

Training of Key Resource Persons (KRPs) on Learning of Social Science through Information and Communication Technology (ICT) and Constructivist Pedagogy

**Dr. Vanthangpui Khobung
&
Dr. Sangeeta Pethiya**

Programme Coordinators
PAC 16.51



विद्यया ऽमृतमश्नुते



एन सी ई आर टी
NCERT

Regional Institute of Education (NCERT)

(A constituent unit of National Council of Educational Research and Training)

Ministry of Human Resource Development, Govt. Of India

Shyamla Hills, Bhopal, Madhya Pradesh

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Learning of Social Science through Information
and Communication Technology (ICT) and
Constructivist Pedagogy**

20-24 October 2017

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Sitting Left to Right

1. Monika D. Patel 2. Pragna M. Jethwa 3. Raxita Fulbariya 4. Priyanjali Shah 5. Dr. Sangeeta Pethiya (Programme Coordinator) 6. Mrs. Sarika C. Saju 7. Dr. Sanjay Pandagale 8. Prof. N. Pradhan (Principal) 9. Prof. L.K. Tiwary (Head, DEE) 10. Dr. Soyhunlo Sebu 11. Kalpana L. Dhodi 12. Gajanan Rangnath Waghmare 13. Santosh Shinde

Standing Left to Right

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Concept Note

Social Sciences in upper primary and secondary levels covers a wide area encompassing environmental, social, political and economic issue as well as fundamental geography and history. Knowledge imparted through Social Science is indispensable to building the knowledge base for a just and peaceful society. It also carries a normative responsibility of creating a strong sense of human values namely freedom, trust, mutual respect and respect for diversity. The realization of these is contingent upon many factors, most importantly the method of imparting social science understanding and knowledge in the classroom and outside classrooms.

Many researchers suggest that a constructivist method of teaching could improve students' social science understanding and skills. Constructivist teaching is based on the belief that learning occurs when learners are actively involved in a process of meaning and knowledge construction as opposed to passively receiving information; learners are the makers of meaning and knowledge. It fosters critical thinking and creates motivated and independent learners. This theoretical framework holds that learning always builds upon knowledge that a student already knows through which all learning is filtered. This method of teaching rely on guided discovery where the teacher avoids most direct instruction and attempts to lead the student through questions and activities to discover, discuss, appreciate, and verbalize the new knowledge.

In the approach to teaching including constructivism, integrating Information and Communication technologies (ICT) is considered to be an inseparable part. It brings an immense change and becomes indispensable parts of classroom pedagogy. The need to integrate ICT in Education is reflected in the various Government documents. The National Policy on Education in 1986, modified in 1992 stressed the need to employ educational technology to improve the quality of education. As a result of this, two major programmes i.e. Educational Technology and Computer Literacy and Studies in Schools were launched. These programmes paved the way for a more comprehensive centrally sponsored scheme – Information and Communication Technology at Schools in 2004. National Curriculum Framework 2005 also mentioned the significance of ICT in school education. ICT for quality education also figures in Government of India's flagship programme such as Sarva Shiksha Abhiyan (SSA) and Rashtriya Madhyamik Shiksha Abhiyan (RMSA). The report of Central Advisory Board of Education (CABE) on universal secondary education also stress on the importance of ICT. All these initiatives are inspired by the potential of ICT in improving quality of education and enhancing outreach. When effectively integrated into the classroom, ICT brings novelty entirely in the process of teaching and learning.

The use of ICT implies change in classroom pedagogy and teacher roles as well as new approaches to student-teacher interaction. It can provide teachers with the appropriate tools, resources and contexts to improve students' abilities to become active learners and prepares them to transfer what they have learned to new problems and contexts. It is

widely recognized that learners are motivated and purposefully engaged in the learning process when concepts and skills are underpinned with ICT and sound pedagogy. It supports learners but more importantly extends the reach of the population in ways we have yet to imagine. Effective teaching therefore becomes somewhat contingent upon the availability, selection and application of ICT and in its effective synchronization in the classroom teaching and outside. Exploring and integrating effectively and creatively the use of ICT in education becomes a pertinent exercise for teachers. Social Science teachers are also no exception to this exercise. It is therefore important to identify relevant ICT components for the teaching of Social Science and explore the possibility of its effective and appropriate integration into the teaching of Social Sciences. Further, teaching has research as its one important foundation. It is important to also look into how ICT is used in the course of research investigation by teachers teaching Social Science.

Thus, the aim of this training programme is to familiarize the teacher with constructivist pedagogy of teaching social science and the need of integrating ICT and its effective integration. These will help in redefining the role of teacher or instructor to be a guide or helper rather than the source of knowledge. The module and the training are expected to equip teachers to move to child centric approach from teacher centric and make learning joyful and more democratic.



ACKNOWLEDGEMENT

We would like to place our deepest appreciation to Honorable Prof. H.K. Senapaty, Director NCERT for motivating us and for being the constant source of inspiration in all our endeavors.

We owe a deep sense of gratitude to our respected Principal, Prof. Nityanand Pradhan, Regional Institute of Education, Bhopal who encouraged, guided and supported us at all stages of this programme.

We are indebted to Prof. I.B. Chughtai, Dean, Regional Institute of Education, Bhopal, whose moral support and encouragement with valuable ideas always helps us in all our endeavours.

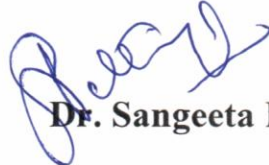
We are deeply grateful to Prof. L. K. Tiwari, Head DEE for his guidance, support and co-operation throughout the programme.

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We extend our thanks to all the faculties and staff of Department of Education in Social Science and Humanities, Regional Institute of Education, Bhopal, for their encouragement and support.


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PROGRAMME
**Training of Key Resource Persons on Learning of Social Sciences through
Information and Communication Technology (ICT) and Constructivist Pedagogy**

Venue: RIE, Shyamla Hills, Bhopal
Duration: 20-24 November 2017

Day one	Programme	Room No.
9:30-10:30	Opening Ceremony - Introduction of guests - Welcoming remarks Dr. Vanthangpui Khobung and Dr. Sangeeta Pethiya, Programme Coordinators - Address By the Principal Prof. N. Pradhan	53
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1:00-2:00	Lunch	
2:00-3:30	Team Building Activities and Activities on Learning Outcomes Dr. Vanthangpui Khobung and Dr. Sangeeta Pethiya	53
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11:45-1:00	Rubrics & Blueprints Dr. Sangeeta Pethiya	53
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11:00-11:15	Tea break	
11:15 --1:00	Gender in Social science Multiculturalism and Pedagogical processes in Social science Dr. Sarika Saju	53
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2:00-3:30	Final Reflection and Synthesis Action plan development and presentations	53
3:30-3:45	Tea Break	
3:45-5:30	Sharing of experiences Feedback from participants Main takeaways from the workshop Valedictory	53

(Dr Vanthangpui Khobung)

(Prof. N. Pradhan)

Nature of Social Science Knowledge

Dr. B.Ramesh Babu,
Professor of Education,
RIE, Bhopal

Human Knowledge is an interpretive understanding about the reality they encounter. The Reality they encounter is different in substance and characteristics. The difference in substance and characteristics makes every dimension of reality unique in nature. Therefore, human understanding of the reality should ultimately come up with an understanding of the nature of reality. This makes understanding more meaningful and comprehensive.

Human understanding is the result of interaction with reality. When human interacted with nature-physical, biological, etc – he/she understood and produced the knowledge of nature. This understanding resulted in the emergence of natural science knowledge. Like wise when humans interacted with fellow human beings knowledge of humans in institution and human institution was produced hence, we have social science knowledge.

The custodians of the knowledge of natural and social works alike from 17th and 18th century divided to assume the ‘status’ of scientist when potentially could adopt scientific method is explains and understanding the action and behaviors of the phenomena under study. This ambition to look at phenomena

Scientifically irrespective of its nature resulted in the emergence of monologue approach to all the phenomena. This entire ‘scientific’ enterprise in natural and social world was guided and glided by the philosophy of empiricism and its offshoot - positivism.

Empiricism proclaims that all knowledge ultimately originates in experience. All those who do not abide by the precepts of Empiricism are thus threatened by excommunication from the bosom of science. Empiricism is there fore, at the center of fundamental disputes. Scientific knowledge represents the systematic accumulation of facts of experience but the problem of interpretation arises precisely with the expression ‘facts of experience’.

Nature of knowledge: Determinants.

Nature of the knowledge of any discipline always invariably corresponds to the object of study under investigation and its nature. The object of study in natural science is NATURE and its nature is pre-determined. The behaviour of the natural Phenomenon is genetically programmed and hence predictable and casually explainable with precision. The casual explainability, it is believed, makes the natural science knowledge objective, universal and value-free.

However, in social sciences, a debate has been raging since the latter part of the 19th century about the suitability of this deterministic mode of explanation for the investigation of human action.

Regardless of this, some theorists and social scientists -representing all branches of social science- believe that physical events and human actions are essentially the same sort of things

and that monological explanatory principles are therefore applicable to such action. In fact human activities require an altogether different mode of scientific explanation.

Nature of Social Science Knowledge

Persistent efforts have been made in various disciplines of social science to discover their own NEWTON, to explain social phenomenon casually. This attempt is based on the assumption that social world of humans particularly their action are not qualitatively different from the natural world of animals and there behaviors. The positivism in social science, despite its enormous contribution in understanding social pheromone reduced the human world to the level of natural world. The positively approach is social science, in its over in enthusiasm to explain social phenomenon scientifically ignored or undermined the unique attribute of human individuals and there action. The unique attribute is “consciences”. This consciences differentiates human action from others there fore they cannot be ‘predictable’ as that of the action of natural phenomenon.

This fundamental difference in the nature of social phenomenon demands Qualitatively different approach that goes beyond causality, objectivity and scientificity (read natural science approach).

Characteristic features of social science

Science in it’s general sense, is systemic study of object or phenomenon under consideration. Science as a methodology to social phenomenon has the following Characteristic features.

Interpretive knowledge

Human actions and thereby emerging relations are not naturally programmed and are not meant to satisfy only natural desires or appetites. They are preceded and followed by motives, and purposes. Though human actions and relations are conditioned by natural and social environment, they are not completely determined by environment. Therefore, apart from ‘discovering’ the laws of human action, social science knowledge always includes ‘interpretation’ of the same. The historian J.G. Droysen (1808-84) stressed that knowledge gained by interpretation is entirely different from scientific knowledge. He explained it as a contrast between understanding and explanation. Our knowledge of historical, social and cultural facts essentially involves interpretation. This is the reason why it is radically different from the knowledge gained by the application of the scientific method in the natural science. Therefore, social sciences are always left with ‘hermeneutics space’. In the “what is history” E.H. Carr said, ‘the study of history was difficult to reconcile with the traditional empiricist theory of knowledge’. He further analyzed that historical facts need interpretation, as facts cannot speak unto themselves.

Value Leadenness:

Science particularly deals with facts, as if they are ‘out there’ as an independent entity. Therefore, positive science always claims to be value-free. However, social science that essentially deals with humans and human relations, which are based on values. In this regard E.H. Carr says, ‘our values are essential part of our equipment as human beings’. In fact, ‘our

picture of the facts of our environment' says Carr, 'is molded by our values'. As humans are valuational in nature their knowledge cannot be value neutral. It is value laden or value directed.

Conclusion:

Nature of social science knowledge is qualitatively different from natural science knowledge. The nature of social science knowledge goes beyond objectivity, testability and causality, and includes interpretation and value judgments. Therefore, the human agency, which constructs and transacts social science knowledge, should keep in mind the age in which they are living and should deal with the same in a Humanistic way.

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Constructivism and Classroom Teaching

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The term constructivism refers to the idea that individuals, through their interaction with the environment construct their own knowledge and meaning (Fosnot 1996; Steffe and Gale, 1995). This metaphor of construction comes from the idea that humans are builders, shapers, and designers, who throughout history have created artifacts from pots to skyscrapers. All these tangible products were and are still being built through the process of selecting the materials, arranging or mixing the materials together, resulting in a whole that is greater than some of its parts (Spivey, 1997). However, as humans we also create mental products or meanings as well as creating things. The emphasis of the constructivist theory is on the process, rather than the product of learning. A constructivist approach would have the student determine how much they have learned as well as the process by which they have come to know. Such a theory of knowledge and learning has significant implication for teaching. It changes the dynamics of the traditional classroom by empowering the learner as the focus and architect of the learning process while redefining the role of the instructor to be a guide and helper, rather than the source and conduit of knowledge. Constructivism has become an educational theory of choice for many within modern educational institutions. Gaining insight into its core pedagogical principles and how these principles determine/influence the major aspects of classroom instruction, e.g. role of the teacher, instructional strategy, evaluation, is important on the part of the teachers and the teacher-educators who really want to participate in this movement.

Assumptions of Constructivist Learning Theory

The constructivist learning theory is based on the following four major assumptions

- Knowledge depends on past constructions. We know the world through our mental framework and we transform and interpret new information through this framework.
- Constructions come through systems of assimilation and accommodation into our existing mental framework.
- Learning is an organic process of invention, not mechanical.
- Meaningful learning occurs through reflection and scaffolding of new knowledge upon existing framework of knowledge.

Characteristic of constructivist learning

- Goals and objectives are derived either by the learner or in negotiation with the teacher or system
- Teacher plays the role of facilitator, guide monitor and coach
- Learner plays a central role in mediating and controlling learning
- Knowledge construction and not reproduction is emphasized

- Knowledge construction takes place in individual contexts and through social negotiation, collaboration and experiences
- Learners' previous knowledge, beliefs and attitudes are considered in the knowledge construction process
- Learning environments are created where activities, opportunities, tools are provided to encourage meta-cognition, self-analysis, self-regulation, self-reflection and self-awareness
- Content, skills, tasks and learning situation are relevant, realistic, authentic and represent the natural complexities of the 'real world'
- Primary sources of data are used to ensure authenticity and real-world complexity
- Problem-solving, critical and creative thinking skills and deep understanding are emphasized
- Wrong answers provide the opportunity for insight into students previous knowledge construction
- Learners are encouraged to explore the new knowledge independently and to manage the pursuit of their goal
- Learners are provided with the opportunity for apprenticeship learning in which there is an increasing complexity of tasks, skills, and knowledge construction
- Conceptual interrelatedness and interdisciplinary learning are emphasized which reflex knowledge complexity
- Collaborative and cooperative learning are focused in order to expose the learner to alternative viewpoints and encourage social interaction
- Scaffolding facilitate to enable students perform just beyond the limits of their ability
- Assessment is interwoven with teaching

Constructivist Pedagogy

Instruction that is based on constructivist principles is extremely demanding of the teacher. Constructivist pedagogy is the link between theory and practice. Many theorists and practitioner (Brooks and Brooks, 1993; Driscol, 1994; Jonassen, 1991) have generated constructivist pedagogies with an array of results. While these pedagogies share a set of core design principles, the peripheral principles tend to vary greatly. The general theoretical and practical constructivist principles indicates that eight factors are essential in constructivist pedagogy (Brooks and Brooks, 1993; Larochelle, Bednarz and Garrison, 1998; Steffe& Gale, 1995).

Learning should take place in authentic and real-world environments

Experience, both socially oriented and object oriented, is a primary catalyst of knowledge construction. Experience provides the activity upon which the mind operates. In addition, knowledge construction is enhanced when the experience is authentic.

(i) Learning should involve social negotiation and mediation

While only social constructivism emphasizes social interaction as a basis for knowledge construction, cognitive and radical constructivism do assign social interaction a role. Social

interaction provides for the development of socially relevant skills and knowledge. In some cases, e.g. greetings, gender relations, dress, knowledge can only be attained through social contact. As an individual gains experience in a social situation, this experience may verify his knowledge structure or it may contradict those structures. If there is contradiction or confusion, then the individual must accommodate this contradiction in order to maintain an accurate or social model of reality. Language is the medium through which knowledge and understanding are constructed in social situations (Spivey, 1997).

(iii) Content and Skills should be made relevant to the learner

Constructivism emphasizes the concept that knowledge serves an adaptive function. The knowledge attained, i.e. content and skills, in order to enhance one's adaptation and functioning, must be relevant to the individuals need, understanding, and goal. This relevancy is likely to increase the individuals' motivation. Ultimately, experience with relevant tasks will provide the individual with the mental process and social experiences necessary for enhanced functioning within one's practical environment.

(iv) Content and skills should understand within framework of the learner's prior knowledge

All learning begins with an individual's prior knowledge, regardless of constructivist affiliation. Understanding a student's behaviour requires an understanding of the student's mental structure, i.e. an understanding of the student's understanding. When a student replies that the answer to $54 - 38$ is 24, the teacher must not think it immediately to be wrong, but rather try to understand the student's understanding of subtraction that has led to this answer. In this case, the student appears to be using the following rule of subtraction: "Subtract the smallest from the largest". Understanding the student's rule usage makes it much easier for the teacher to demonstrate the non-viability of the student's understanding. The teacher in this case, for example, may ask the student to count out 54 blocks, then take away 38 blocks from that pile, and finally count the remaining 16. Only by attempting to understand a student's prior knowledge will the teacher be able to create effective experiences, resulting in maximal learning.

(v) Students should be assessed formatively, serving to inform future learning experiences.

Constructivism asserts that the acquisition of knowledge and understanding is an ongoing process that is heavily influenced by a student's prior knowledge. Knowledge and understanding are not directly visible, but can be inferred from one's action. Thus, to take into account an individual's current level of understanding in this ongoing teaching-learning process, a teacher must continually assess the individual's knowledge. This formative assessment is necessary to create the subsequent series of experiences and activities for the students.

(vi) Students should be encouraged to become self-regulatory, self-mediated, and self-aware

The underlying tenet of constructivism is that learners are active in their construction of knowledge and meaning. This activity involves mental manipulation and self-organization of experiences; and requires that students regulate their own cognitive functions, mediate new meaning from existing knowledge, and form an awareness of current knowledge structures. Within a cognitive constructivist perspective, self regulation, self-mediation, and self-awareness would be subsumed under the construct of metacognition. Metacognition is considered an essential aspect of learning and consists of (i) knowledge of cognition, and (ii) regulation of cognition (Brown & Palincsar, 1987). Vygotsky (1978) believed that students construct mental signs or psychological tools to represent concepts and relationships, and that these tools are used to mediate cognition. Similarly, Piaget (1977) theorized that students mentally reflect on the use and nature of objects and then construct new knowledge by generalizing new relationships.

(vii) Teachers serve primarily as guides and facilitators of learning, not instructors

The role of the teacher, in constructivist perspective, is to motivate, provide examples, discuss, facilitate, support, and challenge, but not to transmit knowledge. In the cognitive constructivist perspective, the role of the teacher is to create experiences in which the students will participate that will lead to processing and acquisition of knowledge. On the other hand, social and radical constructivism argue that the only role of the teacher is to guide students to an awareness of their experiences and socially agreed-upon meanings. They advocate that there is no factual knowledge to transmit.

(viii) Teachers should provide for and encourage multiple perspectives and representations of content

The relationship of multiple perspectives and multiple representations is one of cause and effect. Experiencing multiple perspectives of a particular event provides the student with the raw materials necessary to develop multiple representations. These multiple representations provide students with the ability to develop more complex schemas relevant to the experience. In a nut-shell, multiple perspectives provide the students with a greater opportunity to develop a more viable model of their experiences and social interactions.

Constructing Knowledge in the Classroom

Research on instructional advancement of the last 30 years, particularly in the areas of cognitive processing, teacher effects, and teaching of cognitive strategies, revealed that the constructivist view affects all the important aspects of the teaching-learning process, including classroom environment. A constructivist classroom is no longer a place where the teacher pours knowledge into passive students, who wait like empty vessels to be filled. Students are actively involved in the learning process and given the opportunity to construct knowledge based on their own background. In specific terms, a constructivist classroom bears the following characteristics (Brooks & Brooks, 1993) :

Students' autonomy and initiative are accepted and encouraged

By respecting students' ideas and encouraging independent thinking, teachers help students attain their own intellectual identify. Students who frame questions and issues and then go about analyzing and answering them, take responsibility for their own learning and become problem solvers.

The teacher asks open-ended questions and allows wait time for responses.

Reflective thought takes time and is often built on others' ideas and comments. The ways teachers ask questions and the ways students respond will structure the success of student inquiry.

Higher-level thinking is encouraged.

The constructivist teacher challenges students to reach beyond the simple factual response. He encourages students to connect and summarize concepts by analyzing, predicting, justifying, and defending their ideas.

Students are engaged in dialogue with the teacher and with each other.

Social discourse helps students changes or reinforce their ideas. If they have the chance to present what they think and hear others' ideas, students can build a personal knowledge base that they understand. Only when they feel comfortable enough to express their ideas will meaningful classroom dialogue occur.

Students are engaged in experiences that challenge hypotheses and encourage discussion.

When allowed to make prediction, students often generate varying hypotheses about natural phenomena. The constructivist teacher provides ample opportunities for students to test their hypotheses, especially through group discussion of concrete experiences.

The class uses raw data, primary sources, manipulatives, physical, and interactive materials.

The constructivist approach involves students in real-world possibilities, then helps them generate the abstractions that bind phenomena together.

The 5 E's Model of Constructive Learning

The 5 E model of constructive learning envisages all the principles of constructivism.

1. ***Engage***– Students encounter the material, define their questions, lay the groundwork for their tasks, make connections from new to known, and identify relevance.
2. ***Explore*** – Students directly involved with material, inquiry drives the process, teamwork is used to share and build knowledge base.
3. ***Explain*** – Learners explain the discoveries, processes, and concepts that have been learned through written, verbal or creative projects.

4. **Elaborate**– Learners expand their knowledge, connect it to similar concepts, apply it to other situations can lead to new inquiry.
5. **Evaluate**– It is an on-going process by both instructor and learner to check for understanding. Rubrics, checklists, teacher interviews, portfolios, are used to evaluate and modify further instructional needs.

Conclusion

The constructivist view of the world as having reality only as it is understood by the learner signals a dramatic departure from theories which view the world as objective truth to be explained and accepted. This change represents a fundamental shift in the understanding of the learning relationship. It gives new status to the learner as the active constructor within the learning activity instead of being the passive respondent to externally determined world of education. Constructivism challenges learners to move beyond fact learning to more transportable cognitive understanding. It defines teaching to be an exciting process of joining in the intellectual discovery of others. The constructivist teacher becomes a partner who is given the opportunity to see familiar educational vistas through new eyes and in a real sense becomes a fellow learner with the students he serves. Becoming a constructivist teacher may prove a difficult transformation since most instructors are prepared for teaching in the traditional manner.

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Constructivist Pedagogical Processes in Social Science

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“ The teacher who is indeed wise does not bid you enter the house of his/her wisdom ,but rather leads you to the threshold of your own mind”

~ Kahlil Gibran.” The Prophet’

Introduction

It goes beyond saying that a conducive environment holds the key to effective learning. What forms this environment? First and foremost is the teacher and how he/she organizes teaching-learning in the class. Are ample opportunities to learners to voice their opinion provided? Are learners motivated and interested? Are interesting and innovative activities to hold the learners attention and engross their attention provided? Is technology integrated in the teaching-learning process? Are the learners assessed continuously and comprehensively and feedback provided to them?

