje study of science education in schools- Lal Bahadur Shastri as chairman.
- **National Council of Educational Research and Training(NCERT)** - 1961- has a separate department of science education.
- **UNESCO Planning Mission**(1963) - experts of UNESCO planning mission visited India in connection with technical assistance projects.

Contd...

-- Gave recommendations on different issues of science education.

- **Indian Education Commission**(1964- 66) - recommended compulsory science education as part of general education and stressed that method of teaching science should be modernised andd should be linked with agriculture and technology.
- **National Policy on Education**(1986) - much stress on science education. Recommended that science education should be decided to enable the learner to acquire problem solving and decision making skills as well as the ability to correlate science with health, agriculture, industry and other aspects of daily life.Concerted effort be made to extend science education to all those who had to remain outside the pale of formal education.

National Curriculum Framework (NCF - 2005)

- Formulated by NCERT - Chairman Prof. Yash Pal
- Guideline for syllabus, textbooks and teaching practices in India
- **Basic criteria of validity of a science curriculum**
  a. **Cognitive validity -** content, process, language& pedagogical practices of the curriculum are age appropriate and within the cognitive reach of the child.
  b. **Content validity** - curriculum must convey significant and correct scientific information.
  c. **Process validity** - curriculum should engage the learner in acquiring the methods and processes that lead to the generation and validation of scientific knowledge and nurture the natural curiosity

NCF (contd…)

and creativity in science.

d. **Historical validity** - Science curriculum be informed by a historical perspective, enabling the learner to appreciate how the concepts of science evolve over time. Helps the learner to view science as a social enterprise

e. **Environmental validity** - science be placed in the wider context of the learner's environment, local and global, enabling him to appreciate the issues at the interface of science, technology and society and equipping him with the requisite knowledge and skills to enter the world.

f. **Ethical validity** - curriculum promote tye values of honesty, objectivity, cooperation and freedom from fear and prejudice.

The curriculum at different stages

- **Primary stage:** Nurturing the curiosity about the world around the child
- **Upper primary stage:** Learning the principles of science through hands on experiences and familiar observations
- **Secondary stage :** Systematic experimentation as a tool to verify theoretical bases.
- **Higher secondary stage :** Science should be introduced as separate disciplines with emphasis on experiments or technology and problem solving

Kerala Curriculum Framework - 2007

- Conceptualised on the basis of the recommendations of NCF- 2005
- **Includes;**
  - **Aim of science education-** development of scientific temperament, ability to examine problems of daily life as well as social issues scientifically, interest and abilities in technical and vocational fields.
  - **The importance of scientific enquiry**
  - **Learning methodology for science-** science learning is something that students do, not something that is done to them, should be an active learning process, must include individual learning, competitive and cooperative learning.

KCF (contd…)

- **The nature of science and science education**
- **The relevance of the history of science**
- **Relevance of laboratory**

RECOMMENDATIONS IN RESPECT TO SCIENCE

- Science will be introduced at middle stage only laying a solid foundation through interactive classroom learning in the earlier stage.
- Science curriculum will be reduced to make space for critical thinking, discovery based, inquiry based, discussion based learning .
- There will be no rigid separations between arts and sciences.
- Department of applied science will be introduced in all higher education institution.

2 Mark Questions

4 Mark Short Essays

1. Briefly describe the nature and history of science subjects. (2018)

10 Mark Essays

1. Briefly describe the subject nature and subject history of science and social sciences. (2017)

UNIT 4

Emerging subjects

Haritha T

EMERGING SUBJECTS

- Apart from the subject of core curricula of schools new subjects like Disaster management, Gemmology,Immunology,Bioinformatics etc …are included.

DISASTER MANAGEMENT

- Defined as the organization and management of resources and responsibilities for dealing with all humanitarian aspects of emergencies, in particular preparedness, response and recovery in order to lessen the impact of disasters.

- Natural disasters - Flood, drought, earthquake, etc

  Man made disasters- Fire, road accidents, industrial accidents etc

- Discipline that deals with and avoids risks.
- Introducing disaster management as a subject in school and college curriculum will create awareness in better management of disaster.

- Discipline involves

  -Preparing for disaster before it occurs.

  -Disaster response(emergency, evacuation, mass decontamination etc).

  -Supporting and rebuilding society after disaster have occurred.

- Disciplinary status of Disaster management-Emerging, applied and social science.
- Both an academic field of study and an applied field for the purpose of developing practitioners for careers in disaster related professions.