Objectives

After going through the module, the teachers will:

1. Revisit teaching -learning methodologies
2. Will reflect on best practices and innovative techniques in teaching and learning of Social Science
3. Will be able to plan varying their teaching methodology, to make learning a joyful experience

Objectives of teaching Social Sciences

Respect for Constitutional Values

- Creating a Gender Neutral Society
- Imbibing Global Ethos
- Imbibing Values of Sustainable Sustenance
- Imbibing feeling of Nationalism and Internationalism
- Creating Holistic personalities
- Making learners aware of the past, and the lessons to be drawn from it.

Why do we need to incorporate diverse and innovative instructional strategies ?

Varying transactional strategies results in incorporating activities like debate, brain storming, group work, research based projects, interactive classes to name a few. This in turn results in:

1. Growth of self- control
2. Growth of self- management
3. Growth of Ambition
4. Growth of Independence. Increased Social interaction.
5. It reduces intimidation (influence by frightening) in the classroom which inhibits learning
6. Improved reading abilities

7. Systematic reproduction of knowledge
8. Ability to make conclusions and summarizing.

Importance of Instructional Strategies

“ Tell me and I’ll forget , show me and I’ll remember, involve me and I’ll understand”.

~Confucius (551-479 B.C)”

Chinese philosopher

How do Instructional strategy work?

- Educators focus on making connections between facts and fostering new understanding in students.
- Instructors tailor their teaching strategies to student responses.
- Encourage students to analyze, interpret, and predict information.
- Teachers throw open-ended questions and promote extensive dialogue among students.

Role of Instructional Strategies

- Are the key to learners being engaged in the classroom.
- Require Students to focus naturally during interaction/discussion of a particular concept
- Make learning participative.
- Help the students to organize their thoughts and information
- Help in visual representation of the concepts and thereby hone their ability to interlink concept and sub concepts.
- Keep the students engaged and thereby promote inclusive education.
- Make the learners more responsible , as the responsibility shifts from adults pushing the children to learning by self.
- Connects it to the daily social lives of the learners
- Let them see ‘ how they relate to His/ Her daily life? Example: Good governance, freedom of press, Reservations, Changing Climate , Global warming, Fiscal Policies- Does it affect them also?

How to make Geography, Economics and Political Science, History Relevant?

- Connect it to the daily social lives of the learners
- Let them see ‘how they relate to His/ Her daily life? Example: Good governance, Freedom of press, Reservations, Changing Climate , Global warming, Fiscal Policies- Does it affect them also?
- In Economics, let them experience the economic processes/activities that take place in the economy.
- Arouse a sense of curiosity in students and convince them that the past is also about processes and developments – what happened and why it happened, how societies progressed, what and how people earned for their livelihood, why they acted as they did, how kingdoms and empires were established, why people organised themselves together to rebel, etc.
- Instead of just teaching history a teacher must make an attempt to ‘do history’. By doing history students cease to become passive learners and therefore become active participants in the classroom. The various themes in the NCERT History textbooks provide ample scope to students involve themselves with the past through activity boxes, in-text questions, interpretation of visuals, source- boxes, photographs and

paintings, etc. It is expected that the teacher uses these judiciously to involve students in their understanding of the past. In discussing each theme the textual narrative is supplemented by extensive use of pictures, photographs, cartoons, extracts from a variety of original sources— eye witness accounts, travel literature, newspapers/journals, statements of leaders, official reports, terms of treaties, declarations by parties, and in some cases contemporary stories, autobiographies, diaries, popular literature, oral traditions. The effort again is to make learners read the sources, think of what they say, and why a thing is represented in a particular way. In many cases questions will be appended to pictures and extracts to allow a critical engagement with these.

Role of learning resources: Learning resources are instrumental in making learning effective. The teacher needs to ask these questions:

- What materials are required for effective learning?
- What materials will I make available in a given context?
- Will they provide opportunities for open ended discovery?
- The teacher must highlight the connection between text and context.
- Do my students have any previous experience with this topic?
- How relevant is this topic to my students?
- What connections to the students' lives do they offer?
- What connections do I expect the students to see?

Exemplary pedagogical processes For Social Science Classes

CAUTION: DO NOT Follow the instructional model of Reading the book, answering the questions, at the end of the chapter, listening to a lecture and taking a test. These **Do Not Provide** for a good instruction.

1. Lecture Method : The Good old 'ways' if interestingly crafted lesson remains to be effective but we need to have alternate instructional strategies. It cannot be the only way of teaching.

2. Jig Saw Technique:

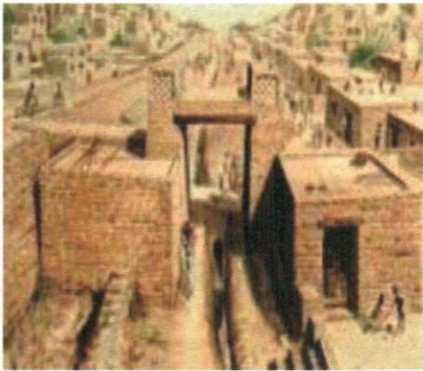
This is a very effective instructional strategy and can be used at secondary and senior secondary stage of learning.

Steps:

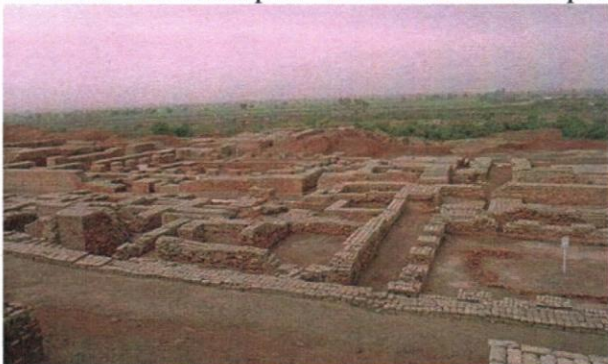
1. Divide the whole class into groups. Each group may have number of members as per the strength of the class.
2. Divide the Lesson among the groups.
3. Assign every member of base group with one major section. The group then discusses the portion allotted in temporary groups called expert groups. There they learn about their topic and discuss how to teach it to the students in their base groups.
4. Students return to their base groups and serve as the expert for their topics. Everyone then takes a turn teaching what he/she learned about his/her topic to members of the base group.
5. A class presentation by expert group leaders can also be initiated.
(Steps 4 and 5 provide learners to discuss and exchange knowledge.)

6. The teacher intervenes to enrich/ correct learning or puts up questions to understand whether the concepts have been understood by all.
7. A written test may thereafter be given to the entire class.

3. The Art of Questioning



Posing the right questions will enhance lateral thinking and perspective building of the learners. For Example: What idea about a place do you get looking at the image?



What idea of daily life can you gather from the image?



What could these used for during the Harrapan period?

4. Role Play’ or a ‘Play Act’ is an interesting activity which not only involves students in the activity thoroughly but also makes them perceptively understand the event, the characters associated with the event, and the ‘whys’ and ‘how’s’ of their roles in that event.

Planning role plays Scripting the entire Event Role playing a building: I am Ibadatkhana, I am the Monsoon. I am a Deciduous forest

Role playing Events: Presidential Elections, Parliament session

Role playing on Functioning : Of banks, self help groups.

5. Preparation of ‘Exit Card’ ‘Exit Cards’ are often prepared by students on topics which they have completed studying in all respect. (With Reference To The French Revolution)

1. An ‘Exit Card’ should include: (a) a list of the important terms and concepts, (b) meanings of those terms and concepts, (c) historical circumstances under which those terms and concepts were coined, (d) a chronological arrangement of the facts (serialisation of events) pertaining to the coining and propagation of the revolutionary ideas, (e) a collection of visual and assorted materials connected with those ideas, like, the pictures of individual philosophers, the Tennis Court Oath etc.. (f) summarised versions of all the important ideas, (g) self-constructed questions which could be asked on the topic, and finally, (h) an overall assessment of the contributions made by the philosophers to the revolution.

2. The teacher should allow students 2 to 3 days to prepare these ‘Exit Cards’ using the resources that are available in the school.

6. Discussion Method

While teaching ‘Money and ‘credit’ the teacher can form groups in the class to discuss the positive and negative role that credit plays.

While teaching Gender, Religion and caste in Political Science the teacher can discuss the impact of caste in Democracy.

While teaching French Revolution, the teacher can ask the students to discuss individual events which are labelled as ‘revolutions’, such as, the Green Revolution, the Industrial Revolution, the Russian Revolution, the Cultural Revolution, Mass-Communication or Information Revolution etc. Similarly, the teacher can initiate a discussion in the class to let students decide as to why India’s struggle for freedom should be regarded as a ‘movement’ as it is often done and not as a ‘revolution’.

In Geography, the advantages and disadvantages of Green Revolution can be discussed.

7. Conducting Debate

This has various advantages-

- Helps in Perspective building, analyzing, evaluating, critically evaluating , lateral thinking and logical reasoning.
- Social Sciences provide a variety of concepts/ideas which are debatable.

Some topics for debate :

1. Are we moving towards World Democracy?
 2. Are reservations for socially and economically backward classes justified?
 3. Volcanoes are only disastrous?
- Suggest more topics from your area of teaching

8. Live Play

- Conducting Lok Sabha elections from initial stage till declaration of results.
- Creating scenes on the actual working of the U.N.O.
- Youth parliament
- Local Self Governing Bodies Elections(Municipalities, District Council etc)
- Panchayati Raj proceedings(Meetings of the gram panchayat)

Encouraging self Exploration through the Newspapers. This will help in:

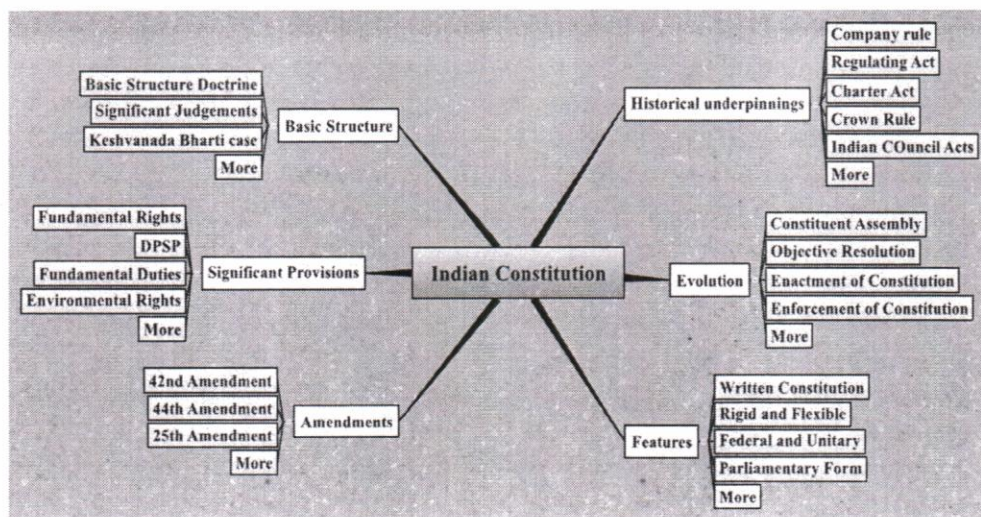
- Construction of Knowledge
- Strengthening of critical thinking and analysis.
- Doing away with rote memorizing.
- Improving imagination and expression.

Ways to use Newspapers

- Collect information Related to contemporary political happenings with reference to Indian democracy
- Information related to Money and banking
- Issues related to consumer rights
- International Relations
- News on Food Clothing
- Cultures /Places From around the world
- New Findings/ Discoveries in History and Geography

9. Concept mapping

Organizing concept through web charts can help in understanding them better. An example of Concept mapping could be the Constitution of India.



10. Using Humour in Classes: From Haha To Aha..... If they are laughing they are learning....

- Add Humour to Student Interactions
- Sprinkle classroom time and all student encounters with a little humour. Of 5 primary needs – survival, belonging, power, freedom, fun is one of them.
- It puts students at ease, gains attention, and shows the students that the teacher is indeed human. If the teachers and students can laugh together they can most likely work together.
- It is not a joke- but putting a positive spin on reality.
- Be careful: Negative humour deals with sarcasm and cynicism which is never appropriate in the classroom.

How humour works

- Teachers who uses humour in a positive way models for students
- Not to take small crisis too seriously.
- Creates a more welcoming address.
- It helps students to deal with stress, Enhances his/her self image and counteract depression, cuts boredom and anxiety.
- It stimulates creative and flexible thinking, improves interest and attention in the class.
- Helps in rapport building between the teachers and learners.

11. Either Or Game

- While teaching concepts through differentiation either or game can be played with the students
- Are you a mountain , valley or a plain?
- Are you a stalactite or a stalagmite?
- Are you Lithosphere, Biosphere or atmosphere?
- Are you a President, Prime Minister or a Speaker?
- Are you a village, city or a state?

12. Bell Story

Works wonderfully when revising a topic that has been completed in the class before the class concludes.

For Example: Rotation and Revolution

Our dear earth is such a wonderful planet.... Can anyone tell us Why?.... The story goes on till the teacher rings a bell for any other child to stand up and continue with the story....

Once upon a time there was a king. His name was Akbar... He ...

Similarly, Indian National Movement, Vietnam, or any other topic can be revisited.

Social Sciences can be further made interesting by

- Field Trips- Zoo, Museum etc.
- Listening to speeches
- Watching Videos
- Watching subject related movies
- Taking learners to Social science lab and teaching through 3 –D models.

- Giving Innovative assignments and projects. Ex. Prepare a brochure for the city of Harrapa for the tourism department.
- Make coins of the Medieval period. Note the images and the script used. Comment on the same.

Towards Excellence....

- Network With colleagues about best Teaching Practices
- Reflection after a lesson is taught (Self Review) can improve classes substantially.
- Build a repertoire of techniques , skills, and strategies through Group discussion and brainstorming with co teachers.

Let us Make Social Science happening in School.....Social Science Clubs must be formed and work actively. They can be assigned responsibility to

- Celebrate /Mark important Historical events in the school.
- Celebrate India's Diversity through Cultural Fiesta(Include diverse food, dresses, language, songs, jewelry, dance etc.)
- Prepare Collages on recent happenings related to their Curriculum.

Conclusion:

Thus, we can conclude that introducing topics creatively. It could be through a short story, newspaper article, learner's experiences, showing a video to generate curiosity and interest on the topic/concept, providing short summary of previous lesson ,using different teaching methods like ICT (Power point presentations, use of smart classes, videos, creating a blog, using podcast to name a few) will break the monotony of chalk and talk style of teaching. Various student-centric activities like - discussions on current topics, brain storming on controversial issues, debate on conflicting opinions, mapping of important concepts, chart preparation, role play, poster preparation can be conducted inside the classroom. Activities outside the classes can also be conducted. These can be-organizing trips to historical places, legislative assembly, municipal office, gram panchayats, primary health centers, anganwadi, consumer courts, banks, farm lands to name a few. This will break the monotony of lecture style of teaching. It will provide rich and varied experiences to the learners. It will also lead to joyful learning as it will arouse the interest of the learners in the subject and thereby involve them in the learning process. Thus, it will help in deepening learning among the learners. Use of newspapers, magazines, books and other related articles, using documentaries, films in the teaching -learning process will enable to live events. Besides, creating a social science laboratory and making it a happening place for teaching and learning of Social Sciences will lead to looking forward to Social science classes by learners. Effective use of teaching -learning material/center in the classroom will lead to experiential learning. It will go a long way in building the conceptual understanding of the learners and in developing their own views, ideas and opinions on social issues and concerns.

Besides, It is very important to give learners an opportunity to express their opinion and viewpoint. The teacher should also acknowledge, appreciate and motivate learners when they express their opinion. This will encourage them to keep thinking and speaking. Not giving importance to learner's opinion may discourage them and they may become reluctant to respond in future. Incorporating these transactional strategies will surely result in joyful learning.

Web 2.0 technologies: An innovative teaching-learning platforms

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Introduction

Today's world is a world of technology and education is not indifferent to it. We always suggest our teachers to use ICT in education. However, use of ICT in education is depends on availability of hardware/software and the knowledge as well as effective use these hardware/software. It can be said that the first part related to infrastructure is beginning to reach to the schools due to intervention of SSA, ICT@schools project and various other government interventions. However, there is a need to concentrate on second part related to effective use of ICT in education, which depends upon proper training. Normally, teachers have often been provided with inadequate training for this task.

Faced with these challenges, how can teachers integrate technology into their teaching? An approach is needed that treats teaching as an interaction between what teachers know and how they apply what they know in the unique circumstances or contexts within their classrooms. There is no "one best way" to integrate technology into curriculum. Rather, integration efforts should be creatively designed or structured for particular subject matter ideas in specific classroom contexts. Honouring the idea, that teaching with technology is a complex, ill-structured task; approaches to successful technology integration require.

At the heart of good teaching with technology are three core components: content, pedagogy, and technology, plus the relationships among and between them. The interactions between and among the three components, playing out differently across diverse contexts, account for the wide variations seen in the extent and quality of educational technology integration. These three knowledge bases (content, pedagogy, and technology) form the core of the technology, pedagogy, and content knowledge (TPCK) framework.

Nowadays with the invention of web 2.0 technology, this is also not a big issue. Web 2.0 technology opened the doors to create potential multimedia content at various platforms easily and free of cost.

What is web 2.0 technology?

Web 1.0 was read-only or static where internet users went online to find information. With Web 2.0, which is read/write or dynamic, people have become active participants and content creators. They not only find information on the Internet, but they also create and share content. The term Web 2.0 was coined in 1999 to describe web sites that use technology beyond the static pages of earlier web sites. It is closely associated with Tim O'Reilly because

of the O'Reilly Media Web 2.0 conference, which was held in late 2004. A Web 2.0 site may allow users to interact and collaborate with each other in a social media dialogue as creators of user-generated content in a virtual community, in contrast to websites where people are limited to the passive viewing of content.

Web 2.0 websites allow users to do more than just retrieve information. By increasing what was already possible in "Web 1.0", they provide the user with more user-interface, software and storage facilities, all through their browser. This has been called "network as platform" computing. Web 2.0 technologies have allowed users to easily publish content online and to connect and network with other people from all over the world who have similar interests. The use of tags particularly enables us to collectively categorize and find content easily. Concisely, Web 2.0 could be characterized by openness, user participation, knowledge sharing, social networking and collaboration, user-created content, and folksonomy (Alexander, 2006; Brown & Adler, 2008; Downes, 2005; Thompson, 2007; Richardson, 2009). Popular examples of Web 2.0 include social networking sites, blogs, wikis, video sharing sites, social bookmarking, etc.

Web 2.0 technologies in teaching and learning

Web 2.0 technologies provide teachers with new ways to engage students, and even allow student participation on a global level. By allowing students to use the technology tools of Web 2.0, teachers are giving students the opportunity to share what they learn with peers. Web 2.0 calls for major shifts in the way education is provided for students. One of the biggest shifts that Will Richardson points out in his book *Blogs, Wikis, Podcasts, and Other Powerful Web Tools for Classrooms* is the fact that education should be collaboratively constructed. This means that students, in a Web 2.0 classroom, are expected to collaborate with their peers. By making the shift to a Web 2.0 classroom, teachers are creating a more open atmosphere where students are expected to stay engaged and participate in class discussions. In fact, there are many ways for educators to use Web 2.0 technologies in their classrooms.

Web 2.0 technologies have "blurred the line between producers and consumers of content and has shifted attention from access to information toward access to other people" (Brown & Adler, 2008, p. 18). Emphasizing a participatory culture, Web 2.0 technologies encourage and enable teachers and learners to share ideas and collaborate in innovative ways. They also force educators to rethink the way we teach and learn and to transform our education practices so that we can support more active and meaningful learning that involves "learning to be" as well as "learning about."

Web 2.0 has the potential to create more interactive and powerful learning environments in which learners become knowledge creators, producers, editors, and evaluators (Richardson, 2009). Learners' critical thinking skills can be enhanced through the opportunity to regularly compare their own contributions to those of their peers, and the affirmation of their relative standing in the class may be powerful motivation for learning (Hurlburt, 2008).

Thus, Web 2.0 technologies has the ability to “support active and social learning, provide opportunities and venues for student publication, provide opportunities to provide effective and efficient feedback to learners, and provide opportunities to scaffold learning in the student’s Zone of Proximal Development” (Hartshorne & Ajjan, 2009; Vygotsky, 1978). In addition, Web 2.0 provides numerous opportunities for social interactions and collaboration among students, teachers, subject matter experts, professionals in different fields, as well as a host of others with related interests.

Benefits of using web 2.0 technologies in teaching

The major benefits of using Web 2.0 technologies in teaching include (1) interaction, communication and collaboration, (2) knowledge creation, (3) ease of use and flexibility, and (4) writing and technology skills.

1. **Interaction, communication and collaboration:** using Web 2.0 technologies in teaching helps to build a sense of community, increases interaction and communication among the instructor, students, and other people, and promotes collaboration and resource sharing.
 - *If used correctly, they can help develop a better sense of connectivity between students and teachers and afford students opportunities to connect and communicate with classmates and resources throughout the world.*
 - *They reduce the distance between teacher and students.*
 - *Students learn about new ways of collaboration.*
 - *Students and teachers see learning as a more social process. It's not just the book and yourself; its collaborative meaning making.*
2. **Knowledge creation:** Web 2.0 technologies enable students to become creators of knowledge. Web 2.0 technologies give students the opportunity to create content themselves instead of just listening to lectures, and this supports active and student-centred learning in which students take responsibility for their learning. Web 2.0 technologies create an environment where a teacher becomes a facilitator of learning rather than a distributor of knowledge.
3. **Ease of use and flexibility:** Web 2.0 tools are easy-to-use and flexible. They remove time constraints by providing a more flexible learning environment that is not inhibited to classroom walls.
4. **Writing and technology skills:** use of Web 2.0 technologies help students to become more proficient in writing and in the application of technology.

In addition to above four major benefits, using Web 2.0 technologies helps teachers understand a little more about the world of their students, and motivates the students. After discussing about meaning of web 2.0 technologies and there benefits, it’s time now to discuss about few such technologies.

Key Web 2.0 services/applications

There are number of Web-based services and applications that demonstrate the foundations of the Web 2.0 concept, and they are already being used to a certain extent in education. These are not really technologies as such, but services (or user processes) built using the building blocks of the technologies and open standards that underpin the Internet and the Web. As discussed earlier, these include blogs, wikis, multimedia sharing services, content

syndication, podcasting and content tagging services. Many of these applications of Web technology are relatively mature, having been in use for a number of years, although new features and capabilities are being added on a regular basis.

* indicates an open source or other, similar, community or public-spirited project.

Blogs

The term web-log, or *blog*, was coined by Jorn Barger in 1997 and refers to a simple webpage consisting of brief paragraphs of opinion, information, personal diary entries, or links, called *posts*, arranged chronologically with the most recent first, in the style of an online journal (Doctorow *et al.*, 2002). Most blogs also allow visitors to add a comment below a blog entry.

This posting and commenting process contributes to the nature of blogging (as an exchange of views) in what Yale University law professor, Yochai Benkler, calls a 'weighted conversation' between a primary author and a group of secondary comment contributors, who communicate to an unlimited number of readers. It also contributes to blogging's sense of immediacy, since 'blogs enable individualists to write to their Web pages in journalism time— that is hourly, daily, weekly— whereas the Web page culture that preceded it tended to be slower moving: less an equivalent to reportage than of the essay' (Benkler, 2006, p. 217).

Each post is usually 'tagged' with a keyword or two, allowing the subject of the post to be categorized

within the system so that when the post becomes old it can be filed into a standard, theme-based menu system. Clicking on a post's description, or tag (which is displayed below the post), will take you to all of the other posts by the same author on the blogging software's system that use the same tag.

Well-known or education-based blogs: <http://radar.oreilly.com/>
<http://www.techcrunch.com/>
<http://www.instapundit.com/>
http://blogs.warwick.ac.uk/*
 Software:
http://wordpress.org/*
<http://www.sixapart.com/typepad/>
<http://www.blogger.com/start>
<http://radio.userland.com/>
<http://www.bblogger.com/>
 Blog search services:
<http://technorati.com/>
<http://www.gnosh.org/>
<http://blogsearch.google.com/>
<http://www.weblogs.com/about.html>

Multimedia sharing

One of the biggest growth areas has been amongst services that facilitate the storage and sharing of multimedia content. Well-known examples include YouTube (video),

Flickr (photographs) and Odeo (podcasts). These popular services take the idea of the 'writeable' Web (where users

are not just consumers but contribute actively to the production of Web content) and enable it on a massive scale. Literally millions of people now participate in the sharing and exchange of these forms of media by producing

their own podcasts, videos and photos. This development has only been made possible through the widespread adoption of high quality, but relatively low cost digital media technologies such as handheld video cameras.

Well-known photosharing services:
<http://www.flickr.com/>
<http://www.ourpictures.com>
<http://www.snapfish.com/>
<http://www.fotki.com/>

Well-known videosharing services:
<http://www.youtube.com/>
http://www.getdemocracy.com/broadcast/*
<http://eyespot.com/>
http://ourmedia.org/*
<http://vsocial.com>
<http://www.videojug.com/>

Audio blogging and Podcasting

Podcasts are audio recordings, usually in MP3 format, of talks, interviews and lectures, which can be played either on a desktop computer or on a wider range of handheld MP3 devices. Originally called audioblogs they have their roots in efforts to add audio streams to early blogs (Felix and Stolarz, 2006). Once standard had settled down and Apple introduced the commercially successful iPod MP3 player and its associated iTunes software, the process started to become known as podcasting. This term is not without some controversy since it implies that only the Apple iPod will play these files, whereas, in fact, any MP3 player or PC with the requisite software can be used. A more recent development is the introduction of video podcasts (sometimes shortened to vidcast or vodcast): the online delivery of video-on-demand

clip that can be played on a PC, or again on a suitable handheld player (the more recent version of the Apple iPod for example, provide for video playing).

A podcast is made by creating an MP3 format audio file (using a voice recorder or similar device), uploading the file to a host server, and then making the world aware of its existence through the use of RSS (Rich Site

Summary). This process (known as *enclosure*) adds a URL link to the audio file, as well as directions to the audio file's location on the host server, into the RSS file (Patterson, 2006).

Podcast listeners subscribe to the RSS feeds and receive information about new podcasts as they become available. Distribution is therefore relatively simple. The harder part, as those who listen to any podcasts know, is to produce a good quality audio file. Podcasting is becoming increasingly used in education (Brittain *et al.*, 2006; Ractham and Zhang, 2006) and recently there have been moves to establish a UK HE podcasting community.

Tagging and social bookmarking

A tag is a keyword that is added to a digital object (e.g. a website, picture or video clip) to describe it, but not as part of a formal classification system. One of the first large-scale applications of tagging was seen with the introduction of Joshua Schacter's *del.icio.us* website, which launched the 'social bookmarking' phenomenon.

Social bookmarking systems share a number of common features (Millen *et al.*, 2005): They allow users to create lists of 'bookmarks' or 'favourites', to store these centrally on a remote service (rather than within the client browser) and to share them with other users of the system (the 'social' aspect). These bookmarks can also be tagged with keywords, and an important difference from the 'folder'-based categorization used in traditional, browser-based bookmark lists is that a bookmark can belong in more than one category. Using tags, a photo of a tree could be categorized with both 'tree' and 'larch', for example.

Well known podcasting sites:

<http://btpodshow.com/>

<http://www.audblog.com/>

<http://odeo.com/>

<http://www.ourmedia.org/>*

<http://connect.educause.edu/>*

<http://juicereceiver.sourceforge.net/index.php>

<http://www.impala.ac.uk/>*

<http://www.law.dept.shef.ac.uk/podcasts/> *

The concept of tagging has been widened far beyond website bookmarking, and services like Flickr (photos), YouTube (video) and Odeo (podcasts) allow a variety of digital artefacts to be socially tagged. For example, the BBC's Shared Tags project is an experimental service that allows members of the public to tag BBC News online items. A particularly important example within the context of higher education is Richard Cameron's CiteULike, a free service to help academicists store, organize and share the academic papers they are reading. When you see a paper on the Web that interests you, you click a button and add it to your personal library. CiteULike automatically extracts the citation details, so you do not have to type them in.

The idea of tagging has been expanded to include what are called *tag clouds*: groups of tags (*tag sets*) from a number of different users of a tagging service, which collates information about the frequency with which particular tags are used. This frequency information is often displayed graphically as a 'cloud' in which tags with higher frequency of use are displayed in larger text.

Examples of tagging services:

[http://www.connotea.org/](http://www.connotea.org/http://www.connotea.org/)
<http://www.citeulike.org/>
<http://www.librarything.com/>
http://del.icio.us/http://www.sitebar.org/http://www.furl.net/index.jsp/http://www.stumbleupon.com/http://www.blinklist.com/http://www.digg.com/http://www.rawsugar.com/http://del.icio.us/elearningfocus/web2.0*

Wikis

A *wiki* is a webpage or set of webpages that can be easily edited by anyone who is allowed access (Ebersbach *et al.*, 2006). Wikipedia's popular success has meant that the concept of the wiki, as a collaborative tool that facilitates the production of a

groupwork, is widely understood. Wikipages have an edit button displayed on the screen and the user can click on this to access an easy-to-use online editing tool to change or even delete the contents of the page in question. Simple, hypertext-style linking between pages is used to create a navigable set of pages.

Unlike blogs, wikis generally have a *history* function, which allows previous versions to be examined, and a *rollback* function, which restores previous versions.

Proponents of the power of wikis cite the ease of use (even playfulness) of the tools, their extreme flexibility and open access as some of the many reasons why they are useful for group working (Ebersbach *et al.*, 2006; Lamb, 2004).

Examples of wikis:

<http://wiki.oss-watch.ac.uk/>
http://wikieducator.org/Main_Page
<http://wikispaces.com/>
http://wiki.cetis.ac.uk/CETIS_Wiki*
http://en.wikipedia.org/wiki/Main_Page*
http://www.ch.ic.ac.uk/wiki/index.php/Main_Page
<http://www.wikihow.com>
 Software: http://meta.wikimedia.org/wiki/MediaWiki*
<http://www.socialtext.com/products/overview>
<http://www.twiki.org/http://uniwakka.sourceforge.net/HomePage>
 Online notes on using wikis in education:
http://www.wikiineducation.com/display/ikiw/Home*

Social Networking

Professional and social networking sites that facilitate meeting people, finding like minds, sharing content—uses ideas from harnessing the power of the crowd, network effect and individual production/user generated content. Nowadays Facebook is very popular in India as well as in other countries also. These sites can be used to create groups, pages, events, polls, etc, which are very useful in education.

Professional networking:
<http://www.siphs.com/aboutus.jsp>
<https://www.linkedin.com/>
<http://www.zoominfo.com/>

Social networking:
www.myspace.com
www.facebook.com
<http://fo.rtuito.us/>
<https://twitter.com/>
<http://www.spock.com/>
<http://www.flock.com/>
<http://www.bebo.com/>

Content Management System (CMS)

CMS is a computer program that allows publishing, editing and modifying content as well as maintenance from a central interface. Such systems of content management provide procedures to manage workflow in a collaborative environment. These procedures can be manual steps or an automated cascade. The first content management system (CMS) was announced at the end of the 1990s. This CMS was designed to simplify the complex task of writing numerous versions of code and to make the website development process more flexible. CMS platforms allow users to centralize data editing, publishing and modification on a single back-end interface. CMS platforms are often used as blog software.

<http://www.adaptcms.com/>
<http://b2evolution.net/>
<http://www.bedita.com/>
<http://www.cmsmadesimple.org/>
<http://www.cmsimple.org/>
<http://drupal.org/>
<http://www.joomla.org/>
<http://www.mamboserver.com/>
<http://www.tcexam.org/>

The core function of content management systems is to present information on web sites. CMS features vary widely from system to system. Simple systems display a handful of features, while other releases, notably enterprise systems, offer more complex and powerful functions. Most CMS include Web-based publishing, format management, revision control (version control), indexing, search, and retrieval. The CMS increments the version number when new updates are added to an already-existing file. A CMS may serve as a central repository containing documents, movies, pictures, phone numbers, and scientific data. CMSs can be used for storing, controlling, revising, semantically enriching and publishing documentation.

Document sharing and self-publishing platform

The expansion of the Internet in recent years has provided web users with a robust platform for content sharing -- whether it be files, documents, music or videos, among others. Like never before, the Internet has provided professionals and everyday users alike with the ability to send and receive information quickly and easily.

<http://www.calameo.com/>
<http://www.slideshare.net/>
<http://www.scribd.com/>
<http://www.docuter.com/>
<http://www.wepapers.com/>
<https://www.zoho.com/rip/zohoshare-eof.html>
<http://www.edocr.com/>

Free websites

Although the modern Internet community is moving towards social networks and clouds, there is still some space for **traditional free web hosting** that enables to publish a *custom web page*, or *custom blog*, or other “manually” build website on the web at absolutely no cost.

<http://www.webs.com/>
<http://www.wix.com/>
<http://www.biz.nf/>
<http://www.freehostingeu.com/>
<http://www.biz.ly/>
<http://www.freehostia.com/index2.html>
<http://byethost.com/>
<http://www.x10hosting.com/>
<https://www.yola.com/pricing?cid=CJ20035>

The above web 2.0 technologies are few of the popular web 2.0 technologies. If one, wish to know more such technologies need to visit following sites-

<http://pinterest.com/esheninger/web-2-0-tools-for-educators/>

<http://edudemic.com/2011/11/best-web-tools/>

References:

•Adcock, L., & Bolick, C. (2011). Web 2.0 tools and the evolving pedagogy of teacher education. *Contemporary Issues in Technology and Teacher Education*, 11(2), 223-236.

•Yun-Jo An, Bosede A., Glenda Ballard & Kevin Williams. Teaching with Web 2.0 Technologies: Benefits, Barriers and Best Practices, College of Liberal Arts and Education, Texas A&M University-Texarkana.

- http://en.wikipedia.org/wiki/Technological_Pedagogical_Content_Knowledge
- http://www.unesco.org/education/aladin/paldin/pdf/course01/unit_13.pdf
- http://en.wikibooks.org/wiki/ICT_in_Education/Definition_of_Terms
- http://en.wikipedia.org/wiki/Web_2.0
- <http://www.jisc.ac.uk/media/documents/techwatch/tsw0701b.pdf>
- <http://pinterest.com/esheninger/web-2-0-tools-for-educators/>
- <http://www.edudemic.com/2011/11/best-web-tools/>

CONSTRUCTIVIST TEACHING IN POLITICAL SCIENCE THROUGH ICT INTEGRATION

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Introduction

Man is a social animal and he lives in a society. There are many dimensions to his social life. The political aspect of human life is dealt with in the field of study called Political Science which is concerned with different political institutions, processes and activities of human beings. From an early age, individual is initiated towards the process of learning and acquiring political knowledge -consciously or unconsciously. Therefore, political knowledge in an inert or dynamic state is seen to be present in individual, upon which new or subsequent knowledge can be constructed. In this process, ICT components can be of great helps and instrumental, provided that it is integrated effectively in the whole process of teaching and learning political science. It is therefore important to identify the relevant ICT available for the teaching of Political Science and explore the possibility of its effective and appropriate integration into the constructivist teaching of Political Science.

Nature and objective of teaching Political Science

Political science is concerned with different political activities of human beings. It is the study of state, governments, public policies, political processes and systems as well as political behavior. Politics is not only a mere institution of governance but also a mechanism for achieving societal goals. Political science is a social science concerned with the theory and practice of politics and the description and analysis of political systems and political behaviour. It includes matters concerning the allocation and transfer of power in decision making, the roles and systems of governance including governments and international organizations, political behavior and public policies. The objectives of teaching political science in school as laid down in NCF 2005 are given as below:

- At upper primary stage, the objective is to introduce the learner to the functioning and dynamics of political institutions and processes of the country. The formation and functioning of governments at the local, state, and central levels, and the democratic processes of participation is to be introduced at this stage.
- At secondary stage, the objective is to develop among the learner analytical and conceptual skills to enable him/her to:
 - a) Understand the rights and responsibilities of citizens in a democratic and secular society.
 - b) Understand the roles and responsibilities of the state in the fulfillment of constitutional obligations.

The focus at this stage should be on discussing the philosophical foundations that underlie the value framework of the Indian Constitution, i.e. an in-depth discussion of equality, liberty, justice, fraternity, dignity, plurality, and freedom from exploitation (Position Paper, National Focus Group on teaching of Social Sciences, NCERT, 2006).

To realize the above objectives, it is important that a proper and instrumental methods and approach is adopted when learning of political science took place.

Constructivist teaching and ICT

Constructivist teaching is based on constructivist learning theory which is based on the belief that learning occurs as learners are actively involved in a process of meaning and knowledge construction as opposed to passively receiving information. It fosters critical thinking, and creates motivated and independent learners. This theory holds that learning always builds upon knowledge that a student already have. Constructivists suggest that learning is more effective when a student is actively engaged in the learning process rather than attempting to receive knowledge passively. A wide variety of methods claim to be based on constructivist learning theory. Most of these methods rely on some form of guided discovery where the teacher avoids most direct instruction and attempts to lead the student through questions and activities to discover, discuss, appreciate, and verbalize the new knowledge. The characteristics of a constructivist classroom are the learners are actively involved, the environment is democratic, the activities are interactive and student-centered and the teacher facilitates a process of learning in which students are encouraged to be responsible and autonomous. In this approach to teaching, ICT can play a crucial role in assisting both the learners and teachers.

ICT and Political Science teaching

Integrating Information and Communication technologies (ICT) into the teaching pedagogy and the curriculum is increasingly becoming an inseparable part of teaching. Teaching profession is being redefined as a result of this incorporation or integration process. When effectively integrated in the classroom, technology is believed to provide teachers with the appropriate tools, resources, and contexts to improve students' abilities to become active learners and prepares them to transfer what they have learned to new problems and contexts. Information and communication technologies (ICT) have become one of the basic building blocks of modern society. It is influencing every aspect of human life. They are playing prominent roles in work places, business, education, and entertainment. It is becoming more and more embedded in the education system of human society. The need to integrate ICT in Education has been highlighted by the National Knowledge Commission (2009), National Curriculum Framework (2005) and UNESCO (2002). National Policy of Education (1986, 1992) also stressed on the need of employing educational technology to improve the quality of education. It is widely recognized that learners are motivated and purposefully engaged in the learning process when concepts and skills are underpinned with ICT and sound pedagogy. It supports learners but more importantly, it extends the reach of the population in ways we have yet to imagine. Effective teaching therefore becomes somewhat contingent upon the availability, selection and application of ICT and in its effective synchronization in the classroom teaching and outside. Exploring and integrating effectively and creatively the use

of ICT in education becomes a pertinent exercise for teachers. Political Science teachers are also no exception to this exercise.

The components of ICT such as Print Media (Newspaper, Books, Journal, Magazines), Electronic Media (Radio, Television, Videos etc), Computer, Telephone and other Communication Networks such as internet, Mobile phones are very vital to all the elements of teaching and learning Political Science. The need to and application of ICT as veritable teaching tools in the teaching of political science is reflected in Chinese saying 'When I hear I forget but when I see I remember and when I do I remember'. According to Eregha (2003), ICT perform the following functions in teaching and learning situation of Political Science:

1. They supply a concrete basis for conceptual thinking
2. They make learning more permanent since the students see what they hear.
3. They offer a reality of experiences, which stimulates self-activity on the part of the students.
4. They have a high degree of interest for students and sustain aroused interest.
5. They develop a continuity of thought, especially in motion pictures.
6. They contribute to growth of meaning and hence to vocabulary development.
7. They provide experiences not easily obtained through other materials and contribute to the efficiency, depth and variety of learning.
8. They help in the storage of information needed for quick references and guidance in governance.

Pictorial materials may be used as a tool to convey message in teaching Political Science. This may be supplemented by video clips/films. This stimulates the imagination of learners. **Creating an atmosphere for learning** is also important because it makes the learner to be more receptive. For this, abstract of a lengthy film (relevant with the topic to be taught) can be shown to the learners. This will give background information to the learner. Tape recorder can also be used anytime to record sounds like speech, music and instruction and the recorded information can be used anytime it is needed for any lesson. Live and recorded television programmes such as session of Lok Sabha and Rajya Sabha can also be used in classroom teaching to learn the Parliament procedure.

A more hands-on approach to learning political science involves **the active participation of the students**. This approach involved ICT as a learning tool. For example, students may be asked to scanned newspaper and make a topic-based collage and display in a display board (inside or outside classrooms) or digitally preserve for use later on. A discussion forum may also be created using mobile application such as Whatsapp, Facebook, Twitter etc. where the student as well as teachers can take active part during a time-slot agreed upon or depending on the availability of Internet. In this way, it can aid to their understanding of what can otherwise seem like dry, irrelevant and unrelated issues.

For **reference purpose** during the lesson or end of a classroom teaching, attention may be directed to such ICT material to see after class so that students may refer later on. Factual information from website in the form of table, chart, figures and diagrams contain in the website can be used during transacting a lesson in the classroom. For e.g. Table with

information can be used to compare two or more sets of political phenomena such as Unitary and Parliamentary system, Presidential and Parliamentary Government etc.

For **introduction and revision**, some ICT materials are more relevant. Instead of using it for actual teaching, it is more appropriate and effective to use for introduction and revision. Such materials are Radio and Television. Radio can be used to introduce a lesson where the period of the lesson coincides with the time of a relevant radio programmes. Home assignment based on radio and television programmes can also be given to learners. Teacher can give them in advance the specific period of program and the specific points of ideas which the student should look for in the programmes.

Learning outside the classroom also provides a huge scope for integrating ICT in political science. ICTs could help provide information about government and the democratic process. For example, websites developed by government institutions, political parties, campaigning groups and on-line news services. The use of digital communications technology also supports 24-hour news-gathering and dissemination about current political events. Television is a medium of transmitting pictorial views and sounds of events while they are taking place or from recorded films or tapes. News item, political discussion and broadcast, political interviews, debates, Quiz and documentary programmes in Television, Newspaper, Movies, Radio etc. are of interests for the student and teachers of political science.

As teaching and research goes together, the **role of ICT in research** also needs to be explored. ICT remained a veritable tool for collecting, storing and analyzing of political data. Data associated with most contemporary political system is huge. In the course of any research investigation and presentation, it is often difficult for political scientists to collect, store, analyze or present data for onward usage without the use of ICT. For instance, ICT devices like computer are used extensively in the course of research investigation relating to elections. Data base are found digitally (in India or elsewhere) because activities relating to elections such as registration, screening, classification of voters as well as casting, counting, analyzing and declaring of votes are also done through the medium of ICT. Data analysis is done using statistical tools like Statistical Package for Social Science (SPSS), Chi square test, calculator etc. using computer. It can be very satisfying for a researcher or student at any level when they run commands in SPSS and get outputs. This is a tangible result that can help them to appreciate that ICT can help a great deal with their projects or reasearch, and it also removes the perceived unpredictability some students feel ICT has. One of the major benefits of ICT is that it provides some important transferable skills. The ICT skills that students develop in this course of their study and research will not only benefit them in their careers as students, but equally importantly, in the job market once studies have been completed. Furthermore, in the context of a higher education which is increasingly viewed as a commodity, the use of 'IT' achieves the twin objectives of assisting the students' learning while preparing them in some way for the job market.

There are numerous websites that can be referred to in the course of learning and teaching political science. These sites may be more relevant for teachers. Teachers may filter these sources based on the context to be used. Some example websites are given as under:

<http://www.apsanet.org/teach/index.cfm>

The site offers a variety of useful resources for teaching political science. Resources include teaching websites, Online Textbooks, Syllabi, Key Issues, Journals, Simulations and Games, Articles on Teaching, etc.

The Ultimate Political Science Links Page

<http://upslinks.net/>

The page lists many political science links such as major associations, areas of study, departmental rankings, journals, publications, and other teaching resources.

Poly-Cy: Internet Resources for Political Science

<http://www.polsci.wvu.edu/PolyCy/psteach.html>

The page offers links to teaching political science, including cybernetic classrooms, syllabi and course home pages, and others.

Journal on Excellence in College Teaching (electronic)

<http://celt.muohio.edu/ject/>

This website is of Journal on Excellence in College Teaching, with sample issue (full text) and issue archive (with titles and abstracts).

<http://www.politicalresources.net/>

This website provides list of political sites available on the Internet sorted by country, with links to Parties, Organizations, Governments, Media and more from all around the world.

Exemplar: Transacting Democratic Rights

This exemplar of teaching political science is based on the topic ‘Democratic Rights’ of citizens. Citizens’ right in a democracy is sanctioned by law. While upholding one’s right, it is equally important to recognize and respect other’s rights. This begets responsible citizens which highly instrumental for the success of democracy anywhere. At the same time, rights of citizens’ also puts a limit to properly elected rulers working through the established institutional process from crossing the limit. Therefore, it is essential for learners’ to be equipped themselves with the theoretical knowledge of their rights in a democracy as well as explore the possibility of imbibing and practicing it in their everyday life. So a teacher is required to impart the necessary knowledge to young citizens to make them abide by our constitutional values and cherish the noble ideals which inspired our freedom struggle. The secondary level Political Science textbook encourages active involvement of the teachers and learners in the teaching, learning and assessment process and provides a lot of space to teachers and learners to infuse local elements into it. This module attempts to explore this.