Role of schools in Disaster Management

- Plan for the safety measures
- Touch with various local agencies
- Train both their staffs and personnel
- Evaluate and improve plans

Circulate disaster plans in each class room

Advantages of disaster awareness education

- Provides contemporary and relevant information about local environment
- Participation in both pre and post disaster activities
- Technology to combat disaster
- Effective team work and spirit
- Decision making

NANOTECHNOLOGY

- Science and technology of small things(less than 100mm).
- Multidisciplinary and interdisciplinary area of inquiry and application.
- Wide range of applications in various fields such as electronics, optical communications and biological systems.
- Inclusion of nanotechnology in the science curriculum will foster interdisciplinary explorations of science.
- Interdisciplinary field that applies scientific and engineering principles to make and utilize things very small at nanoscale (one billionth of a meter)
- Calls upon many disciplines –biology, chemistry, electrical engineering, materials science, pharmacy, medicine etc to bring creativity and innovation to the investigation of the properties of materials when reduced to very small.
- Growing rapidly , possibilities for application of this knowledge are limitless, and future holds great potential

GEMMOLOGY

- Science dealing with natural and artificial gemstone materials
- Considered a geoscience and a branch of mineralogy.
- First gemmological laboratory- Landon in 1925
- Gemstones are basically categorized based on their crystal structure, specific gravity, refractive index, and other optical properties
- Special Gemmology- deals with categories and varieties of gemstones, synthetic stones and imitations. Conventionally, the organic substances such as amber, pearls, coral and the non-minerals are also included in this subject.
- Practical Gemmology –application of the knowledge of characteristics and properties of gemstones in identification or separation of synthetics and imitations. Diamond grading is included in this
- Today over 150 special minerals that posses the desirable attributes of beauty, rarity and durability are termed gemstones .
- It is the scientific study of these very special minerals that forms the basis of the science of gemmology

- Over recent years ever-intentive man has duplicated many of Nature's masterpieces and in the process created precise man made duplicates (synthetics) and very effective look-alikes (imitations)
- Numerous techniques have been discovered for artificially enhancing the beauty of lower quality gemstones. The identification of these offers a continuiing challenge to gemmology and gemmologist.

BIOINFORMATICS

- The combination of biology and information technology
- Recently developed science using information to understand biological phenomenon
- It involves computational tools and methods used to manage, analyse and manipulate volumes of biological data
- Regarded as a part of the computational biology
- Interdisciplinary field of science, bioinformatics combines computer science, statistics, mathematics and engineering to analyse and interpret biological data.
- Two important large scale activities that use bioinformatics are

  -Genomics: Sequencing and analysis of all of these genomic entities, including genes and transcripts in an organism

  -Proteomics: Analysis of the complete set of proteins.

- Introduced in 1990s
- Dealt with the management and analysis of the data pertaining to DNA, RNA and protein sequences
- Includes many other types of biological data like

  -Gene expression profiles

  -Protein structure

  -Protein interaction

  -Microarrays

  -Drug designing

  -Functional analysis of biomolecules.
- Various application includes

-Sequence mapping of biomolecules

-Identification of nucleotide sequences of functonal genes

-Finding of sites that can be cut by restriction enzymes

-Prediction of functional gene products

-Drug designing for medical treatment

IMMUNOLOGY

- Study of immune system and is a very important branch of the medical and biological sciences.
- The immune system protects us from infection through various lines of defence. If the system is not functioning as it should, it can result in disease, such as autoimmunity, allergy and cancer.
- Immunology builds on the knowledge gained in the course of study courses of biology, chemistry, biochemistry and physics.
- Branch of biomedical science that deals with the response of an organism to antigenic challenge and its recognition of what is self and what is not.
- Deals with the defence mechanisms including all physical, chemical and biological properties of the organism that help it to combat its susceptibility to foreign organisms, material, etc.