Teaching-Learning Objectives

While transacting Democratic Rights in the classroom, a teacher will be required to focus on the following objectives:

To enable the learner to

- understand the rights and duties of citizen
- critically evaluate the need and importance of rights and duties in our day to day life

- understand the various provisions of rights in the Indian constitution
- aware of not just what is written in the Constitution but also what has been happening on the ground level.
- understand the expanding scope of rights

Note for the Teachers

The teacher concerned is requested to go through the following parts of the Democratic Politics-I Textbook thoroughly -

1. A Letter for You (pp. v-vi)
2. How to use this book (pp. vii-ix)
3. The first five chapters

Learning Resources

- Wall maps of World, Asia, India and States (Political)
- 2 daily newspapers (English and Hindi / regional language editions)
- 2 news magazines (English and Hindi / regional language editions)
- Audio-visual materials (movies, documentaries, short films etc.)
- Constitution of India (The English and Hindi versions of the Constitution can be downloaded from the web link: <http://indiacode.nic.in/coiweb/welcome.html>)

Key concepts (Discussion points):

A. Life without rights

To know the significance of rights, examples of what it means to live in the absence of rights given in the textbook (Prison in Guantanamo Bay, Citizens life in Saudi Arabia and Ethnic Massacre in Kosovo) are to be narrated by the teacher with the help of wall map (political) of World to locate the location. This narration may be supplemented, if possible by showing video clips based on the examples discussed.

Activity 1: The learners may be asked to write what they would have wished if they were in the positions of prisoners in Guantanamo Bay, Citizens in Saudi Arabia and Kosovo.

After this, a similar examples (it is not necessary that for each of these cases, you must find an exact India parallel) from India is to be mentioned by the teacher and the examples given in the textbook should be contextualize to the local setting (teacher should cite few examples of incidents closely similar happened in the local area, district, state or country as a whole). This should be supplemented by Activity 2 given below.

Activity 2: The learner may be asked to list out incidents closely similar to incidents in Guantanamo Bay, Saudi Arabia and Kosovo that has happened in the local area, district, state or country. Simulation may also be encouraged by the teacher.

B. Rights in a Democracy

While explaining the concept of rights, it is also crucial to make the learners understand duties of the citizen as well because rights have real meaning only if individuals perform

duties. Rights are rules of interaction between people. They place constraints and obligations upon the actions of the state and individuals or groups. For example, if one has a right to life, this means that others do not have the liberty to kill him or her. Rights are defined as claims of an individual that are essential for the development of his or her own self and that are recognized by society or State and sanctioned by law. The basis of rights and its dynamic nature should be explained thoroughly. On the other hand, a duty is something that someone is expected or required to do. Parents, for example, have a duty to take care of their child. You have duties towards your parents, siblings, society and so on. A teacher has a duty to educate students. In fact, rights and duties are complementary for life to move forward smoothly. Examples of unreasonable and reasonable claims may be cited by the teacher. Apart from the activity given in the text in page no.102, the following activities may be taken up.

Activity 3. Write down in the boxes given below your rights and your duties towards family, friends and the neighbourhood.

My Duties

<i>Towards My Family</i>	<i>Towards my Friends</i>	<i>Towards my Neighbours and Neighbourhood</i>
1.	1.	1.
2.	2.	2.
3.	3.	3.

My Rights

C.

<i>In My Family</i>	<i>Related to my Friends</i>	<i>Related to my Neighbours and Neighbourhood</i>
1.	1.	1.
2.	2.	2.
3.	3.	3.

Rights in the Indian Constitution:

There can be a long list of rights which may be recognized by the society. However, there are some rights which are considered to be most fundamental and are recognized by the State and enshrined in the Constitution. These rights are called Fundamental Rights. Why it is fundamental should be explained? (First, these are mentioned in the Constitution which guarantees them and the second, these are justiciable, i.e. enforceable through courts. Being justiciable means that in case of their violation, the individual can approach courts for its protection. If a government enacts a law that restricts any of these rights, it will be declared invalid by courts).

Rights in the Indian constitution are:

1. Rights to equality:

2. Rights to Freedom

- Freedom of speech and expression
- Assembly in a peaceful manner
- Form associations and unions
- Move freely throughout the country
- Practice any profession, or to carry on any occupation, trade or business

3. Rights against Exploitation

4. Right to Freedom of Religion

5. Cultural and Educational Rights

6. Right to constitutional Remedies

While explaining the six Fundamental Rights to students, reasonable restrictions or duties for each right should be explained thoroughly. It is necessary to incorporate stories that reflect different Fundamental Rights and let the student identify which rights are affected or discuss in the story. This may also be used as Evaluation method.

Here is one example:

Monu and Ramu aged 9 and 11 respectively belonged to a remote village in the State of Chhatisgarh. Their father sold them to a bangle manufacturer of Firozabad in Uttar Pradesh for Rs. 2,000 each. They were made to work in a factory where many more children were already working under extremely unhealthy and hazardous conditions. They were not given enough food to eat and they hardly got time to sleep. In case they got hurt or burnt or fell ill, they were beaten up, tortured and forced to work for more than 18-20 hours. Some children who managed to escape from there, went to other cities and took to begging, stealing or some other menial jobs. They always dreamt of meeting their parents, but they could never do so.

Activity 5: Read the above news story and answer the following questions:

1. Which Fundamental Rights are violated in this story?
2. What action should be taken against the parents who sell their children or make them work in such conditions?
3. What measures may be taken to save such children from exploitation?

Activity 6: Below are stated Freedoms granted to citizens by the Constitution and the reasonable restriction that the State can impose. Match the Freedom with appropriate Reasonable Restriction.

Fundamental Rights and Duties

Freedoms Reasonable Restrictions

- | | |
|---|---|
| 1. Freedom of speech and expression | (a) Restriction on the movement of a person/group to prevent spread of violence. |
| 2. Freedom to form Associations and Unions | (b) Not allowed to run trades like gambling, prostitution, selling of narcotic drugs. |
| 3. Freedom to assemble peacefully and without arms. | (c) Not allowed to reside too close to aerodrome |

-
4. *Freedom to move freely throughout the territory instigate people for communal violence of India* (d) *Restriction on the use of language that may*
5. *Freedom to reside and settle in any part of India terrorist activities* (e) *Not allowed to form an association to help*
6. *Freedom to practice any religion, profession or to carry on any occupation, trade or business.* (f) *Should be peaceful and participants should not carry any weapon*
-

Activity7: *Students may be asked to collect newspaper clippings about violation and protection of rights. They can prepare a collage and display it in the classroom.*

D. Expanding the scope of Rights:

While Fundamental Rights are the source of all rights, our Constitution and law offers a wider range of rights. Over the years the scope of rights has expanded. E.g. Right to Education, Right to work, Right to Information etc.

E.g. The Right to Education is added by introducing a new Article 21A in the Chapter on Fundamental Rights in 2002 by the 86th Constitutional Amendment. It was a long standing demand so that all children in the age group of 6-14 years (and their parents) can claim compulsory and free education as a Fundamental Right. It is a major step forward in making the country free of illiteracy. It is this Act which aims at ensuring that every child who is between 6-14 years of age and is out of the school in India, goes to school and receives quality education, that is his/her right. Learners may be evaluated throughout based on the various activities given to them and the conventional questions answer method.

Conclusion: The growth and application of ICT will be generally welcomed in the teaching of political science as it has a great potential to support and enhance the process and outcome of learning. Also, the application of ICT devices and tools will continue to help researchers to effectively and efficiently carry out their research investigations. This is because of the capacity of modern computers and other ICT devices in reducing inaccuracy and delay associated with manual methods in data analysis and presentation.

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Integration of Information and Communication Technology in Geography Pedagogy

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Introduction

Information and Communication Technologies (ICTs) has influence the way we communicate, learn and live. It has become the medium of people and has plays a pivotal role in almost every aspect of our lives. Therefore, “UNESCO considers that ICTs can contribute to universal access to education, equity in education, the delivery of quality learning and teaching, teachers’ professional development as well as improve education management, governance and administration provided the right mix of policies, technologies and capacities are in place”. Today, ICTs are been use in classroom and in learning environment to support the pedagogy and outcome of the subjects.

The nature and scope of Geography subject is such that it lends itself as an ideal subject to integrate ICTs in its teaching learning process. In fact, ICTs in Geography teaching is more than just a tool. It has the potential to open up new topic, place and dimensions for both teachers and learners. Therefore, teaching of geography can no longer be considered effective if ICTs are not effusively integrated.

ICTs provides teachers and students with immediate access to up-to-date, topical geographical information and our highly interconnected world. It is a dynamic medium which, when used appropriately, can significantly reinforce and deepen geographical knowledge and understanding as never before. Moreover, it has been shown that students often sustain concentration levels more fully when given the opportunity to support their learning through the use of ICT. This is due to the ability of modern technology to collect an extensive range of geographical data for exploring physical and human patterns, distributions and processes that would not be possible without ICT.

The same technology also allows students to collect, display, communicate and evaluate findings in a highly creative and personal fashion.

Geography pedagogy and ICT

There are wide ranges of ICTs resources available about the world can help teachers and students to visualise places through clippings, pictures, animations and sounds. But more than that:

- (i) ICT has created new ways of exploring the world through maps (Google map). They are easily accessible and can be integrated into teaching-learning process.
- (ii) Multimedia software can help students to investigate geographical topics that are too remote, too dangerous, or involve too long a timescale, to be studied without ICT.
- (iii) The internet and email enable Teachers and Students to interact with peers and other communities, to access and research information and exchange details of weather, environment and culture. This brings otherwise inaccessible localities into the classroom.

This can help to develop global citizenship and awareness of the sameness, differences and diversity in the cultures of the world.

ICT offers students opportunities to work in role, engage with 'real time' situations which promote teamwork, citizenship and thinking skills. ICT should not be seen simply as a bolt-on; it needs to be carefully integrated into geography lessons, with a clear rationale for its use.

Integrating ICTs tools such as internet, video projection units, model data, CD-Rom, pictures, clippings, interactive whiteboards, microscopes connected to computers etc in teaching – learning process can benefit both teacher and learner. The careful embedded of ICT tools can raise the standards of geography learning. Some of the benefits are;

- i. Teaching geography can be more effective;
- ii. It can improve lesson plan;
- iii. It can engage and motivate students to learn more effectively;
- iv. It can provide opportunities for students to learn in alternative and challenging ways using a wide range of sources of information and techniques to support critical thinking;
- v. It can support both individual and collaborative work / activity;
- vi. It can allow students to access sources of information relevant to a particular enquiry by searching websites on the Internet;
- vii. It allow students to identify and select the most useful information;
- viii. It can help students to refine and present their ideas more effectively and in various ways.

To ensure the effective use of ICTs in geography pedagogy, teachers should:

- i. plan the use of ICT by students to ensure that students have appropriate ICT skills;
- ii. analyse how to build on prior learning in geography and ICT to inform planning of schemes of work and design of lessons;
- iii. be sure that ICT resources are available for the lesson.

Most importantly, when planning for ICT use in geography lessons teachers should consider whether the ICT is adding value to the lesson:

- i. Would the geography learning outcomes be achieved as or more efficiently without the use of ICT?
- ii. Is the identified form of ICT (both hardware and software), the most appropriate one to use?

Teaching Geography has become uninteresting without integrating ICTs. Students often distance themselves when subject need to be studied in depth. Therefore, to help yourself as a teacher you can use the apps listed below which will not only develop the student's interest in Geography but will make it enjoyable for them too.

Apps helpful for geography pedagogy;

i. Google Earth

Google Earth app is perhaps one of the most important ICTs for teacher and students.

Google Earth is a free geobrowser that accesses satellite and aerial imagery, ocean bathymetry, and other geographic data over the internet to represent the Earth as a three dimensional globe. It also allows users to see cities, habitats and houses at various angles. Google Earth provides search capabilities and the ability to pan, zoom, rotate, and tilt the view of the Earth. It also offers tools for creating new data and a growing set of layers of data, such as volcanoes and terrain that reside on Google's servers, and can be displayed in the view. It also uses elevation data primarily from NASA's Shuttle Radar Topography Mission (SRTM) to offer a terrain layer, which can visualize the landscape in 3D.

Navigation in Google Earth is fairly intuitive for students who have grown up in the age of the computer and the Internet. Google Earth allows the user to view true-color images draped over topography for most of the globe, at varying resolutions mainly depending on the browser's "eye altitude" (height above ground). The user can navigate(pan) either by clicking and dragging part of the field of view with the mouse, by using the arrow keys, or by using a set of navigation arrows displayed in the main Google Earth viewer window.

Google Earth's main attraction is its ability to display vector datasets (place marks - points, lines, and polygonal areas), raster images (overlays), and 3D virtual models on top of the virtual globe.

With Google Earth, students can browse casually on their own or engage in structured inquiry-based explorations individually or in teams.

Google Earth can be used:

- To support hands-on inquiry by students in computer classrooms.
- As a basis for home work assignments.
- For dynamic presentations during class lectures.
- For inquiry during class presentations.
- To create imagery and maps for powerpoint, word, and other presentation tools.
- As a data discovery, organization, and distribution tool for research projects.
- To enrich discussion of an issue that arises spontaneously during an informal classroom discussion.

Another plus point of Google Earth is that it can be used as a program to view outer space. It allowed exploration of Mars, The Moon and the view of sky from earth.

- ii. **Solar System 3D (Free):** Explore our Solar System and get all the information about our planets.
- iii. **Star Chart:** Used by over 30 million people world-wide, Star Chart provides a magical star gazing experience like no other. You can now have a virtual planetarium in your pocket. Look through the eyes of your Android device to see a virtual window to see a virtual window into the whole visible universe.
- iv. **Sun Locator Lite:** Sun Locator predicts the sun and moon position and path at a specific location during the course of a day. Anticipate lighting conditions in photography/filming, real estate, architecture, outdoor activities (e.g. setting up camp), solar panel positioning, gardening, and more.
★ **The Main View** displays all the detailed information: sunrise/sunset, moonrise/moonset, blue hour, golden hour, solar noon, twilight times, moon phase and much more

★ The **Augmented Reality** feature displays the solar position and lunar position directly overlaid on your device's camera. Use the slider to set the time of day and directly track the solar movement. [A device with a magnetometer (compass) is needed to use the AR feature]

★ The **Map** feature displays the solar and lunar location, direction and shadow on a map to help you plan your activities.

Geography is considered as an important subject for the use of ICT. It has the ability to fully engage and motivate students in geographical concepts using authentic data and information sources, and enables teachers to concentrate more closely on teaching geographical skills, whilst providing students with a pedagogical sense of location and place.

Exemplar 1

Interior of the earth

What's inside the Earth?

Introduction

Discuss, or get students to draw and then share their ideas of what is inside the earth, and evidence to justify their ideas.

First, ask students what a globe represents. Explain to them that a globe is a model of the Earth. Scientists use models to represent objects.

Example -volcanoes show that there must be heat to melt the rock and there must be water because steam and hot water come out of the ground.

- Digging in the ground or exposed hillsides (road works) reveals different layers.

Resources

- Hard boiled eggs for individuals, groups or teacher.
- Play doh
- ICT
- Activity sheet.

Learning Intentions

- Find out what scientists think is inside of the Earth
- Use an egg as a model to represent the Earth

Success Criteria

Students can

- Explain the layered structure and heat inside the Earth by relating it to an everyday item such as an egg.
- Correctly label the Earth's layers in a diagram
- Use descriptive language to describe the crust, mantle and core.

How far down have scientists drilled?

The deepest drill so far is the Kola Hole in Russia. After 24 years of drilling scientists reached a depth of just over 12 km.

Could we travel to the centre of the Earth?

No, we would be melted long before we got past the crust.

Activities

- Examine a recently boiled egg and explain that it represents the Earth. Egg shells could be decorated first with continents and oceans.
- Making the 3D model of earth with Play doh (different colour)

Discuss

Is it hotter on the inside or the outside? Which part will cool faster?

The inside is hotter and the outside will cool faster.

• Cut the egg in half with a sharp knife. Some shattering of the shell is inevitable but don't peel the egg or students may not see how thin the shell is in relation to the inner layers.

How many layers does it have?

Three main layers, some students will say four if they include the thin membrane just under the shell.

- The shell represents the crust –it is very thin and rigid so it breaks easily. On average the crust of the Earth is only 8km thick under the oceans and 35 km thick under the continents.
- The white represents the mantle, this is the largest part of the Earth's interior. It is made of rock that is so hot it can flow but only extremely slowly. If we could see the mantle moving, it would flow about as fast as your fingernails grow. The mantle is hotter close to the core and cools a little as it nears the crust just as the egg is hot in the middle and cooler on the outside.
- The yolk of the egg is the Earth's core. Scientists think that the core has two parts. The inner core is the hottest part of the planet but it is under so much pressure that it is solid and made mainly of iron. The outer core is almost as hot but the metal is slightly softer.

Activity Instructions

- Label the layers of the egg and the Earth on the worksheet.
- Draw continents (green) and oceans (blue) on the crust of the Earth making sure they are shown as very low features. If the Earth were the size of a basketball its surface would be smoother than the ball because the features on the Earth's surface are so small when compared with the size of the whole Earth.
- Make sure students show land (green) under the ocean. A common misconception is that there is no rock under the ocean, just sand.

The Earth's structure is the key to understanding volcanoes.

Show students the video of volcanoes in following link;

<http://video.nationalgeographic.com/video/101-videos/volcanoes-101>

- We live on the only cool part of the planet, everything inside the Earth is hot.
- Volcanoes are places where hot molten rock (magma) has risen to the surface, broken through and been rapidly cooled.
- There are many simple models of the Earth's layered structure, a recently boiled egg is perhaps the best because it shows both the heat and the layering of the Earth's interior. An apple, an avocado, etc could all be used to show the thin, hard crust above larger, denser (heavier), less rigid, internal layers.

Ideally students would have an egg each to examine and could decorate it to resemble the Earth, before cutting it open, but this is not essential.

Students will know that the hotter things get the runnier they get. This is true on the surface of the Earth but the pressure is so great inside the Earth that even hot rocks are too dense to

move easily. The mantle is not all magma, the huge pressures inside the Earth mean that most rock is solid despite the high temperature. It is only in isolated pockets that the crust and mantle melt to form magma. The inner core is the hottest part of the Earth but it is under so much pressure that it is believed to be completely solid. If we travelled to the core the pressure would be so great we would be compressed to about the size of a marble.

It is 6300km to the centre of the Earth and drilling has only reached 12km into the crust. Shallow drill holes at a few kilometres depth show temperature increases of up to 25°C per kilometre but this could not continue at that rate or the middle of the Earth would be hotter than the Sun.

The student activities limit the explanation of the Earth's interior to crust, mantle and core. Of course there are many deeper levels of explanation. The crust and the upper layer of the mantle together make up a zone of rigid, brittle rock called the lithosphere. The layer below the rigid lithosphere is a slightly softer zone called the asthenosphere. The asthenosphere is the part of the mantle that flows very slowly and moves the plates of the Earth. Students may assume that it is just the thin crust that is broken into plates, it is actually the crust and the upper part of the mantle (the lithosphere). The lithosphere averages about 100km thick, ranging from 6km at mid ocean ridges to 200km under continents.

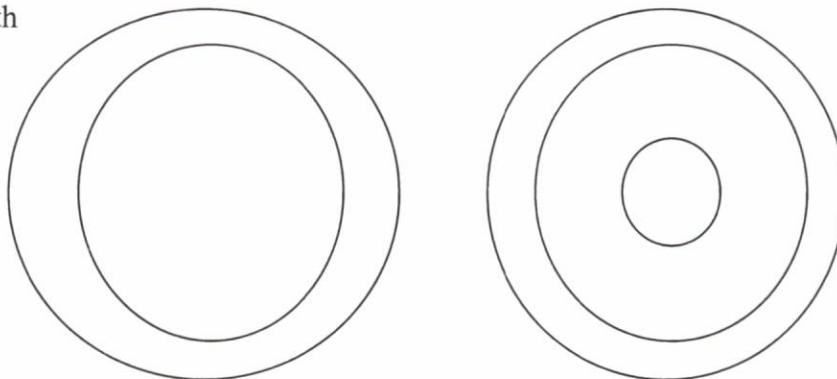
Link: National Geographic

<http://video.nationalgeographic.com/video/news/101-videos/mars-101-1?source=relatedvideo>

Activity sheet

1. Add the following labels to the correct diagram: Core, white, crust, mantle, shell, yolk.
2. Show the hottest part of the Earth by colouring it red, colour the mantle orange.
3. Show the surface of the earth by colouring the crust blue and green to represent oceans and continents. Remember it is 6300 KM to the centre of the Earth but Earth's tallest mountain is less than 9 km high so even the highest mountain will be almost invisible on your diagram.
- 4.

Egg Earth



For more information visit :

Earth's interior <https://www.nationalgeographic.org/media/earths-interior/> National Geographic Society

Exemplar 2

Plate motion and Faults

Introduction

When a lateral displacement takes place on a fracture, the break is referred to as a fault. Earthquakes are associated with displacements on faults. In this activity, students will learn about the different kinds of faults produced by different kind of plate motions and their relation to earthquakes.

Explanation

1. Explain that there are three kinds of stress: compression, tension, and shear.
2. Give them an example they can relate to.
3. Ask students to predict what happens to a ball of pizza dough or play doh when they squeeze it between both hands.
4. Next, hand a student a soft ball of dough or play doh and ask the student to show what happens (to you might want to touch hands with small prior to touching) when they squeeze it between both hands. The dough becomes squeezed. Tell students they the dough. This **compression**. It shape of the dough
5. The dough into less space. have compressed stress is call changes the by shortening it.
6. Ask students to predict what happens if they stretch the dough. Invite a student to demonstrate this. The dough becomes thinner and longer. The stress applied by students is called **tension**. It changes the shape of the dough by lengthening it.
7. To demonstrate the third kind of stress, ask two students to stand next to each other, holding on to the ball of dough. One student should face the blackboard while the other should face the rest of the students in the class. Ask students to predict what happens to the dough if both students start to walk. The dough is sheared and may eventually become torn apart into two pieces. This is called **shear stress**.

Learning resources

- A soft ball of dough / play doh
- Small amounts of flour
- Strips of cardboards (1 per group)
- Colour pencils / sketch pen
- scissors

*Show your students the pictures and videos of Fold Mountains by linking <https://www.nationalgeographic.org/encyclopedia/fold-mountain/>.

Ask students what kind of plate motion results in compression in rocks, what kind produces tension in rocks, and what kind shears rocks. Students should use the information acquired from playing with the dough to answer these questions.

Explain to students that different kinds of plate motions produce different kinds of stress, and different kinds of stress produce different kinds of strain (deformation) in rocks.

- * Convergent plate motion results in compression in rocks,
- * Divergent plate motion produces tension in rocks, and
- * Transform plate motion shears rocks.

This should be easy to understand after experimenting with the dough. The dough is the rock in this experiment.

Remind students of what they learned in Interior of the earth: the outer part of the Earth is relatively cold, and when it is stressed, it tends to break.

- Explain to your students that these breaks or fractures, across which displacement occurs, are called faults.
- Tell them there are three kinds of faults viz., strike-slip, normal, and reverse/ thrust faults.
- If you have pictures of faults and fault ruptures, now is a good time to share them with your students. Tell your students they are going to build models of the above faults in this activity.

Procedures

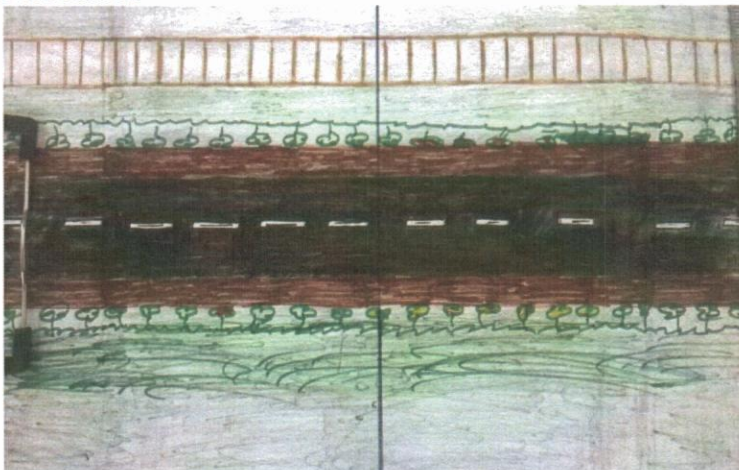


Figure 1: Bird's eye view of the Earth's surface

Divide your students into three groups (Group 1, 2, and 3). Hand each group one strip of cardboard, one pair of scissors, and colour pencils/ sketch pen.

In Group 1, instruct one student to colour a road with several houses along it on their piece of the cardboard.

This piece represents a bird's eye view of the Earth's surface from above. Next, ask one student to make a vertical line from a point at the center of the cardboard. The line should split the cardboard in two and cut across the colour road. Instruct a student to cut along this line (see figure 1).

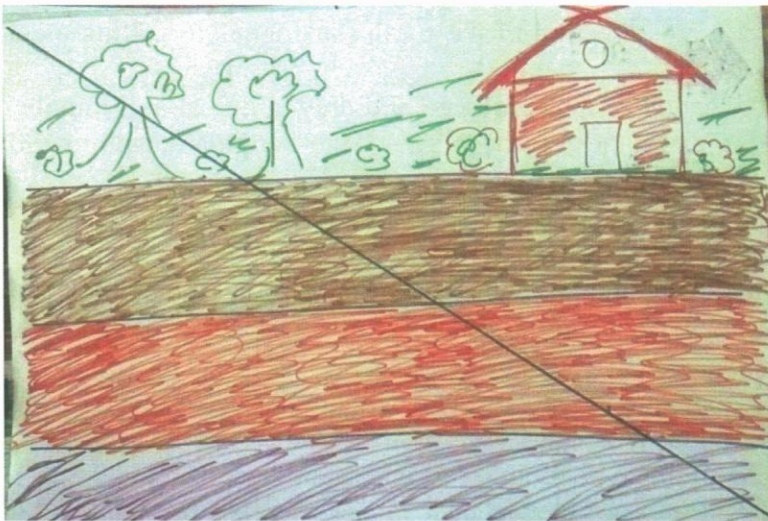


Figure 2: A cross-section of the Earth

In Group 2, instruct one student to colour horizontal layers of rocks on their piece of cardboard (you might want to show your students a picture of a mountainside or roadside with layers in it).

This piece of cardboard represents a cross-section of the Earth (analogous to cutting a cake and observing the internal layers).

Students should mark a point at the center of the cardboard and draw a line at a 45° angle to the rock layers from the center point to the outside edge of the cardboard, splitting the cardboard in two.

Ask them to cut along this line (see figure 2).

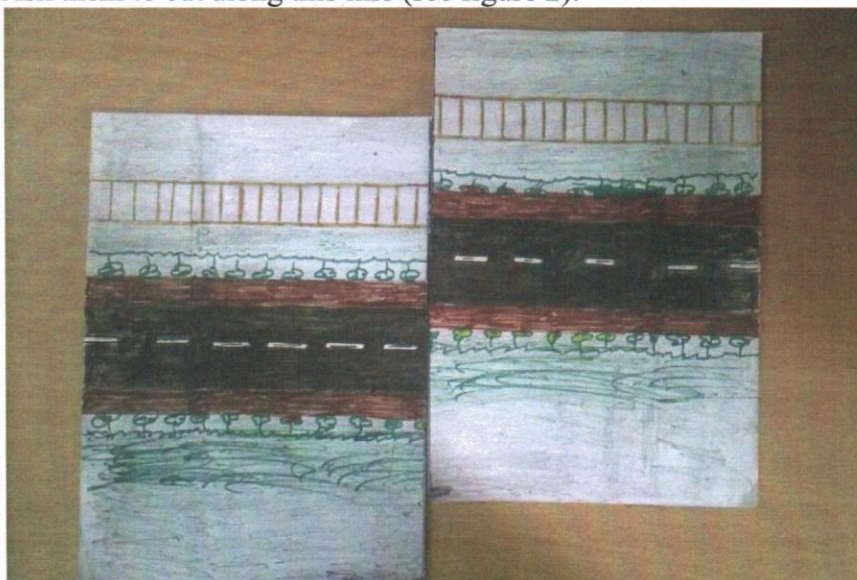


Figure 3: Cardboard representation of a strike-slip fault

In Group 3, instruct one student to colour horizontal layers of rocks on their piece of cardboard (you might want to show your students a picture of a mountainside or roadside with layers in it).

This piece of cardboard represents a cross-section of the Earth (analogous to cutting a cake and observing the internal layers).

Students should mark a point at the center of the cardboard and draw a line at a 45° angle to the rock layers from the center point to the outside edge of the cardboard, splitting the cardboard in two.

Ask them to cut along this line (see figure 2).

Meet individually with each group. Explain to the students in Group 1 that they have produced a model of a strike-slip fault where one block of rock slides past another horizontally (figure 3).

Ask them to show you this motion using their cardboard.

Ask them what happens to the road cut by the fault.

Ask them what kind of stress results in this type of fault (compression, tension, or shear).

Explain to them that earth scientists distinguish between two types of strike-slip faults, based on the relative movement of one side of the fault with respect to the other. So long as they stand facing the fault, they can say it is a left-lateral strike-slip fault if the block on the far side slipped to their left and that is a right-lateral fault if the block on the far side slipped to their right.

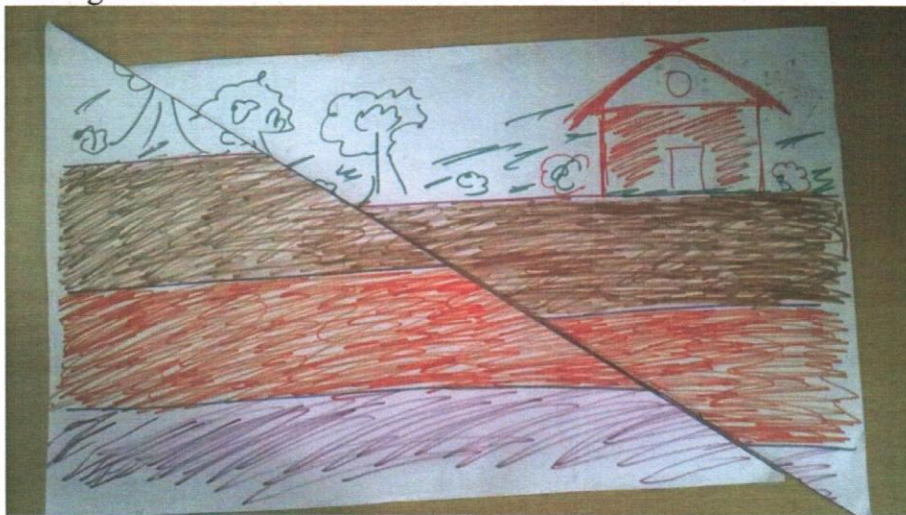


Figure 4: Cardboard representation of a normal fault

Explain to students in Group 2 that they have created a model of a normal fault.

The fault is marked by the cut in the cardboard.

In a normal fault, the rock above the fault plane moves down the slope of the fault (figure 4).

Ask a student to demonstrate this using the cardboard.

Remind them that the cardboard represents a cross-section of the Earth. It might help if they hold the cardboard perpendicular to the surface of their table and imagine looking at a mountainside across a road that cuts through it.

Ask them what kind of stress results in this type of fault (compression, tension, or shear).

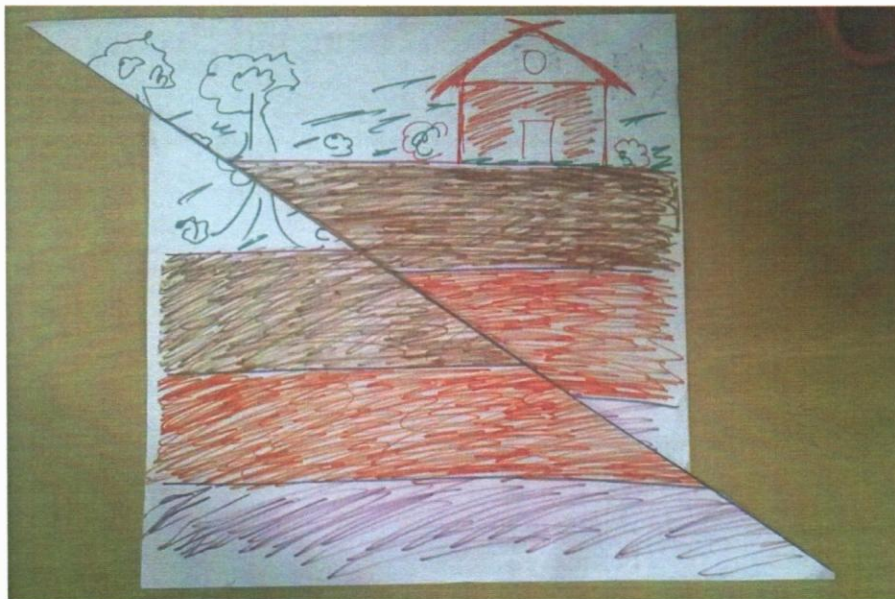


Figure 5: Cardboard representation of a reverse fault

Explain to students in Group 3 that they have produced a model of a reverse fault. The fault is marked by the cut in the cardboard.

In a reverse fault, the rock above the fault moves up the slope of the fault (figure 5).

Then ask them the same questions as those used in Group 1 and 2.

Mention to the students that thrust faults are reverse faults that develop at a very shallow angle.

Invite one student from each group to give a brief report to the class on the fault motion discussed in their groups. All student presenters must demonstrate the sense of motion on their faults using their cardboard, name the stress that creates them, and name the plate motion that may contribute to their formation.

Allow students to exchange their fault models. It is encouraged to allow each student to try all the models.

Finish this activity by explaining to the students that earthquakes occur on faults.

Strike-slip earthquakes occur on strike-slip faults, normal earthquakes occur on normal faults, and thrust earthquakes occur on thrust or reverse faults.

When an earthquake occurs on one of these faults, the rock on one side of the fault slips with respect to the other, just as they observed when experimenting with their fault models.

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Integrating ICT in the teaching and learning of History

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Introduction

History is one of the most fascinating subjects. It is reliving the past - exploring the minds of people who lived in the yesteryears, looking at their day-to-day lives i.e. way of dressing, entertainment, food habits, art, architecture, music and dance, to name a few, marveling at their achievements and learning from their failure

Unfortunately, history has been labeled as a dull, boring, and monotonous subject requiring rote memorization. 'The public perception of history is as a very boring subject that requires teachers to give as much information about the past, which is to be remembered by the students and recall that facts in the examination'. (H. Doreen Tan, 2004)
'If I do not learn the way you teach, can you teach me the way I learn.'

In light of the above statement, it is important to reflect on diverse pedagogies, which may help the subject in realizing the objective of its teaching, in a fun filled and meaningful manner. Today's generation is surrounded by technology and therefore relates and responds to it effectively. Many of those involved in education, realize that thanks to information and communication technologies, pupils are more likely to grasp the veracity of facts, situations, events and interpret them properly and vigorously with their teacher's help. They can obtain several angles on any given fact, situation or event and have access to a plural reading of historical phenomenon. ICT combines text, image, sound and motion and therefore is very engrossing for the learners. ICT can lead to higher quality of lessons, if collaboration in planning and preparing of lesson, can be achieved between teachers. New technologies also encourage independent and active learning and students become responsible for their own learning .(Passey,1999)

ICT proves that students who use educational technology felt more successful in school. They are motivated to learn more and have increased self-confidence and self esteem . It is also confirmed that many students found learning in a technology enhanced setting more stimulating and much better than in a traditional classroom environment (Pedretti and Mayer-Smith . 1998).

CREATIVE DEVELOPMENT OF ICT IN HISTORY TEACHING -

Incorporating ICT in teaching methodology at the outset will require a good lesson plan by the teacher .This plan should necessarily have specific aims and objectives outlined which shall be achieved at the end of the transaction of the lesson. Teacher would be required to

structure learning situations in such a way as to prompt the construction of viable and functional knowledge in the pupils. Since most history teaching is through a lecture method, integration of ICT will bring in a major shift, in teaching learning methodology.

In this module, French revolution primarily and other events from world history which profoundly influenced human kind, have been taken to show how creatively and constructively ICT can be used for accumulation of definite knowledge of the past, perspective building, honing analytical skills, developing mental and moral qualities, developing abilities for impartial and effective investigation, rendering constructive judgments and inculcating the attitude of historical mindedness, which are some of preliminary objectives of history teaching.

- I) IWB IN HISTORY TEACHING :** An IWB or interactive white board is truly a multimedia tool, allowing the teacher and students to switch between applications. While most IWB's come with software installed, on content, class wise and subject wise, they also give teachers liberty to access internet for reference or play a video from the web or DVD. As we proceed to explore transaction of French revolution, through ICT integration in the classroom, we may begin with outlining the learning objectives of studying French revolution on the IWB.

Teaching and Learning Objectives of French Revolution :

1. Making learners understand what a revolution is and how it is different from a movement.
2. To develop a perspective about role played by different groups and institutions, common man, intellectuals and press to bring out the revolution.
3. Students should be able to recognize the dynamic process through which the revolution moved and then established casual connections, between the various development which take place during the process.
4. Having studied the topic the students will be able to appreciate the relevance of values like liberty, equality and fraternity in the social, political and economical arenas, which brought in modern era and are a gift to humankind for all time to come.

How will IWB have an edge over Traditional Boards?

Objectives enlisted above may be saved on IWB and revisited from time to time. During the transaction of the French Revolution, it will help in:

1. Ensuring and reflecting on the objectives achieved after the completion of sub-themes. Relooking at them will also serve to keep the class informed at the expected learning outcomes.
2. Listing the various sub- themes of French revolution on the IWB. The sub- theme can be hyperlinked to videos, films, websites or PPT.
3. Creating text that could be graphically organized, about the chain of events and consequences with multiple fonts and colors. Since IWB's are easy to operate and user friendly, this can be easily achieved.

- II) ACTIVE INVESTIGATION OF FRENCH REVOLUTION THROUGH WORLD WIDE WEB** Constructivist approach says “ when knowledge is constructed by the students, it ensures that it remains with them forever. For this, use of reliable website on the internet may come in handy. Online resources also give pupils and history teachers online access to archives, original documentary sources and various interpretations of these archives and sources. Alternatively, primary sources on CD -ROM are also available which can also be explored.

As an introduction to the background, in which the French revolution happened, students may be asked to visit certain internet sites to gather information on why and how French revolution occurred. Students should collect primary sources available on the net. These materials could be (a) Photographs of important buildings/monuments (b) of the people, and (c) of incidents that were associated with the French Revolution. The materials could also be (d) posters, (e) pamphlets, and (f) news clippings of that period.

- 1- Example of primary source –‘Newspaper Report on Storming of the Bastille’ downloaded from French revolution documents. Source- alpha history <http://www.alphahistory.com>

<p>A Paris newspaper on...f the Bastille (17E</p> <p>and some soldiers; the cannon fired on the town, and the people took fright; a large number of individuals were killed or wounded; but then they rallied and took shelter from the fire... meanwhile, they tried to locate some cannon; they attacked from the water's edge through the gardens of the arsenal, and from there made an orderly siege; they advanced from various directions, beneath a ceaseless round of fire.</p> <p>It was a terrible scene.... The</p>	<p>A Paris newspaper on...f the Bastille (17E</p> <p>It was a terrible scene.... The fighting grew steadily more intense; the citizens had become hardened to the fire, from all directions they clambered onto the roofs or broke into the rooms; as soon as an enemy appeared among the turrets on the tower, he was fixed in the sights of a hundred guns and mown down in an instant; meanwhile cannon fire was hurriedly directed against the second drawbridge, which it pierced, breaking the chains; in vain did the cannon on the tower reply.</p>
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the cannon on the tower reply, for most people were sheltered from it; the fury was at its height; people bravely faced death and every danger; women, in their eagerness, helped us to the utmost; even the children, after the discharge of fire from the fortress, ran here and there picking up the bullets and shot; [and so the Bastille fell and the governor, De Launey, was captured]... Serene and blessed liberty, for the first time, has at last been introduced into this abode of horrors, this frightful refuge of monstrous despotism and its crimes.

Meanwhile, they get ready to march; they leave amidst an enormous crowd; the applause, the outbursts of joy, the insults, the oaths hurled at the treacherous prisoners of war; everything is confused; cries of vengeance and of pleasure issue from every heart; the conquerors, glorious and covered in honour, carry their arms and the spoils of the conquered, the flags of victory, the militia mingling with the soldiers of the fatherland, the victory laurels offered them from every side, all this created a frightening and splendid spectacle. On arriving at the

spectacle. On arriving at the square, the people, anxious to avenge themselves, allowed neither De Launey nor the other officers to reach the place of trial; they seized them from the hands of their conquerors, and trampled them underfoot one after the other. De Launey was struck by a thousand blows, his head was cut off and hoisted on the end of a pike with blood streaming down all sides.... This glorious day must amaze our enemies, and finally usher in for us the triumph of justice and liberty. In the evening, there were celebrations "

- A- Suggested links on Primary sources related to French Revolution
- 2- French revolution documents , alpha history
<http://www.alphahistory.com>
- 3- All French revolution documents
<https://chnm.gmu.edu>
- 4- French revolution primary sources: History Wiz
<https://www.historywiz.com>

5- Primary sources for the French revolution – The cave

<https://thecaveonline.com>

Exploring various dimensions of French Revolution through primary sources by the students on their own will lead to:

- A. Strengthening of critical thinking and analysis.
- B. Doing away with rote memorizing.
- C. Improving imagination and expression.

III) Building up on French Revolution through PPT

PPT's are pictures brought to life. They offer a vitality, newness which attracts attention, create interest and stimulate desire to learn. Power-point slides can include images, sound, animation and videos. They can also be linked to outside resources or linked internally. Students also learn to evaluate and prioritize information and create cohesion between individual slides. Power-point can serve as a useful planning tool in preparation. The students must be guided to first brain storm and make a pen and paper plan before translating it into a PPT.

Suggestive PPT on French Revolution -Class disparities in France on the eve of French Revolution. The PPT may include issues like :

- What is inequality?
- How does inequality affect people?
- How must Government handle inequality?
- What must the people do in the event of inequality?

The PPT slide could be hyperlinked to inequalities in different parts of the world during 1780's and peoples responses to it. PPT preparation can be variedly undertaken:

- 1- Teacher can prepare her/his own PPT.
- 2- Assign the class, the task of preparing PPT either individually or by dividing them into groups.
- 3- PPT's are also available on the internet (<http://www.slideshare.net/ppt-the-french-revolution>)

Such PPT's will thereby make learning of history self exploratory. It will also enhance historical inquisitiveness and analytical skills among the learners. Similar activities in different themes, events in history can be taken up, to kindle inquisitiveness and hone creativity in the learners.

IV) Bringing French Revolution alive through Movies

The course of French Revolution, involving the third estate to declare itself the national assembly, the storming of Bastille, making of the constitution, is largely a factual account. Such factual concepts can be imparted to learners, through the powerful tool of cinema.

Cinema transcends the barriers of time, complexity and space and brings the past, present and probable future into the classroom. They heighten reality by individualizing experience of the outside world and promote a greater understanding of abstract relationships and concepts. Films also enrich learning by presenting a series or sequence of meaningful experiences. They are innately attention getting, generally interesting, are motivational and have an emotional appeal. However, there should be caution exercised. The teacher must check for factual content, objectivity, manipulative information, interpretation and misinterpretation. When students are

also trained into these techniques, they will also learn how to be more critical towards audio-visual aids, when watching news programmes or contemporary movies. French Revolution dramatized through cinema will be an everlasting experience for the learners.

Movies on French Revolution:

1. The French Revolution: Birth of a new France, 16mm film (21 min; color/B&W, Encyclopedia Britannica Educational Corporation, Chicago, U.S.A.
2. The French Revolution: Death Of an Old Regime, (21 min; color/B&W), Encyclopedia Britannica Educational Corporation, Chicago, U.S.A.
3. BBC documentary 2015
 - a. The French Revolution –Part 1 and 2
(la revolution francaise-les – Annes lumieres , monsieur Grognon)
(<http://www.m.youtube.com/>)
 - b. The French revolution documentary ,History channel
(<http://www.m.youtube.com/>)
 - c. The French revolution –Louis XVI
(<http://www.m.youtube.com/>)

Suggested Historical Movies on other thèmes

1. Diary of Anne Franke (Such movies on Nazi atrocities can serve as a very strong tool to sensitize learners against anti-Semitism, which is alarmingly growing in the world. An adolescent, will be more moved by the story of a young person of the same age before and during the war and will develop more concrete understanding of the extent of tyranny and crimes.)
2. Forts of India - Documentary by Doordarshan, India, on 26 Forts.
3. Mughal Glory.
4. Six years of Freedom.
5. Documentary on ‘Alexander The Great’ by B. B. C. Channel.

Engaging learners in movie Making:

With easy access to devices which facilitate shooting of videos, learners may be motivated to make short movies on any aspect of French Revolution. Children may be divided into groups and given the freedom to decide an event. An event can also be suggested by the teacher. It could be enacting the characters-Louis XVI, Marie Antoinette, Robespierre, Role playing attack on the Bastille, Tennis Court Oath . Other themes could be shooting at a historical site- Bhimbetka, Sanchi, The TajMahal etc.

The Film making process automatically imposes upon pupils a natural discipline demanding team work, attention to detail and the whole procedure can be great fun.

Using Film Strips: These are a series of related still photographs. It allows for students participation, either during the actual showing or by shutting it off at intervals to engage in discussions. Examples of film strips:

1. Bring India to your classroom produced by: All Merryn Studio, Bombay.
2. India in the Making
3. Historical Delhi
4. Landmarks of India

V) **Reliving French Revolution through Oral History :Use of Audio clips**

‘Living memory’ can also be illustrated through the documentaries of the time, and oral histories narrated by people, who suffered either during the French revolution or Nazi atrocities, or similar other event in history. Oral history is in fact a source which has often not been creatively used in the teaching and learning of history. Sometimes, this is the only source available on a particular event or living environment and can provide an insight capable of counter balancing the official history. Increasingly, it makes for more personalized history, by giving the speaker the role of a witness. There is already a trend to invite people who were a part of an event to share their experiences /recollect their memories, thereby enabling the listeners to put the period in context. Oral history for people who are not there with us - archival records as in their voice can recreate the magic of the past.