QUESTIONS

1. Give the names of any two emerging subjects……(1)
2. Briefly outline various emerging subjects……..(10)

SUBJECT NATURE AND EVOLUTION OF SOCIAL SCIENCE

GROUP MEMBERS

- AHSANA
- AKSHARA JILLS
- ANN MARY SHAJI
- ANURAJ
- FATHIMA THESNI UNNIAKKAL
- FATHIMATHUL HULOODA T.P
- KAVYA CHANDRAN
- MAJIDA SHIRIN T.K
- NIHALA K
- NILA.P.SHANTI
- NOUSHABI E.P
- SAMEER P.P
- SHAHANA P
- SHAMNAS T
- SOUFIRA K
- THASNI K.C
- TITNU SEBASTIAN

PRESENTATION BY

- ANN MARY SHAJI
- NILA P SHANTI
- FATHIMATHUL HULOODA
- NOUSHABI

MEANING AND NATURE OF SOCIAL SCIENCE

MEANING OF SOCIAL SCIENCE

- Social science is a generic term covering the scientific study of man.
- It is a branch of science that deals with the socio-cultural aspects of human behavior.
- A branch of science that deals with the institution and functions of human society and with the interpersonal relationships of individuals as members of society.
- The social sciences generally include cultural anthropology, economics, political science, sociology, criminology, and social psychology etc.
- This type of curriculum as introduced with a view to help children to develop an insight into human relationship ,social values ,attitudes and also to help them appreciate other cultures.
- In other words, a meaningful realization of the objectives of teaching social science will result in the ***''life skill education''.***

NATURE OF SOCIAL SCIENCE

- A unique combination of various disciplines
- A study of human relationship
- A study of man's development through ages
- A realistic course of study
- It forms an important part of the core-curriculum
- It includes commitment to action
- Aims at preparing the learner for wholesome social living

IMPORTANCE OF SOCIAL SCIENCE AS A SCHOOL SUBJECT

- It helps to form efficient citizens of democracy
- It develops national viewpoints.
- It makes man duty bound
- It enlightens the path of progress and advancement.
- It enhances the moral status of a society
- It helps to solve critical social problems.
- It develops imagination, critical thinking among students.
- It clarifies the duties of citizens towards human society
- It develops desirable attitudes.
- It promotes appropriate social behaviour.

- It promotes appropriate social behaviour.
- It develops the power of reasoning
- It develops the feeling of brotherhood.
- It helps to mould the individual according t the needs of the environment.
- It develops good habits and social efficiency.
- It socializes the students.
- It develops social and moral values.

OBJECTIVES OF TEACHING SCOCIAL SCIENCE

- To understand the society in which they live to learn how society is structured, managed, and governed, and also about the forces seeking to transform and redirect society in various ways.
- To appreciate the values enshrined in the Indian constitution such as justice, liberty, equality and Fraternity and the unity and integrity of the nation and the building of a socialist, secular and democratic society.
- To grow up as active, responsible, and reflective members of society.
- To learn to respect differences of opinion, lifestyle, and cultural practices.
- To question and examine received ideas, institutions, and practices.
- To undertake activities that will help them develop social and life skills and make them understand that these skills are important for social interaction

EVOLUTION OF SOCIAL SCIENCE AS A SUBJECT

DEVELOPMENT OF SOCIAL SCIENCE

According to the encyclopedia of the social science, the course of development of social science as follows;

A. OLDER SOCIAL SCIENCE

- Earliest of the social science Is politics or political science.
- Second of the social science is economics.
- The third of the older disciplines is history
- The fourth of the older social science is jurisprudence.

B. NEW SOCIAL SCIENCE

- The first newer social sciences is anthropology
- The second of the newer social sciences is penology
- The third of the newer social sciences is sociology

in short political science, economics, history, jurisprudence, anthropology, penology and sociology are treated as pure social sciences.

SEMI SOCIAL SCIENCE

- Science of ethics or moral science
- Education
- Philosophy
- Psychology

C. OTHER SOCIAL SCIENCE

- Social biology
- Geography
- Linguistics
- Social administration

CHRONOLOGY OF EVENTS IN THE HISTORY OF SOCIAL SCIENCE

EARLY DEVELOPMENT IN SOCIAL SCIENCE

484-425 BC – **HERODOTUS** -known as "the Father of History " and was the first historian known to Collect his material systematically wrote History on Persian Wars.

460-396 BC – **THUCYDIDES** -Father of scientific history. He wrote history based on witness report and Interviews. Distinguished clearly the causes and reasons for events.

427-347 BC – **PLATO**- Systematically and critically examined issues in philosophical study. Wrote on The theories of political science.

200-118 - **POLYBIUS**– known as historian of the historian. He found truth is the eye of history.

59-17- **TITUS LIVY**-known as Herodotus of Roman History. Adopted pragmatical method in Historical study. Believed in substantialism.

55-12- **CORNELIUS TACITUS**-Critical Historian.

MEDIEVAL PERIOD

354-430 AD- **ST. AUGUSTINE**- conducted historical study based on Intuition and Revolution

ISLAMIC PERIOD

973-1048 AD- **AHAMMED ALBIRUNI** – Founder of Indology, father of Geodegs. Wrote details For comparative studies on the Anthropology of peoples, religious and cultures.

1332-1406 - **IBN KHALDUN**- worked in areas of demography, historiography, sociology and Economics.

Pre 1700 - Europe was experiencing the 'Dark Ages'. Believed to be a time of backwardness And ignorance. Explanation used to be a matter of faith. No fact

16TH CENTURY

Machiavelli published the Prince(1513) Jean Boden published De La Republique.

1620-1780 - **AGE OF ENLIGHTENMENT** -Enlightenment started in Italy. Leaders looked back to the darkness of past(period of unknown) and wanted to shed light (knowledge)on Society. Thinkers like Francis Bacon, Rene Descrate, Kant, John Locke, Montesquieu, Voltaire, Rousseau, Issac Newton, and so on gave rise to changes and allowed Progress for the future. New scientific research and innovations developed.

RENAISSANCE PERIOD- Renaissance means Rebirth or Revival.

- Revival of classical knowledge
- Witnessed the Discovery and exploration of new contents
- Humanistic and Rationalistic approach
- New spirit in Art, Architecture, Literature and Learning
- Growth of the vernacular and scientific investigation

18TH CENTURY

1824 The term social science first appeared in a book written by William Thompson.

1797-1857 AUGUSTE COMTE – developed Sociology in 1838.

RANKE- Father of modern history.

KARL MARX – Marxism – Gave first general theory of social science .

Montesquieu and Voltaire broke a new path for Politics and History.

19TH CENTURY

Era of scientific discovery and invention period of industrial revolution

1858-1917 EMILE DURKHEIM – Developed positivism in general detail

MARX WEBBER – Made contribution to social science

20TH CENTURY

- statistics become free standing discipline of applied mathematics
- Sigmund Freud made impact on psychology
- John Dewey advocate view of scientific treatment of philosophy
- Three phases involved in research :Problematic situation, Isolation of data, Reflective.
- Quantitative and Qualitative method integrated in the study of human actions And its implications.
- New school for Social Research &International Institute of Social History started
- World famous universities conducted research on social science
- William Whewell developed consilience method means jumping together of Knowledge
- Science depended in social science methodology. Eg: Neuro Psychology.

MORDERN EDUCAION; DURING BRITISH RULE

CHARTER ACT 1813

- Accepting the suggestion of Charles Grant, the British parliament passed the Charter Act of 1813.
- Company will spend one lakh rupees annually on the education of Indians
- It encouraged opening of educational institution all over India
- Act also aimed at the revival and promotion of language and literature.

MACAULAY MINUTES 1834

- Thomas Babington Macaulay is the chairman of this commission
- Macaulay's minutes helped to change attitude of Indians towards education
- It helped general development of English and public education
- It promoted opening of educational institutions all over the British India.

WOOD DESPATCH 1854

- Sir Charles Wood made recommendation on education in India in 1854
- The document carrying the recommendations is known as “Woods Despatch”
- Wood’s despatch is also referred to as ‘Magna carta of English education in India
- It emphasized vocational education and education of women
- Introduced grant -in-aid policy and gave due importance to Indian literature, culture and philosophy
- It emphasized on training of teachers and stipends to the poor and deserving students
- It recommended the promotion of mass education by establishing schools, both public and private

INDIAN EDUCATION COMMISSION /HUNTER COMMISSION 1882

- Hunter commission was appointed in February, 1882 under the chairmanship of Sir William Hunter
- Focused on both the primary and secondary education in India
- Preference was given to literature candidates for government jobs in the lower level, along with expansion of primary school in backward district
- District and municipal boards were entrusted with the management of primary education under the Local Self Government Act. Funds were separated for rural and urban areas to avoid funds earmarked for rural school being misappropriated by urban areas
- Secondary school were to be established by private parties with funds provided by the government
- Missionary school were discouraged and Indian participation in the private school system was solicited by the raj. Special care was supposed to be taken in advancing the education for girls and women

SADLER COMMISSION/CULCUTTA UNIVERSITY COMMISSION 1917

- Appointed by the Government of India in 1917
- Dr. Michel Sadler was the chairman of Sadler commission
- The commission recommended the 10+2+3 pattern of education
- This commission gave some importance suggestion for improvement of Muslim education
- Provide women education .For that appointed lady teacher, provide different curriculum for girls, hostel facilities etc..
- It promote education of backward tribes.