Adding expert opinion of Historians on various aspects of French Revolution, and sharing the same with learners can help them in perspective building. ICT will also bring the expert not only in voice but in person to the classroom. Thus, history teaching can become more vivid and interesting.

Examples of Audio Clips :

1. Mahatma Gandhi, Sardar Patel, Swami Vivekananda’s speeches from All India Radio, archives.
2. Speeches of Winston Churchill, Martin Luther from BBC archives.

Above all, oral testimony can act as a useful counter to the belief that history is concerned only with great people. Recollected lives and experiences of individuals, or a particular event seen by a number of people from different perspectives can provide imaginative insights into the life style and experiences of past generations and bring one into contact with inner history. They can bring in the study of social and economic history, in particular the voice of common person, whose historically valuable experiences otherwise goes with them, to grave for even today, poor man leaves few records.(Pg:99- The teaching of History in Secondary schools - issued by Incorporated Association Of Ass. Masters in Sec. schools, Cambridge Utd. Press)

VI) **Reflections in Teaching and Learning Using Podcasts**

What is a podcast?

A podcast is a digital recording, delivered in a format that can be played on a computer or a mobile which supports access to internet, a laptop, or a portable media player.

How are Podcasts different from other types of recordings?

They can be downloaded making it portable for both students and teachers. Hundreds of hours of video and audio content, can be used by connecting to any computer. With the help of these tools, learning can take place anytime, anywhere. Students can listen to podcasts or watch videos while taking bus to school. Audacity is an audio editing program , which enables recording digital audio and then editing it.

Podcasts can be easily searched and thereafter appropriate podcast can be subscribed to from the net.

Some of the Audio and Podcasts sites are:

<http://audacity.sourceforge.net/>
www.powergramo.com/ (This allows to record Skype conversations also.)
www.skype.com
<http://podcast.com>
www.free-sound-editor.com/

Planning of content is very important, key talking points of a topic /theme or event must be outlined before recording is done on a podcast. Recording may take several forms- Interview, commentary, report or a game show.

Podcast recording must encourage and reflect spontaneous expression of ideas of students on a particular issue. Such expressions will help students in logically arranging their ideas, critically analyzing, visualizing, reflecting and in honing their communication skills. It will also develop in them confidence in public speaking, in the process.

Revisiting French Revolution Using Podcasts

Podcast may be used in a variety of ways in T&L of any aspect of history. As an example while T&L French Revolution the following activities may be undertaken :

1. **Publishing of Teachers explanation on Podcast** - Transacting of various aspects of French Revolution in the class by the teacher may be recorded by the teacher. Since the lecture has already been attended by the students it will facilitate revisiting and recollecting it better. Some important points which may have been missed by the students, during the lecture, may be reflected upon by the learners in the process of listening to the lecture again on the podcast. It may be particularly helpful for slow learners, who can play the lecture at a pace to suit their conveniences in learning. It will also be helpful for students who miss attending the lecture. Though, there are certain other sources from where the students can learn, but generally students relate better to the teacher who is teaching on a regular basis. Since the explanation is coming from their teacher, they are also sure of it being correct and can therefore rely on these audio files.
2. **Revision marathon using Podcast:** This as a class activity may be planned in the form of short question answers with additions by the teacher wherever required. This would enable learners to clarify their doubts if they have any. The entire proceedings may be recorded on a podcast.

Suggested Question and Answers on French Revolution on a podcast

1. What is An Allegory? What did an allegory stand for? Name a few Allegories used to create a sense of nation during the French Revolution.
2. Who was Robespierre? Why is his reign known as the reign of Terror?

3. Group Activity: Using a podcast students may also be given creative assignments which can be recorded on a Podcast

1. Enact as a reporter giving a live review of laws passed by Robespier's Government.
2. Interview different classes of people on their views on the above laws. Do they agree that there must be equality in the society?

VII) Engaging Learners through Blogs

As a brain storming activity, to develop the critical, analytical and reflective skills of the learners, once a theme /event in history has been discussed in the class, blogging can be initiated. Discussions often healthily warm up students to break down complex ideas and see historical events in the right perspective. In this instance, unless students properly locate the complex issues troubling the French society... they will only think of mugging up facts for examination purpose. So, the teacher must lead students into an engaging brainstorming session to continue over a period of time on various aspects of the French revolution.

What Is A Blog? Blog is an interactive journal where readers post their thoughts and opinions on a regular basis. They can be used to hoist discussions or projects. The author shares opinion, insights and links to related sites of interest that may contain videos, images, audio files (podcasts) or other type of digital media.

How to Start A Blog

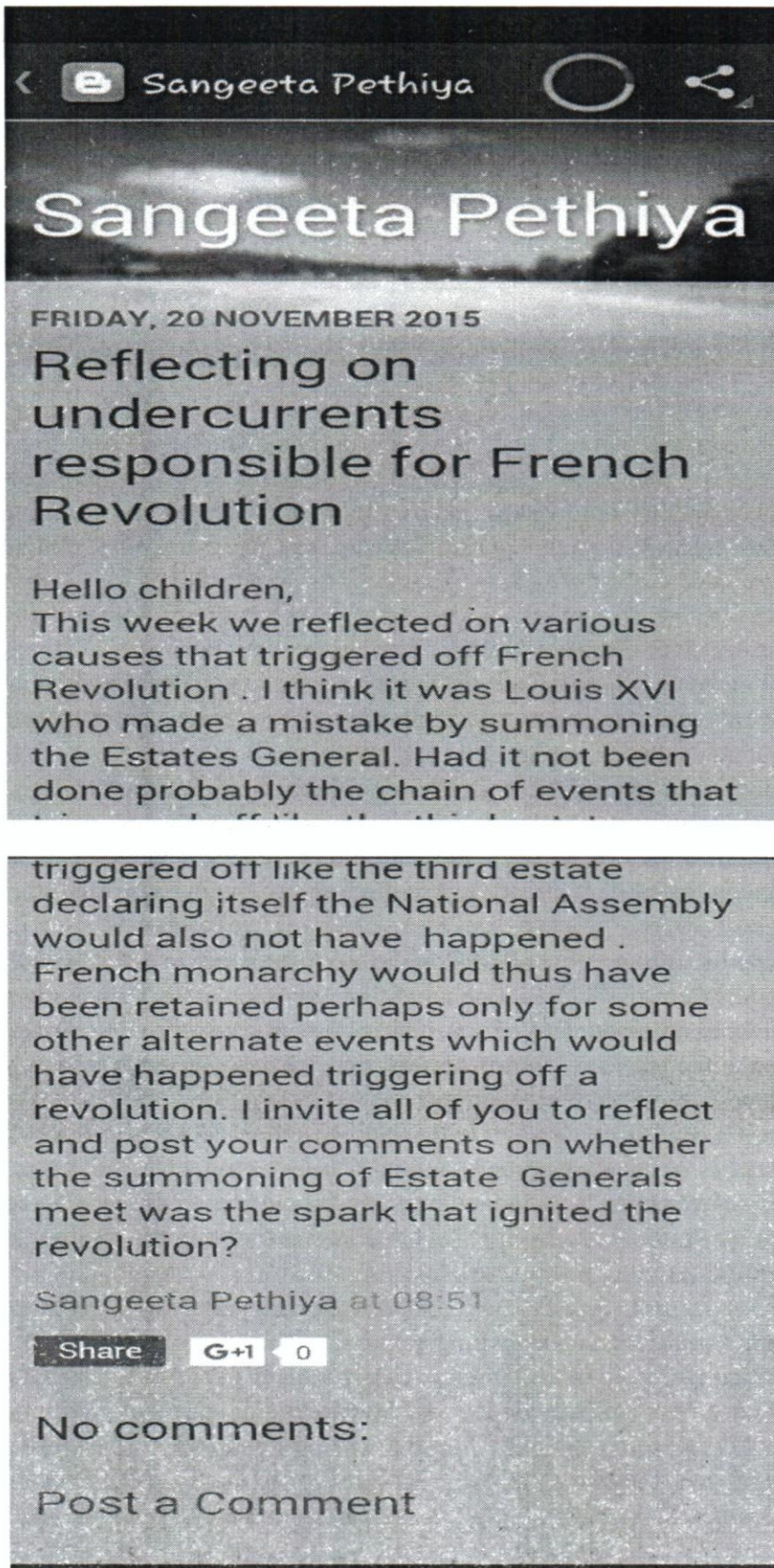
One of the blog building websites available for free, on the internet can be visited. Each website has a step by step process to be followed.

Suggestive list of blog building sites:<http://edublogs.org/> , <http://www.bloggers.com/start> , <http://wordpress.com/> , www.xanga.com/

Different types of Blogs may be created:

- a. **Teachers Blog:** Teacher may start a blog to communicate with the students. For ex: This week we studied about the social, political, economic causes responsible for the French revolution. I think it was Louis XVI who made a mistake by summoning the Estates General. It was this incidence which actually triggered off the French Revolution. Another example could be- 'Are the values contained in the French Revolution relevant in Contemporary world?' The students may then be asked to enter their thoughts and reflections on it. Teacher can also post an assignment on the blog: Prepare a time line of key events associated with the French Revolution from 1789 to 1815. How was the National Assembly formed? The teacher can edit/delete the information on the blog.
- b. **Students Blog:** Students can share their views on various events related to French Revolution-their observations, understandings, analysis and reflections. It can be managed by individual students. It also helps to reduce social disparities between pupils, since they work in teams in order to achieve a given task. On French revolution students can start blogging- on their idea of freedom, equality and liberty. Students can access web, collect and post photographs of important buildings and monuments, people, posters, pamphlets and news clippings associated with French Revolution,
- c. **Project/topic Blogs :** A blog may also be created to give a project related to a ongoing theme in the class. For ex: 'Was 1857 , Indian War of Independence or a sepoy mutiny? The blog can be ongoing or can be deleted with the culmination of the project.

Screen Shot of Blog Created On Revisiting French Revolution:



VIII) Extension Of French Revolution: Use Of Wikis

A wiki is a tool that allows people to work together on a common webpage. Wiki is a writing process. It allows its users to collaborate on a text, saving different versions as the text is developed. Class wiki site can be created on any topic. It will help the students to know whether or not they have been able to acquire competencies like the ability to recollect, conceptualize, classify, compare interpret, analyze and assess which are the preliminary objectives of Teaching and Learning.

Suggested Wiki sites that can be created:

1. French Revolution: Causes and Course
2. Setting up of Republic In France: The Second Revolution
3. Causes responsible for Rise of Hitler In Germany.

Checking Wikipedia on the content that has been taught in the class and then editing i.e. adding information can also be undertaken. Students must be instructed to be factual in theory, edits and very sure of the correctness of information posted. Teacher can check Wikipedia periodically to see if anyone has edited students post.

IX) Using Some more ICT Tools.

Integrating new ICT tools will give the teachers the facility to teach certain elements online and others in the face to face classroom. These tools can either be used through computers or through the mobile technology.

- a. Mobile technology** will play an ever increasing role in the field of education. Since they are handy and affordable, students can have an easy access to it. In fact, in future, mobile phones will replace computers to access web (Rather they already have!). Mobile technology will certainly help to bridge the technical divide.
- b. Apps:** It is a type of software that allows one to perform specific tasks. These can be downloaded from the web inexpensively or for free. History apps give information on any theme/event. Ex: Learn World History, Historical Calendar, History in pictures. Quiz on history may also be organized in the class using an app like History Quiz Games.
- c. E-mails:** Since e-mails do away with being online at the time of communication it has its own advantages and is distinct from Chats and Texts. While Text and chats require spontaneous response and greater fluency over language, e-mail can give liberty to low level of learners to take their time in logically arranging their thoughts before presenting them.
- d. Chats:** Discussion on any aspect can be done using chat. It will give all learners equal opportunities to express themselves.
- e. Text messaging:** can be used in a variety of ways. Students can write answers individually to questions put up by the teacher. This can particularly help those learners who are reluctant or withdrawn in participating in classroom discussions or are overshadowed by those who are outspoken. Teacher can also effectively conduct objective type question testing in the class.

- f. **Usage of Ms-Word:** It can be used for typing assignments and preparing notes by the teachers. Students can also prepare projects and assignments using Ms-Word.
- g. **You Tubes :** Interesting presentations on you tubes are available, which after checking reliability may be used in the class.

Conclusion

Thus we have seen a plethora of ICT tools that can be brought in the classroom for making classes interesting and engaging. However, these technologies face teachers with certain challenges. But teachers will have to remember that ICT is no more a choice but a necessity today. In a world full of sights and sound, it would be inappropriate to try and teach through printed word alone. It is important for the teacher, first to reject technophobia and adopt a proactive attitude. This would lead to exploring and exploiting functionally and efficiently, the facilities provided by ICT in order to foster pupils learning process.

It may however here be further noted that ICT may appear to be overwhelming, but the important point is to get control of it rather than technology dominating us. Mobile phones, IWB's, Blogs, podcasts are all tools to make learning more effective in the classroom. They are not an end in themselves. The best of PPT's and content on website may not be able to do justice unless appropriate learning situations are created for the students by the teachers in order to utilize this information in a purposeful way. The underlying philosophy is that history always comes first and that ICT should be used to make student's learning of history better. It is important to understand the basics of technology, so that the teachers are aware of the choices in teaching available to them and are able to choose the most appropriate tool in teaching and learning in the classroom.

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The Notion of Development and Its Measurement in Economics

P.N.Sethy¹

This topic deals with familiarisation of some basic concept of macroeconomics among the child and its use in the context of economic development. Also it will be sensitizing the child about the rationale for overall human development in our country, which include the rise of income, improvement of health and education rather than income? It is necessary to raise the question in the minds of the children whether the increase in income alone is sufficient for a nation? How and why people of our country should be healthy and provided with education.

Key Concept: Development, Social Development, Health, Education, Sex Ratio, Economic Activity, Non-Economic Activity, HDI, GDP, National Income, Personal Disposable Income, Infrastructure, Literacy Rate, Life Expectancy Rate, Standard of Livings Index

Introduction:

The concept of development is not new. It gets back to the European colonies, when colonisers enforced a “civilised” ordered, white, male, Christian Ethnic. The organised development aid followed during the post-colonial period. The theory of development came much latter, even it emerge after World War- II, when European countries were trying to keep their former colonies at arm’s length. Development theory and practice was strongly characterised by the transmission of moral values from industrialised countries to less-industrialised rural countries.

Development cannot be defined in a universally valid manner because ‘development’ is normative term. In other workds, ‘development’ is subjective and discursively constructed(Foucault 1970: XV). Collective and subjective imaginations of values as well as possible social changes in countries are influencing the concept of development. ‘Development’ will be interpreted in different-subjective- ways, depending upon one’s basic theoretical or political, ideological positions and predilection. Therefore, the idea of ‘development’ varies depending on theoretical approaches.

It is seen that “Development” and “Economic Development” have very often been used interchangeably by politicians, academicians, civil society organisations, community groups and economists to describe industrialisation, modernisation or westernisation. According to Shaffer (1989), “the process of ‘development’ involves change, improvement and vitality; as directed to attempt improve participation, flexibility, equality, attitude, the function of institutions and quality of life. It is the creation of wealth. Wealth means the things people value, not just dollars”.

The South Commission Report(1990) defines development as “ a process which enables human beings to realize their potential, built self-confidence, and lead lives of dignity and

fulfilment. It is a process which frees people from fear, exploitation and oppression. Through development, political independence acquires true significance”.

Korten(1990) sees development as a “ process by which the members of a society increase their personal and institutional capacities to mobilize and manage resources to produce sustainable and justly distributed improvement in their quality of life, consistent with their own aspirations”.

Development should be understood as a process, not a product. Societies are always changing. Some improve, while others fail. Development theory aims at explaining both processes. Development is multidimensional process and therefore does not admit any one form of measurement(Mallick, 2005)

The traditional paradigms of development theory have historically been similar to those of economics. The field of development economics to explain differences in development conditions mostly through macroeconomic factors like country’s GDP to measure development success. The moment we talk about development in economics, we mean it is a multi-dimensional concept like it is not only reduction of poverty and unemployment but also change in cultural, biological, human, social and political dimension.

The development field has always been highly influenced by economic thought, as exemplified by the fact that development has been primarily measured by increases in gross national product (GDP).

Economic Development

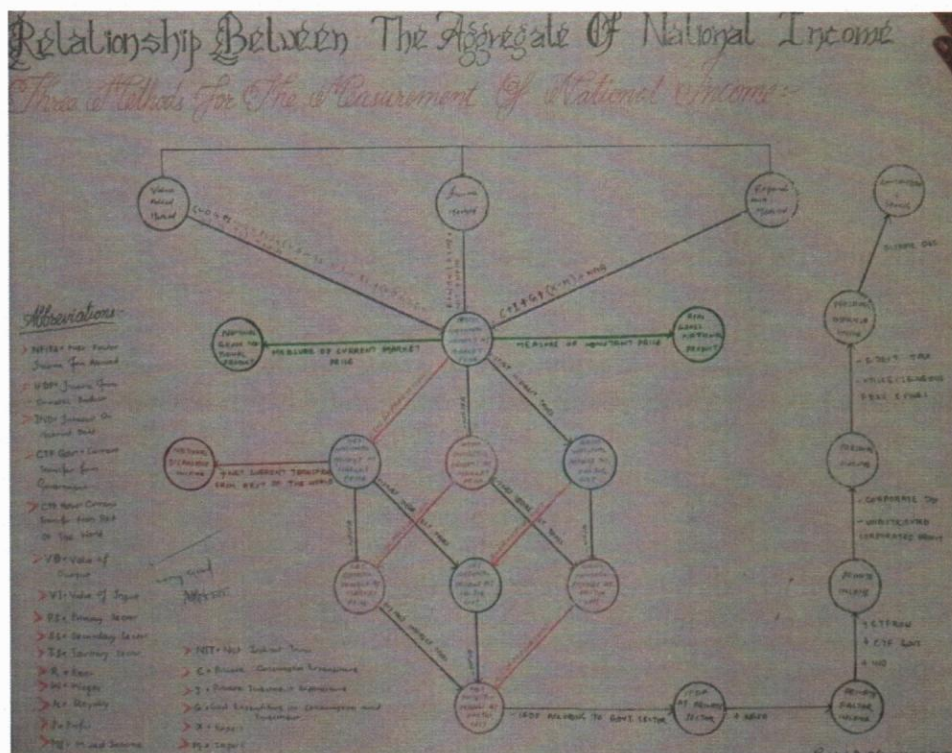
It is not easy to define economic development in a precise manner because different criterions have been used for making distinction between developed and underdeveloped countries. Some groups of economists like Prof Simon Kuznet, Paul Albert, Youngson, and Meier and Baldwin, consider the ‘national income’ or GDP as an index of economic development. On the contrary, Benjamin Higgins, Arthur Lewis, Jacob Viner and Harvey Libenstein favoured Per Capita Income(PCI) is more scientific than the earlier concept i.e national income. Therefore, let us examine some important definition on different ground for assessing economic development in a more clear and precise way.

According to Prof. Meier and Baldwin, “Economic development is a process whereby an economy’s real national income increases over a long period of time”. This definition is more simple and precise. This definition emphasises on three important ingredient of economic development such as (i) process (b) Real National Income and (c) Long Period.

- (i) **Process:** economic development is a process which implies that a *series of changes* in social, technological and economic forces which are useful in accelerating the pace of development. Process also implies the operation of certain forces which causes **continuous changes in the economic system** like optimum use of capital, modern techniques of production, technical development, institutional reforms, demographic and social framework. Therefore, it is a process of change in economic variable like real national income. It includes the

process of change in environment of economic development through its monetary and fiscal policies. In brief, economic development is a dynamic process.

- (ii) **Real National Income:** It refers to the sum total of output of all final goods and services expressed in *real term but not in money terms*. Therefore, it must be view as Real GNP or Real NNP. The best criterion of economic development is the NNP at factor cost which consists of only final consumer goods and services plus only the net addition made to the capital goods etc during the process of production. This can be clear from the following figure-1.



- (iii) **Long period:** In economic development, long period occupies a significant place. It implies that the Real National Income should not only rise in the short-period but also must show upward trend in the long period to *sustain the process of economic development*. What it means more than 10 years of rise in economic variable or phenomenon. Since the continuous increase in the real national income over a long period has become an indispensable condition for accelerating the pace of economic development. In fact, we express the view of the economic development is not a short term phenomenon rather it is a long run phenomenon.

Criticism: The definition given by Prof. Meir and Baldwin is too simple but is not satisfactory explanation of economic development. It is a misleading and imperfect when it is examined in respect of economically backward and poor countries where increase in national income is neutralised to a greater extent by the increase in population. In this case, it is more appropriate to measure economic development through per capita income or output. Similarly, some other definition of economic development is given by different economists, which are as follows:

According to Williamson and Buttrick, “ Economic development or growth refers the the process, where by the people of the country come to utilise the resource available to bring about a sustained increase in per capita output²”

Colin Clark, “Economic progress can be defined simply as an improvement in economic welfare”

C.P. Kindleberger, “ Economic development implies both more output and change in technical and institutional arrangement by which it is produced”

Prof. Irma Adleman, “ Economic development is a process by which an economy is transformed from low or negative rate of growth of per capita income to high or significant self-sustained increase in rate of per capita income in long-term in future”

According to UNO, “Development concerns not only man’s material needs, but also the improvement of social conditions of his life. Therefore, development is not only economic growth but also growth plus change- in social, cultural and institutional as well as economic”.

In conclusion, we can say that the meaning of economic development is a very complex. All these definitions emphasis different aspect involved in the process of economic development. Even if we follows that economic development is a long period dynamic process which enables poor countries to break up its vicious circle of poverty and simultaneously attain high levels of income, output, employment and secure better standard of living. It is not only contributed to add material gains and other comforts of life but also makes efforts for equitable distribution of income and wealth.

According to Prof. Walter Krause, “there are three essential tests to know whether economic development is taking place or not in a country. They are

1. Income must rise cumulatively over a long period of time.
2. Population must be benefited from such an increase in income.
3. Aggregate income must rise faster than population

$$PCI = \frac{\text{National Income}}{\text{Total Population}} = \text{Income per head of population}$$

Distinguish between Economic development and Economic Growth

From the lay man point of view, it appears that there is no different between the terms economic development and economic growth. But the terms economic development, economic growth, economic progress, economic welfare and secular change etc are synonymous and interchangeably used. It is very difficult for a layman to make any distinction in these terms but economist like Schumpeter, Mrs. Hicks, Bonne Kindleberger have attempt to draw a line of demarcation, which are as follows:

Sl.No.	Name of Economist	Economic Development	Economic Growth
1.	Mrs. Hicks	The problems of underdeveloped countries	The problems of developed countries
2.	Prof.	The rising the level of income	The rising the level of

3.	Maddison Schumpeter	of a poor countries As a discontinuous and spontaneous change in a stationary state which forever alters and displace the equilibrium state previously existing	income of rich countries Gradual and steady changes in the long-run which comes about by a gradual increase in the rate of saving and population
4.	C.P. Kindleberger	<ul style="list-style-type: none"> • Both more output and changes in the technical and institutional arrangements by which it is produced. • Draw attention to the change in functional capacity 	<ul style="list-style-type: none"> • More output i.e increase in the quantity of economic variable is denoted as growth. • Focussing on height or weight
5.		As an incentive process of lending to the structural transformation of social system	As an expansion of the system and more dimensions without change is its structure
6.		It concerned to the qualitative change in the economic wants, goods, incentives, institutions, productivity and knowledge etc. It is the upward movement of entire social system.	It concerned to a quantitative sustain increase in the country's per capita income or output accompanied by expansion in its labour force, consumption, capital and volume of trade.
7		Determine change in both the direction like growth and decline. (+ or -) ED= growth + change	Determine technological and structural change in upward direction.

Distinguish between Economic Growth and Economic Progress

S.N	Economic Growth	Economic Progress
1.	An increase in national income	An increase in per capita income
2.	Leads to raise the level of national output	Improvement in standard of living of the people.
3.	Leads to economic progress of the country	Higher standard of living of the people is only possible if the increase in national income is accompanied by the same increase in population.
4.	Used in macro sense	Used in micro sense

Distinction between Economic Progress and Economic Welfare

S.N	Economic Progress	Economic Welfare
1.	It itself implies increase in	Rise in the purchasing power of money

	economic welfare	income of the people in the society.
2.	Rise in the real per capita income	Distributive aspect of the per capita real income
3.	According to Colin Clark, “it is simply as an improvement in economic welfare”	According to Pigou, “it is nothing but the abundance of all those goods and services which are exchanged for money”
4.	If real PCI is rising which create inequality in the society as rich will be richer and poor will be poorer.	The economic welfare of the people will be promoted when the purchasing power of money income rises among the lower strata of the people in the spciety. There should not be discrimination between rich and poor in the society. <ul style="list-style-type: none"> • Rise in prices denotes economic welfare while fall in prices promote economic welfare. • Price index is the measuring rod of economic welfare.

Measurement of Economic development

On the basis of above definition, it rightly pointed out that economic development is process of change in economic variable over a long period of time. Though there are several criterions or principle to measure the economic development, yet none of them provides a satisfactory and universally acceptable index of economic development. According to R.G. Lipsey, “there are many possible measures of country’s degree of development such as income per head, percentage of resources unexploited, capital per head, saving per head and amount of social capital. Generally, the more commonly used criterion of economic development are increase in National Income(GNP), Per capita income(PCI), comparative concept, standard of living and economic welfare of the community etc. Let us come to know the in detailed understanding of the Index for the measure of economic development.

1. Real National Income Criterion
2. Real Per Capital Income Criterion
3. Economic Welfare Criterion
4. Social Indicators Criterion

1. **Real National Income(GNP) as an Index of Development:** Some groups of economists Simon Kuznet, Meier and Baldwin said that the growth of national income is a suitable index of economic development. In this methods, the economic development is measured in term of an increase in the country’s real national income over a long period of time. But this definition is not a satisfactory one, because:

- Real National Income refers to the country’s total output of goods and services in real term rather than money term. Thus, price changes will have to be ruled out in calculating the real national income. But this is unreal because variations in prices are inevitable.

- In this measure the phrase “over a long period of time” implies a ‘sustainable increase in real income’. A short-period rise in national income during the upswing of the business cycle does not constitute economic development.
- This measure fails to take into consideration changes in the growth of population. If a rise in real national income, which is accompanied by a faster growth in population, there will be no economic growth but retardation.

Difficulties:

There are certain conceptual difficulties in the measurement of national income.

- i) Difficulty definition of ‘Nation’:** there is the difficulty of defining ‘nation’ in national income. Every nation has political boundaries, but in the national income is also include the income earned by the national’s of a country in a foreign country.
- ii) National income measured in money term:** National income always measured in money term but there are a number of goods and services which are difficult to be assessed in term of money.
- iii) Double counting:** Another difficulty in calculating the national income is of double counting which arises from the failure to distinguish properly between final and intermediate products. There are always exists the fear of a goods or a services being included more than once.
- iv) Government Transfer Payment:** There arises the difficulty of including transfer payments in the national income. For example individual get pension, unemployment allowance and interest on public loans, but whether these should be included in national income is a difficult problem.
- v) Private Transfer Payment:** Items such as pocket money given by parents to their children, elder gifting money to the young one are private transfer payments. This merely a transfer of money from one individual to another. Hence, this is also not included in National income.
- vi) Buying and Selling of Securities:** In the financial markets, potential savers and investors buy and sell financial assets such as shares and bonds. While someone buys a share there is only a transfer of ownership right. It is a claim to ownership of assets. There is no production activity but only exchange of funds for financial claims. Trading in financial instruments does not imply production of final goods and services. As such these are not included in the national income.
- vii) Transfer of Used Goods:** GNP refers to the value of final goods and services produced in a given year. Hence, goods produced in the previous time period cannot be included in the GNP. For instance, when a person buys a used car. It cannot be recognised in GNP measurement as the car was produced in an earlier year. Spending on a used car simply reflects a change in the ownership of a pre-existing output.
- viii) Non-market Goods and services:** Many goods and services are not acquired through regular market transaction. For example vegetables can be grown in the backyard instead of bought in the super market or an electrical fault can be repaired by the house owner himself or herself instead of hiring an electrician. These are the example of non-marketable goods and services that can be consumed without using organised markets. But GNP included only these transactions that occur through market activities. Barter transactions and production for self-consumption by household are not included in the GNP. In this context, there is debate as to whether housewives services should be included or not. If so how do we value their services at current market prices?

ix) **Illegal Activities:** GNP does not include trade in illegal goods and services even though they are final products and are purchased in market transactions. Activities of black marketing such as smuggling, gambling, crime for hire, drug trafficking, illegal arms sale are some cases in point. These illegal activities create an ‘underground economy’ where production is not reported or not accounted because it is unlawful and it evades the government tax. Black money is the main driving force of underground economy or parallel economy.

x) **The Value of Leisure hour:** Leisure is regarded as economic goods. More leisure is better than less leisure. When level of income increase, people prefer more leisure than less of it. This means that with higher economic security the richer segment of our society would cut down their work effort, which in turn means producing less GNP. In fact, choice of more leisure is simply an increase in utility. However, it is very difficult to measure the intangible items like leisure and included it in the GNP. Leisure time activities are in great demand from the middle and richer section of the society.

In the contemporary economies, particularly, in the developing countries, we are confronted with the serious issue of inequality in the income distribution, environmental degradation, and deterioration in the quality of life. All these related problems have not only introduced gaps between different classes of people in term of their social, and economic status but also between nations involves in categorisation such as developed, developing, less developed and least developed countries. It is important to test whether growth in GNP results in equitable distribution of income, sustainable development and good quality of life for people. The process of development must create sustainable societies without endangering the natural resources and ecological system.

To enhance GNP at any cost may create economic ‘bads’ such as poverty and pollution. This requires an alternative measure which is economic welfare of human being. Some economists have suggests the concept of ‘Green GNP’ would help to attain a sustainable use of the natural resources or environment and equitable distribution of the benefits of development.

2. GNP per capita (Real GNP per capita income) as an Index of Development:

The second important measure relates to an increase in the real per capita income of the country over the long period of time. Some economists believe that economic growth is meaningless if it does not improve the standard of living of the common masses. This indicator of economic growth emphasised that for economic development of the rate of increase in real income should be higher than the growth of population. UNO is also accepted this measure. Economists like Harvey, Libenstin, Rostow, Baran, Buchanon and many others favour the use of *per capita output* as an index of economic development. This PCI index of development is also not free from certain criticisms which are as follows:

i) An increase in PCI of the nation may not raise the real standard of living of the each and every individual in the society or masses. Economic growth is a multi-dimensional phenomenon which not only increases in money income but also improvement in social activities like education, public health, greater leisure etc. These improvements cannot be measured by changes in per capita income.

ii) PCI estimate does not tell us anything about the distribution of wealth and income in the society. Even if the PCI of the nation increase, still most of the people poor in the society. If real PCI increase, PCC falling, increased saving in some section of the people. Therefore, the true economic development not only involves a rising PCI but also a proper distribution of income among them. It is only a partial index of the welfare of the people.

iii) Sometime the data of the PCI are often inaccurate, misleading, and unreliable because of imperfection in national income statistics.

Despite these drawbacks, PCI is accepted as a suitable and reasonable index of economic development. Meier observed that economic development of a country is mainly concerned with the achievement of better nourishment, better education, better living condition and opportunities to work and leisure of the poor people in the world.

3. Economic Welfare Criterion or PCC Index of Development:

The third criterion for the measure of economic development is per capita consumption (PCC) index from the economic welfare point of view. It means “economic development is a process whereby an increase in the consumption of goods and services of individuals”. This increase in the PCC expenditure of individual can increase in the economic welfare of the people in the society. From the welfare point of view, we must consider not only what is produced but also how it is produced and how it is distributed. This means that we are interested in value judgement or qualitative measure of development. This indicator is also not free from limitations:

i) **Weight to be attached to the consumption:** It is very difficult to weight to be attached to the consumption of individuals. Consumption of goods and services depends on the tastes and preferences of individuals.

ii) **Composition of total Output:** The second difficulty in measuring economic welfare with regards to composition of total output. That means giving rise to an increase in per capita consumption (PCC) and how this output is valued. The increased total output may be composed of capital goods as well as consumption goods. However, it may be the cost of reduced the output of consumers goods.

iii) **Increase real cost and social cost:** From the welfare point of view, we must consider not only what is produced but how it is produced. The increased in real national output leads to increase in real cost and social cost and in the long-run, increase in the working condition of labour force.

iv) **Lack of social welfare:** We cannot equate an increase in output per head with an increase in economic welfare alone, without additional consideration of social welfare.

4. Social Indicators:

Social indicators include education, health and housing. Besides this it includes literacy, skills, employment and working conditions, consumption of basic necessities, transportation, sanitation facilities, clothing, recreation, entertainment, social security etc. All these indicators emphasised on quality of life of the people in development process.

Criticism:

The problems arise in constructing common index of development relating to these social indicators. They are

i) There is no unanimous view among economists to include the number of items while constructing an index. For example, Hagen and UNRISD³ use eleven to eighteen items. On the other hand, Morris D. Morris use only three items i.e life expectancy at birth, infant mortality and literacy rate in constructing a “**Physical Quality of Life Index(PQLI)**” relating to 23 developed and developing countries of the world for a comparative study.

³ United Nation Research Institute for Social Development(UNRISD)

- ii) There is the problem of assigning weights to the various items which may depend upon the social economic, political set up of the country. For example, Morris has given equal weight to three indicators in constructing PQLI.
- iii) While talking about the level of development in the context of human resource development, we mean basically there are three essential choices of the people are :
(a) lead long and health life; (b) to acquire knowledge and (c) to have access to the resource needed for a decent standard of living. Human development is a means with the development of ends. According to Mahbub- ul- Hag, there are three measures of human development
 - Human Development Index(HDI)
 - Gender-related Development Index(GDI)
 - Human poverty Index(HPI)(a) HDI measures the average achievement of the three basic dimensions of the human development such as (1) a long and healthy life measured by life expectancy rate at birth, (2) Knowledge is measured by 2/3 of literacy rate plus 1/3 of GER in primary, secondary and tertiary. And (3) decent standard of living measured by GNP per capita.
 - Dimension index = $\frac{\text{Actual value} - \text{Minimum Value}}{\text{Maximum value} - \text{Minimum Value}}$
 - HDI = (Health Index + Education Index + Standard of living Index)/3
 - The coefficient value of HDI lies between 0 to 1. The value approach to 1 characterised by developed and while approach to 0 indicate less development and approach to .50 indicates middle.(b) GDI measures the average achievement to reflected the inequalities between men and women. It has three components such as (a) female life expectancy rate at birth, (b) female adult literacy and gross enrolment ratio and (c) female per capita income.
- (c) HPI measures the deprivation of human being. The deprivation of three important elements of human life as already reflected in HDI such as (a) longevity measure by number of die before age 40 year, (b) Knowledge measure by percentage of adult illiterate and (c) a decent standard of living measured by percentage of people with access to poor health services, safe drinking water and percentage of malnutrition of children under five year of age.
- iv) The social indicators are concerned with current welfare and are not related to the future.
- v) Majority of the indicators are inputs but not outputs, such as education and health etc.
- vi) It involves value judgement in selecting the items while constructing index.

Conclusion:

Therefore, in order to avoid value judgements in selecting items while constructing index for the measurement of development and for the sake of simplicity, economists and UN organisations use GNP per capita as the measure of economic development. Beside this increase in the Green GNP of a country is also an important index for the measurement of sustainable economic development of an underdeveloped economy. Thus, each of the index such as increase in Real GNP, Green GNP, Real GNP per capita, PCCE, PQLI and HDI have their own identity in measuring the process of economic development of a country.

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Effective Transacting of Key Concepts in History

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Introduction

History is one of the important stream that makes up the Social Sciences along with Political Science, Economics and Geography. Acton says that History is a unique opportunity of recording, in the way most useful to the greatest number, the fullness of the knowledge which the nineteenth century is to bequeath. (Carr 1961). According to Collingwood “All history is the history of the thought and its re-enactment”(Collingwood 1946)

Nature, Method and Objects of History

History like theology or natural science is a special form of thought. The nature of history in context of it being a science is due to its answering of questions. The objective being to understand the human actions of the past. Its method is to proceed by Interpretation of evidence, for the sake of human knowledge.

History must not only be about what happened but the understanding of the processes that shaped what happened and the subsequent implications of it. Understanding of Concepts in History through investigation needs to be emphasized. In History there are several concepts that need to be reflected upon and ensured that the learners understand.

It is believed that the Social Sciences needless to say including History, merely transmit information and are text centered. Therefore, the content needs to focus on conceptual understanding rather than lining up facts to be memorized for examinations. Reiterating the recommendations of “Learning without Burden (1993), emphasis has to be laid on developing concepts and the ability to analyse socio-political realities rather than on the mere retention of information without comprehension (NCERT; 2005).

Objectives

After going through the content the teachers will be able to:

1. Identify the key concepts in History
2. Will be able to design innovative and experiential ways of handling a concept.
3. Will shift evaluation from information checking to conceptual understanding

What is a concept?

A concept is a general or abstract idea, understanding or thought embodying a set of things that have one or more properties in common (Chadwick; 2009). It can be expressed in a single word, such as Nationalism, or in a simple phrase, such as Mother country, Civilising mission.

A concept is an abstraction, which pulls together a number of facts. Concepts group certain facts together and help organize them and make sense of them by revealing patterns of similarity and difference. To be understood, concepts need to be constructed by the learner under the guidance of the teacher.

Barr, Graham, Hunter, Keown, and McGee; 1997

In Social Science, 'concept' mean abstract thoughts organized into knowledge and ideals, for e.g. Democracy, Secularism, Gender equality, Revolution, Economic development etc. Concepts are indispensable part of Social Sciences. It is the most productive means of accessing and framing knowledge in the subject. Therefore, the understanding of concepts is vital for the overall comprehension and understanding of Social Science. Understanding implies abilities and dispositions with respect to an object of knowledge sufficient to support intelligent behavior (Carl Bereiter: 2005).

Key Concepts in History

1. Revolution - 'A fundamental change in political power or organizational structures that take place in a relatively short period of time when the population rises up in revolt against the current authorities. It could be sudden like French Revolution or a long drawn process like the Industrial Revolution'

In a study conducted to assess the understanding of concept among secondary school children in Bhopalⁱ it was found that the understanding of Revolution was average. 55.8 percent of the students were found to understand the concept. On the other hand, many learners (43.3%) were not able to understand the conceptⁱ.

For concept clarity revolution can be taught by comparing it with a revolution and discussing various types of revolutions. Example – French revolution, Glorious revolution, Industrial Revolution or Commercial revolution. The term is being used for several other revolutions - White revolution, Green revolution, Pink revolution etc. These can also be discussed to strengthen the conceptual understanding. Preparing flash cards, making presentations or holding group discussion can help in the understanding of the concept.

2. Nationalism- 'It is a feeling of oneness, patriotism and unity among the people living in a country'

As per the study mentioned before, the analysis on level of understanding among students on Nationalism showed that 52.9 percent understood the concept while the level of not understanding is 47.1 percentⁱⁱ.

Nationalism forms the basis of a nation. It is a great democratic ideal which continues to be the strongest force and inspires citizens to work for the motherland. Understanding various ways in which nationalism can be expressed will help the learners in fulfilling their responsibilities with commitment and serving the nation. Learners can be asked to write stories, essays, perform role plays on the concept of nationalism.

3. Non- violence - 'Practice of being harmless to self and others under every condition'. It comes from the belief that hurting people, animals or the environment is unnecessary to

achieve an outcome and refers to a general philosophy of abstention from violence based on moral, religious or spiritual principles.

The understanding on the concept of Non – violence was found to be average i.e. 52.9 percent and the level of not understanding is 47.1 percent. ⁱⁱⁱ

The need for tolerance, patience has always been important. It is moreso in today’s context where violence is on the rise and has taken all forms – mental and physical. Education for peace is therefore of vital importance. It is necessary to make the learners understand the philosophy of non – violence which was as an integral part of Indian freedom struggle. The teachers can make use of movies, vidoes, newspaper or real life experience to build the understanding of the concept. Through activities like poster making, role play or presentation its understanding among the learners can be assessed.

4.Despotism - ‘Exercise of absolute power especially in a cruel and oppressive way. Implying tyrannical rule, dominance through threat of punishment, violence, absolutism or dictatorship or a dictator ruler not restricted by constitution laws, or opposition. Total unchecked power is also despotism; abuse of power where sovereign power is not divided i.e. autocratic government can also be termed as despotism.

Majority of the respondents (65.2%) were not able to explain the concept of Despotism. This means the level of understanding on despotism is low i.e. 34.8 percent. ^{iv}

Learners need to understand the various forms of government like dictatorship and despotism. This will make them respect and value democracy. They will also be able to understand their responsibility as citizens of a democratic nation. Conceptual understanding of despotism can be strengthened by comparing different forms of Government, showing movies and documentaries based on the concept. The related issues can thereafter be discussed in the class. Thereafter, formative assessment to check the understanding of the concept can be taken by the teacher.

5.Imperialism- ‘A country usually an empire or kingdom’s extending of power by the acquisition of territories through colonization, use of military force or other means. It exploits their territories for its advantage. Colonialism is a form of imperialism’.

Majority of learners (77.2%) did not understand the concept of imperialism. The level of understanding is therefore very low i.e. 22.9 percent. ^v

The concept needs to be discussed at length. Showing documentaries and movies may help to understand the meaning and impact of imperialism. The concept of neo- imperialism can also be discussed in the class. Connecting with daily life experiences and posing questions can help learners think. For example: Are the Indian toy industries suffering because of dominance of Chinese toys. What steps can the Government and the people take to check these? Can you think of similar other examples?

6.Communalism- ‘Division based on religion. It means to distinguish people on the basis of religion – to treat the person belonging to one’s own religion as friends and others as enemies’.

The level of understanding on communalism is very low i.e. 12.8 percent while the level of not understanding is very high i.e. 87.1 percent. ^{vi}

Asking learners their opinion on religion like -Should people be discriminated and have bitter relations due to differences in religion? What are their experiences related to it? What steps can be taken to promote communal harmony? Enacting a role play written and directed by

the learners themselves, preparation of slogans on national integration and communal harmony, preparation of charts, posters can be some strategies to strengthen the conceptual understanding.

7. Communism- An economic system in which the means of production are owned by the state. It is a social, economic, philosophical and political philosophy. In practice a single authoritarian party controls both political and economic systems.

The concept can be taught by emphasizing how private ownership of means of production-land, labour, capital and entrepreneurship leads to creation of vast income gaps. The teacher must check whether the learners understand related terms like- means of production and their role in wealth creation. The learners must be then given certain situations like figures on how many children face malnutrition, how difficult it is for people to get daily proper food. How access to basic needs like proper food clothing and shelter is denied due to abject poverty. This situation being while a section of the nation's population is basking in wealth and luxuries. Should there be social responsibility, Is Govt. intervention justified ?What should be the scale of intervention? Should private ownership of resources be done away with and all resources be controlled by the state? The class can then debate upon the merits and demerits of Capitalism and Socialism.

8.Divine Right Theory: The theory which believed that the king was the representative of God on Earth and no one has right to defy him. This theory was held by the Russian Tsars to perpetuate their autocratic rule. It was also the basis of all monarchical states.

This concept comes across while teaching Rise of Nationalism in Europe, Russian Revolution and French Revolution in History. Why was there a need to claim that all powers of King were given by God? What could be the powers that the Kings must have claimed for themselves as a result of it? Was it justified ? What could have been the consequences of such a system?

The teacher needs to give ample opportunities to the learners to reflect, analyse and reason. This will enable them to understand the factors that shaped the various revolutions in Europe and led to the rise of nationalism in Europe. Role playing what the divine rights of the king implied can also be an effective way to make the learners sensitise about the social and political condition of that period.

9.Serfdom: It refers to the legal and economic status of peasants under feudalism. Russian type of feudalism under which peasants worked for the landlord in exchange for food and shelter. No wages were paid. They could not be sold like slaves but they were not free to leave their master estate without permission. The concept of Feudalism can also be discussed. This was the main form of social organisation in medieval Europe. It is a system based on land. It involved a hierarchy of authority, right and power that extended from the monarch downwards, and where the lowest order was that of the serfs.

Understanding erstwhile institutions and their ramifications will help the students understand the past better. It will help them to understand how it has an impact in the present world. Learners can also be made to reflect whether the institutions still exist and have merely undergone changes in the form.

The teacher can draw parallel between the zamindari system of India and European serfdom. Movies, roleplays, discussions, brain storming can help the learners in conceptualizing it better.

10. Industrialization - 'Development of industries in a country or a region on a wide scale or a process when economies/ countries start to use machines to do work that was before done manually. It transforms agrarian society to an industrial one.'

Majority of the students (56.7 %) understand the concept of Industrialization. The level of not understanding is 43.4 percent.^{vii}

Industrialization is a phenomenon which is a part of all economies of the world. What implication does it have in our lives in terms of material benefits or costs in the form of environmental degradation that we pay or social divide that societies face needs to be very clearly understood by the learners. Constructivist model of teaching-learning can help in the strengthening of conceptual understanding.

11. Urbanization- 'Shift of population from rural to urban areas'. Teachers need to stress upon the differences in characteristics of rural and urban areas while teaching urbanization.