HARTOG COMMSSION 1929

- Sir Philip Joseph Hartog committee was appointed by the British Indian government to survey on the growth of education in India.
- The Hartog committee highlighted the problem of wastage and stagnation in education at the primary level.
- The Hartog committee on education recommended for the promotion of technical and commercial education by universities to control the problem of unemployment.

SAGRENT REPORT 1944

- In 1944, the Central Advisory Board of Education was set up by the Government of India and submitted a comprehensive Report on Post-War Educational Development. The report is popularly known as the Sargent Report(under the Chairman of Sir John Sargent)
- It recommended the introduction of free and compulsory education for all Indian children in the 6-11 years age group
- Technical, commercial, agricultural and art education for full time and part time students
- Provision be made for social and recreational activities

SOCIAL SCIENCE EDUCATION IN POST INDEPENDENCE PERIOD OF INDIA

RADHAKRISHNAN COMMISIION 1949

- The Commission's 1949 report assessed the state of university education and made recommendations for its improvement in the newly independent India.
- The courses of study in the universities with special reference to the maintenance of a sound balance between the Humanities and the Sciences and between pure science and technological training and the duration of such courses.
- The provision for advanced study in Indian culture, history, literatures, languages, philosophy and fine arts.

MAJOR OBSERVATIONS AND RECOMMENDATIONS:

AIMS OF EDUCATION

- To teach that life has a meaning.
- To awaken the innate ability to live the life of soul by developing wisdom.
- To acquaint with the social philosophy which should govern all over institutions, educational as well as economic and political institutions.
- To train for democracy.
- To train for self development.

FUNCTIONS OF UNIVERSITIES

The commission laid the emphasis on the following functions of education in the view of the economic and political changes of the country.

1. The universities must develop a concept of the social order in the students. They must also develop value of democracy, justice and liberty, equality and fraternity – ideals of the Indian society.
2. Producing students who can adjust to society and bring about new changes.
3. Training leadership in the profession and in the public life is one of the central aim of the university education.
4. We are building a civilization, not a factory or worship. The major task of the education is the improvement of the character.
5. Developing appreciation of culture unity of India. It would be impossible to think of an Indians where no Mughals are ruled, where no Taj was built.
6. Developing individuals capable of understandings the spiritual heritage of the past.

OTHER IMPORTANT RECOMMENDATIONS

- Increase wages of teachers
- Importance to women education
- Evening colleges
- Formation of UGC(University Grants Commission

MUTHALIAR COMMISSION 1952-53

- CABE suggested- members were J. Christi, K.R Willium, K.L Srimali, M.T Byas, Anath Bose.
- Education is essential for the success of democracy and effective citizenship. It is needed for individual as well as social welfare.
- All the political, social, economic and cultural issues are intimately connected with education.

AIMS OF SECODARY EDUCATON

- To develop national and secular outlook
- To improve productive efficiency and raise standard of living.
- To improve technical skill and vocational efficiency
- Enrichment of cultural heritage
- Education for leadership
- Development of qualities for leadership
- Development of personality

KOTHARI COMMISSION (1964)

RECOMMENDATIONS

According to the commission the most important and urgent reform needed in education was to transform it and related it to the life, needs and aspirations of the people and there by make it a powerful instruments of social, economic and cultural transformation necessary for the realization of the national goals.

EDUCATION AND SOCIAL AND NATIONAL INTEGRATION

Social and national integration is crucial to the creation of a strong and united country, which is an essential pre-condition for all the progress. It has a varied content- economic, social, cultural and political and its different facts are closely interconnected.

KOTHARI COMMISSION PLAY A VERY SIGNIFICANT ROLE IN :

1. Introducing a common school system of education
2. Making social and national services an integral part of education at all stages
3. Promoting national consciousness

THE COMMON SCHOOL

It is the responsibility of the educational system to bring the different social classes and groups together and thus promote the emergence of an egalitarian and integrated society.

- Education will be open to all children irrespective of caste, community, religion, economic conditions or social status.
- Good education will depend not on class but on talent
- Education would meet the needs of the average parent so that he wouldn't ordinarily fail the need to sent his children to expensive schools outside the system.

SOCIAL AND NATIONAL SERVICE

For this purpose they recommended that some form of social and national services should be made obligatory for all students and should form an integral part of education at all stages. This can become an instrument to build character, improve discipline, inculcate a faith in the dignity of manual Labour and develop a sense of social responsibility.

- Labour and social welfare camps
- NCC (National Cadet Cops) was introduced at the university stage.

There are two main forms:

1. Encouraging and enabling students to participate in community living on the schools or college campus. Commission recommended that this pattern of hostel life should be introduced in the schools and colleges so far as possible.
2. Providing opportunities of participation in programs of community development and national service.

- Such participation can help to create possible attitudes towards social services and to develop closer ties between the educated person and the rest of the people.
- At the primary stage it will take the form of bringing the school closer to the community with an account on serving to community in suitable ways
- Labor service camps for secondary students to be organized by the state education department
- College students before he is awarded his first degree, to put in at least 60 Days of national service in one of three stretches.

NATIONAL POLICY ON EDUCATION (NPE) 1986

- The first NPE was promulgated in 1968 by the government of prime minister St. Indira Gandhi, and the second by Rajiv Gandhi in 1986.
- To bring about physical, emotional and ethical integration of individual with a view to evolving a complete man who possess the basic values and who is capable to giving a fuller response to social and environment challenges.
- To inculcate an individual spirit of truthfulness, temperance and courage.
- To cultivate a spirit of humanity, simple living, selfless service and sacrifice.
- To provide a background of humanities and social science as essential to retaining a human touch and mellow down the harshness of a mechanical world.
- To promote the study of classes and develop pride in national culture and heritage so that one may not lose one's moorings.

NATIOAL EDUCATION POLICY (PROGRAMME OF ACTION) 1992

- NPE 1986, its modified policy 1992 which is known as Programme of Action. POA was under PV Narasimha Rao Govt.
- The basic recommendation of POA of 1992 emphasized that education must play a positive and interventionist role in correcting social and regional imbalance , empowering women , and in securing rightful place for the disadvantaged and the minorities.
- It should take strong determination and commitment to provide education for all the priority area being free and compulsory education, covering children education for women's equality and its special focus on SC, ST and minorities.
- There was a need of sustainable development in quality education.
- With the advent of the NPE 1992 POA the quality of life an individual will be enhanced , social and economic human relationships will be maintained , education will be promoted and pride will be nurtured.
- Fostering social equality and embodying values and social and environmental man bring moral integration.

NATIONAL CURRICULUM FRAMEWORK 2005 (NCF)

- It was published by NCERT.
- Professor Yashapal was the chairman of NCF 2005

RECOMMENDATIONS

- Social science should focus on discussing social justice, equality, respect for diversity etc.
- Understand socio economic problems of India

GUIDELINES FOR IMPROVING THE CURRICULUM

- Develop social concept in children by social education
- Civics can be transformed in to political science
- To encourage the students to explore higher level of knowledge in different disciplines
- Include human rights and gender justice and other social issues.

SOCIAL SCIENCE AT SCHOOL STAGES

- **PRIMARY** : mitigation of natural and social environment taught through illustrations from immediate environment
- **IN CLASS 3RD TO 5TH :**environmental science (EVS) will focus on health of environment and urgency to solve it.
- **UPPER PRIMARY**: history, geography, political science, sociology and economics.
- **SECONDARY**: history, geography, political science, sociology and economics. It should include problems and opportunities they have.

KERALA CURRICULUM FRAMEWORK 2007 (KCF)

- Prepared by SCERT Kerala.
- The study of social science helps to understand social reality and equip him/ her to react to social situations.
- The curriculum revision of 1997 made effort to social science as activity based and process oriented.
- Stressed upon values and attitudes that inculcate in learning social science.
- Discussed integrating science and social science.
- Put forward utilization of local resources in order to facilitate the learning of social science.
- Social science integrated with languages and mathematics in 1st and 2nd standard.
- In the 3rd and 4th standard, science and social science were represented as environmental studies.
- 5th to 10th standards, physical science were separated from social science.
- In higher secondary classes completely subject oriented approach put forward.

NATIONAL EDUCATION POLICY 2020

- The National Education Policy 2020 (NEP 2020), which was approved by the Union Cabinet of India on 29 July 2020, outlines the vision of India's new education system.
- The new policy replaces the previous National Policy on Education, 1986.
- The policy is a comprehensive framework for elementary education to higher education as well as vocational training in both rural and urban India.
- The policy aims to transform India's education system by 2021. National Education Policy 2020 envisions an India-centric education system that contributes directly to transforming our nation sustainably into an equitable and vibrant knowledge society by providing high-quality education to all.
- It aims to increase state expenditure on education from around 4% to 6% of the GDP as soon as possible.