On the concept of urbanization it was found that student understanding is average i.e. 53.4 percent while the level of not understanding is 46.7 percent.^{viii}

Diagnostic assessment to find out learning gaps can be taken to ensure the understanding of the concept. Thereafter, designing appropriate strategies for conceptual understanding can be undertaken and executed. Some transactional strategies could be – To ask the learners to list out the chief characteristics that differentiate between the Rural areas and the urban areas. Thereafter, the process of urbanization can be discussed, Teacher can ask the students to reflect on the reasons which lead to people migrating from rural areas to urban areas. The class can then brainstorm on the advantages and disadvantages of urbanization.

12. Economic Depression - 'It refers to the recession in the economy. During the period the price level goes down, so the business activities slow down in the economy.'

The level of understanding on the concept of economic depression is low i.e. 24.3 while the level of not understanding is high i.e. 75.7.^{ix}

For learners to be able to understand various phenomenon that operate in the economy it is fundamental to understand these concepts. With real life examples from the various economies of the world, the understanding of this concept can be strengthened.

Evaluation for conceptual understanding

It is very important to take a formative assessment during the teaching learning process to check the understanding and fill the learning gaps if any. While teaching the concept reflective questions to the students will serve to be diagnostic and help in plugging learning gaps. After a topic has been completed concept based summative assessment must be taken. The focus should be on understanding and application based questions.

Examples:

1. Analyse the causes of communalism in India. What challenges does it pose to the unity and integrity of the nation.
2. Critically analyse the causes of the French revolution. What ideals has it given to the world?
3. Discuss the impact of Industrialization. Has it brought in more difficulties than benefits?

4. How did serfdom lead to social discrimination and exploitation?
5. Critically analyse the divine right theory . Did it result in despotism? Substantiate your viewpoint citing example from the French revolution or the Russian Revolution..
6. Reflect upon the merits and demerits of Communist form of system.

End notes: Pethiya Sangeeta and Khobung Vanthang Pui ~ A study to assess the understanding of social science concepts at secondary level Pac: 16.11

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UNDERSTANDING AND EFFECTIVE TRANSACTION OF CONCEPTS IN POLITICAL SCIENCE

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Introduction

Political science deals with the political aspect of human society and is concerned with the study of different political institutions and activities of human beings. State, governments, public policies, political processes and systems, political behavior etc. falls within the purview of Political science. The subject contains a number of essentially contested concepts which are complex and contemporary. Further, concepts are value laden and are crucial for building a coherent society based on mutual respect. Thus, understanding of concepts among learners in political science is very important. It is expected to help them in internalizing it in their behavior and contribute in building a coherent society. One pertinent query in political science and in social science as a whole should be whether learners understand its basic concepts and in what way their understanding could be strengthened. This module discusses the meaning, importance and learning of concepts. It further dwells on some basic concepts in political science and examines the understanding of learners on concepts among school children in Bhopal and based on the outcome of this study pedagogical intervention in transacting these concepts which can also be applied while teaching other basic concepts in Political science are also included in this module.

What is concept?

In common parlance, a concept refers to an understanding or thought embodying a set of things that have one or more properties in common. It has been defined as general notion or abstract idea and directly conceived or intuited objects of thought.ⁱⁱ Graham and others have defined concept as ‘an abstraction, which pulls together a number of facts. Concepts group certain facts together and help organize them and make sense of them by revealing patterns of similarity and difference’ⁱⁱⁱ. Concept thus, is an understanding or thoughts embodying a set of things that have one or more properties in common. A single word or phrase can be used to express concepts i.e. secularism, communalism, development, rural development, human capital, friction, inertia etc.

Why concepts?

Concepts are basic element in human thinking process. There is no comprehension and cognitive development without concept because human being lives in a world of concepts. Conceptualization is therefore at the center of cognitive development. Vergnaud’s three sets for defining a concept is worth mentioning in this context : i) a set of situations that grant meaning; ii) a set of operational invariants (thought categories considered pertinent, proposition true in relation to reality); iii) a set of symbolic representation.^{iv} Likewise, three aspects are also emphasized in the use of concepts – language, representation technique and application procedures.^v The first two aspects comprise the symbolic aspect of scientific

explanations i.e. to explain and the third one related to the recognition of situations to which these activities are applicable. Concepts play a central role in the construction of human knowledge, in human development, and in human comprehension. Without them (concepts), 'all we call subject matter would practically cease to exist', 'human beings would stop understanding anything', 'human cognition would be at risk'.^{vi}

Concept learning

Concept learning (also known as category learning and concept attainment) has been defined as the search for and listing of attributes that can be used to distinguish exemplars from non exemplars of various categories.^{vii} A learner is required to compare and contrast groups/categories that contain the concept-relevant features with groups or categories that do not. There are two essential ways of learning concepts according to Ausubel.^{viii} These are concept formation and by concept assimilation. Concept formation is usually common to preschoolers. This is spontaneous and intuitive process based on psychological process of determination, analysis, differentiation, generalization and hypothesis testing. The second way of learning is typical for older children, adolescent and adults. It is characterized by the processes in which new concept are acquired through interaction and through the anchorage of these new concepts to the already acquired concepts existing in the learners' cognitive structure. The concept acquired in childhood through concept formation can act as a support for the acquisition of new concept by assimilation. The specific set of concepts we learn in formal education (or out of it) reflects forms of life and thought, and of comprehension and expression that are present in our society.

Some key concepts in Political science

State: State is the central theme of political science. It generally refers to a community of persons more or less numerous occupying a definite portion of territory completely free of external control and possessing an organized government to which a great body of inhabitants render habitual obedience. State has evolved over a period spanning over thousands of years. The concept of state in ancient Greek city-states is different from the subsequent connotation of state in different stage of human society. State, past or present may varies in certain aspects, but on careful observation, it is found to exhibit some common elements which are People, Territory, Sovereignty and Government. People refer to the mass of population living in a state. As state is a human institution and as such one obvious element of state is people. Though there has been difference among early political scientist as to the size of population of a state, today the question of the size of population does no longer appear to be of any major significance. Territory is the demarcated area that belongs to the people. Land, water and air space comprise the territory of a state. Government is the agency through which the will of the state is formulated. Sovereignty is the supreme power inherent in a State.

Government – It represents the organizational focus of the state. Government is the instrument that provides mechanisms in determining, formulating, and implementing the policies of the state. It is the essential instrument or machinery of the state that carries out its will, purposes and objectives. There are different forms of government. Based on the number of people who rule, there are Monarchy, Oligarchy and Democracy and Federal and Unitary; based on the relationship between national and local government – Federal and Unitary; according to the status of those who hold the rein of government, Civil and Military; based on

the relationship between the Executive & Legislature –Parliamentary and Presidential; based on the level of functioning - local, intermediary (State/province/Canton etc) and Central government.

Sovereignty - It is the most distinctive element of state. Sovereignty exclusively belongs to the state. It is by virtue of sovereignty of the state that government exercises authority and makes and implements authoritative and binding laws and policies for its citizens. The study of sovereignty therefore assumes special significance in the field of Political Science.

Sovereignty is the supreme and uncontrollable power inherent in a State. Sovereignty can be internal or external –

Internal sovereignty refers to the supreme power of the state over all individuals and associations within its own territorial limits. The state is the final authority to make laws, issue commands and take political decisions which are binding upon all individuals and associations within its jurisdiction. It has the power to command obedience to its laws and commands and to punish the offenders who violate the same.

External sovereignty involves the idea of freedom from foreign control, i.e., the independence of the state from the control or interference of any other state in the conduct of its international relations. The state has the power to independently determine its own foreign policy and has the right to declare war and make peace. It also implies that each state, big or small, by virtue of its sovereign status is equal to every other state. It can command no other state and it cannot itself be commanded by any other state.

Universal Adult Franchise/Universal Suffrage: Franchise means the rights of the people to vote and elect their representative. Adult franchise means that the right to vote given to all adult citizens without discrimination on grounds of caste, class, colour, religion or sex. Universal Adult Franchise means the right to vote given to all adult without discrimination on ground of caste, color, gender, religion etc to choose their representative. It demands that the right to vote should be equally available among all. To deny any class of persons from exercising this right is to violate their right to equality. This system is the bedrock of a democratic system. It enables all citizens to be involved in the governance of their state. They do so by electing their representatives who govern to serve and protect the interests of the people.

Diversity: It is the condition or instance of being composed of differing elements or qualities. It may be conceptualized as representing a multitude of individual differences and similarities that exist among people. Diversity can encompass many different human characteristics such as race, age, creed, national origin, religion, ethnicity, sexual orientation etc. The concept of diversity encompasses acceptance and respect i.e. understanding that each individual is unique and recognizing our individual differences along dimensions of race, ethnicity, gender, sexual orientation, socio-economic status, age, physical abilities, religious beliefs, political beliefs, or other ideologies. Diversity is a reality created by individuals and groups from a broad spectrum of demographic and philosophical differences. It is extremely important to support and protect diversity.

Discrimination: It denotes differentiation between people on grounds of gender, ethnicity, looks, colour, sexuality, disability, class etc. Discrimination in political system can be explicit (open/clear) or covert (hidden/not clear). One example of explicit discrimination was seen in the institutionalized exclusion of black people from public political life in South Africa recognized by the state. Discrimination on ground of ethnicity, gender, levels of education, poverty etc. are also seen to operate at a more informal level.

Secularism: This concept rest on the idea of equal treatment of all religion by the state. Religion should not be a part of the affairs of the state. There should be a clear commitment to a clear separation between state and religion and avoidance of policies that discriminated on grounds of religion.

Communalism- This concept is associated with two things viz. i) a system of government in which autonomous local communities are loosely in federation. It proposes abolition of market and money and that land and enterprises to be placed in the custody of community; ii) the antagonistic polarization of politics between religious and ethnic groups (in the context of South Asia particularly). It is usually associated with tensions and clashes between different religious communities in various regions and difference among the people of different community.

Understanding of concept and pedagogical intervention

The scenario on understanding of social science concept is highlighted here based on recent study on understanding of concepts among secondary school children in Bhopal^{ix}. By doing so, the status on the understanding of concept, the nature of misunderstanding/wrong understanding, the gap in the understanding of concept and the needed classroom and beyond classroom intervention which will be relevant and applicable even on other concepts apart from the one taken up for this study are highlighted.

Status on the understanding of concept: In this study, five basic concepts in Political science such as Communalism, Gender bias, Universal Adult Franchise, Public opinion and Secularism were included. It was found that the level of understanding was quite low among the student. Only 44 percent of the students under study were found to understand the concepts of political science under study. The most understood concept in political science among the students was found to be gender bias which 71 percent of students understanding it. This is followed by Universal Adult Franchise (57.1 %) and Secularism (47 %). Public opinion was found to be understood by 30 percent of the student under study. The least understood concept under study in political science among the student was found to be Communalism. In most cases, Communalism was found to be wrongly understood.

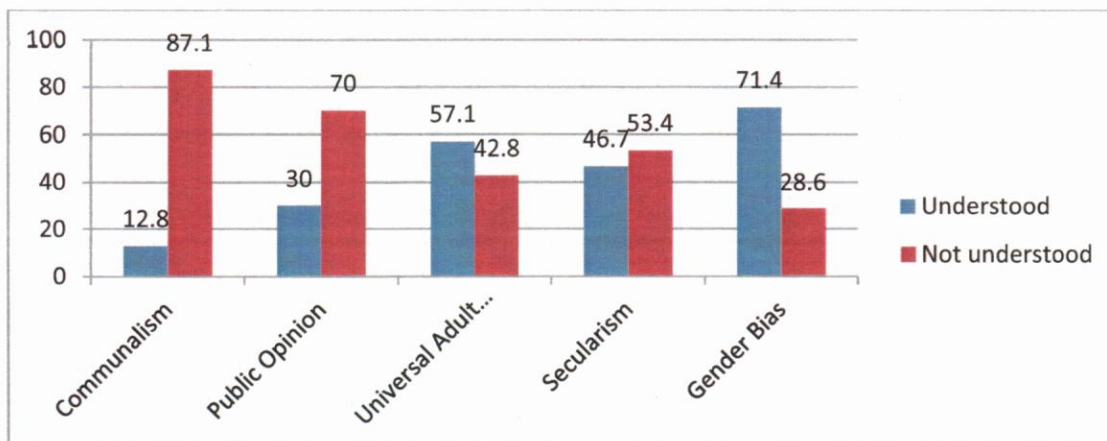


Figure 1: Understanding of concepts in political science.

The need to focus on enhancing understanding of concepts is the need of the hour as also evident from the outcome of this study. To find ways and means for enhancing understanding in social science, it is necessary to know the misconception/misunderstanding on the concepts.

The nature of misunderstanding/wrong understanding: On the concept of *Communalism*, most of the learners link communities with the concept of communalism, apparently appealing their common sense. This kind of misconception is seen in the following responses:

- Communalism is like discrimination
- Different types of religion, types of soil
- When communities combine to do something special
- Coming together of communities
- To promote their party member and to join their opinion
- A single party or Government like China

In order to enhance the understanding of *Communalism* among learners, their opinion and ideas must be assessed beforehand as a warm-up discussion. This will help in understanding their views that have already been constructed through the social environment. The teacher will now be in a position to know whether there is a need to unlearn and relearn for the learners. She/he will be able to take up the concept of communalism better. Effective teaching can ensure the understanding of the concept. The understanding of the concept is crucial to the unity and integrity of the nation. Learners' opinions and ideas must be tapped. Creative use of newspapers and opportunities to learners to relate concept with real life experience may help in stronger conceptual understanding.

On the concept of *Public opinion*, students exhibit vague and incomplete understanding. This reflected in the following response:

- Public opinion means public wants all rights
- Common people have same objectives to advice the goals
- Conflict of opinion between ruler and public
- When government cannot take decision they take public opinion
- Election to choose their candidate
- Something which is done with the opinion of people like election

Public opinion appears to be an easy concept. However, it was not properly understood by the learners. The concept must be taken up with real life examples and learners must be given an opportunity to verbally express their views on public opinion. A diagnosis of the understanding must be done and revisiting of the concepts if required taken up. Teachers need to understand whether there are gaps in understanding or problems in articulation of the concept.

On the concept of Universal adult franchise, the incomplete and vague understanding of students is reflected in responses like ‘ a person about 18 years only allow to give vote’ and ‘people were able to vote and elected their leaders after the age of 18 years’. In these response, ‘Person’ has been generalized and not specified as irrespective of caste, colour, creed, race, religion, gender, rich or poor who are Indian nationals or citizens of the country. It reflects common sense understanding rather than conceptual understanding. This reduces social science to general knowledge or still further it reduces to general information only. The students may be almost correct but do not show use of subject specific meaningful terminology.

This concept needs to be taken up in the class by conducting various activities like mock elections to choose class representatives. This may help the learners in developing strong conceptual understanding. Besides, newspapers activities, discussion, interactive discussion between teachers and learners or peer discussion can be organized for conceptual understanding. A diagnostic test must be taken by the teachers to check the understanding and to take necessary steps in case learning gaps are found.

On the concept of Secularism, learners’ shows partial and incorrect understanding and are confused about secularism with casteism. It is reflected in the following:

- Those people who use secularism make difference on caste, religion ex. (touch difference)’
- Person is low caste not allowed temple entry

As Secularism forms one of the core values of Indian constitution and Indian ethos, the utility in building coherent society based on mutual respect, to great extent hinged on the understanding of this concept by the learners. The learners need to understand the concept well as understanding is one of the first steps in internalizing the values inherent in this concept. The teachers need to devise teaching methodologies to help students in understanding the concept well. A diagnostic test after teaching the concept must be administered and the learning gaps and misconception identified, which should be corrected by designing appropriate teaching-learning strategies. Poster and chart making, videos on state-sponsored religious persecution may be shown in order to convey the need to uphold the secular spirit of our country.

On the concept of gender bias, some of the misconceptions shows in this concept include

- Discrimination on the basis of caste
- Most common problem in many country that some people behave racist, to girls and sometimes boys also
- In India there is no gender bias because in constitution it is written no one discriminate people by gender

Most of the learners' understand the concept of gender bias. For those learners to whom the concept is not clear the concept need to taken up by starting with the learner's experiences, followed by group discussions, showing videos, interactive discussions and other creative/innovative pedagogy. It is very important to take a formative assessment through activities like role play, debate, poster making or through pen and paper test. Diagnosis of learning gaps will help in revisiting the concepts and thereby strengthening conceptual understanding. A part from the above concept-specific intervention in the teaching of political science, the following strategies and methods can be incorporated and considered keeping in mind the context of transaction and content of the subject while teaching concepts in the subject:

- **Appropriate learning resources:** Learning resources can infuse tremendous vitality into the teaching of political science in general and in concept in particular. But the appropriateness of the resources needs to be foremost in the minds of the teacher. Maps, Newspapers, Audio visual materials, pictures etc should be chosen with sensitivity keeping in mind the diversity and multicultural ethos of Indian society.
- **Activity-based learning:** All concepts taught should be activity-based. Textual material is to be complemented by the activity taken up. Activities should be related to examples from local surroundings.
- **ICT integration:**
 - For creating an atmosphere for learning, abstract of a lengthy film (relevant with the topic to be taught) can be shown to the learners. This will give background information to the learner and stimulates the imagination of learners as well. Live and recorded television programmes such as session of Lok Sabha and Rajya Sabha can also be used in classroom teaching to learn the Parliament procedure.
 - To ensure the active participation of the students, hands-on approach should be integrated. Learners may be asked to scanned newspaper and prepare a topic-based collage and display it in a display board (inside or outside class).
 - Radio can be used to introduce a lesson when the period of the lesson coincides with the time of a relevant radio programmes. Home assignment based on radio and television programmes can also be given to learners. Teacher can give them in advance the specific period of program and the specific points of ideas which the student should look for in the programmes.
 - For reference purpose, factual information from website in the form of table, chart, figures and diagrams can be use in classroom. For example, table with information can be used to compare two or more sets of political phenomenon such as Unitary and federal system, Presidential and Parliamentary government etc.
 - For learning outside the classroom, ICTs could help provide information about government and the democratic process. For example, websites developed by government institutions, political parties, campaigning groups and on-line news services. The use of digital communications technology also supports 24-hour news-gathering and dissemination about current political events. Television is a medium of transmitting pictorial views and sounds of events while they are taking place or from recorded films or tapes. News item, political discussion and broadcast, political interviews, debates, Quiz and documentary programmes in Television, Newspaper, Movies, Radio etc. are of interests for the student and teachers of political science.

- Discussion: Sharing of students' own experiences and opinion can result in interesting dialogues which can lead to better understanding of concepts which are usually contestable.
- Research: What has proved efficient for inspiring students is getting them researching and thinking outside of the classroom. This means, for example, asking them to bring in an article they think is relevant to that week's topic. In addition, students can be required to prepare a few discussion questions as well as explain and back up their own opinions.
- Case study: Another recommendation is the use of case studies. Any difficult concept can become comprehensible when connecting it with current and important cases.

Concepts and its learning will remain an important area of focus in political science in particular and in social science in general. As political science deals with the aspect of political life in human society, concepts will continue to evolve and assume a new dimension and along with this, more strategies and methods of its learning.

End Notes:

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GENDER ISSUES IN EDUCATION

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INTRODUCTION

Gender is the most ubiquitous form of inequality, as it operates across all classes, castes and communities. Yet, while gender equality has been a key objective of education policy in India for over three decades, it has lacked critical edge in implementation. The massive amount of resources used for improving gender disparity in education has not contributed much improvement in real terms. Hence, the dropout rate of girls, especially from the marginalised sections of society and the rural areas continues to be grim. The scenario is very alarming as 9 out of every 10 girls ever enrolled in school do not complete schooling, and only 1 out of every 100 girls enrolled in Class I reaches Class XII in rural areas.

Several factors are cited for the persisting disparity of gender in education. Some of these often-cited factors are poor teaching, non-comprehension, difficulties of coping and high costs of private tuition or education. Apart from these, several socio-economic factors have also contributed heavily to the poor representation of girls in the overall education framework. Despite the education system's focused efforts to give more representation to girls, it continues to "push out" those who are already within. There is a growing realisation that socio-economic factors have a greater impact on the enrolment, issues of curriculum and pedagogy require equal and critical attention for improving the retention of girls.

In spite of the national effort to improve gender in education indices, things have not changed much for girls, especially of rural areas. The entire discourse of improving the standards of gender in education will become productive only if three fundamental questions related to Gender in Education are answered;

- a. How will we ensure access to education for all girls?
- b. How will we ensure retention and quality of girl's education?
- c. How are we going to integrate input of women's studies research in textbooks, syllabi and training?

CONCEPT OF GENDER

Before proceeding to discuss the gender dynamics in education, it is necessary to have a good understanding about 'gender'. The construction of gender is not something which happens only to children but it happens to other people as well. It is also not something which happens once only. The foundations of gender construction are laid very early in the life of the individual with the childrearing process. Through this process the child gets into the loop of constructing and reconstructing gender identities. Because masculinity and femininity are not biologically determined they have to be socially constructed and taught.

In a nutshell, gender could be expressed as the following;

- It assigns different and unequal roles and attributes of “masculine” and “feminine” to men and women.
- In practice, it categorises these “masculine” and “feminine” roles and attributes as “natural” differences; this makes unequal relations seem normal.
- Gender is revealed to be a construction rather than *a given* if we shift the perspective from gender as difference to gender as concretely experienced dominance: then gender changes from *what seems natural* to *what calls for questioning*.

Every culture has its way of valuing girls and boys and assigning different behaviour patterns, attributes, attitudes, roles, rights and expectations. All the social and cultural packaging that is done for girls and boys from birth onwards is called gendering. Such gendering becomes visible, in a prominent way, in childrearing process during which biological sexes are attached with gender identities of women and men along historical and cultural lines.

EDUCATION AS A MEANS OF SOCIALISATION AND SOCIAL CONTROL

Surprisingly, Indian education presents a paradox when it comes to women education and women’s status in the society. Increased access to education has not translated into improved status of women. States with the high literacy rates for women record a declining sex-ratio: Delhi – 75 per cent female literacy, sex ratio 821; Punjab – 63.5 per cent female literacy, sex ratio 874.8. These statistics are symptomatic of higher rates of sex-selective abortion and hence greater violence against women. This implies that there is no simple co-relation between higher levels of education and the empowerment of women. Such paradoxes cry for national attention and collectively pose the fundamental question ‘Has education failed Indian women?’

It has been found that schooling reinforces the gendered inequality of socialisation across all divides. It is evident that the schooling of girls remains embedded in the societal context even though it provides an expanded space for growth to women. In fact, school curriculum and schooling have become active instruments of cultural reproduction and social control without seeking to alter the informal and the formal processes of socialisation.

Formal education or schooling involves moving into public spaces, interaction with males (in co-educational schools and with men teachers); or being socialised (through the curriculum) as boys. However, the main concern to control sexuality in the direction of motherhood remains. For example, small girls are given some freedom and may be sent to primary schools (even the co-educational ones) but the nearer they are to puberty, the restrictions imposed on them. Therefore, why girls drop out at 11 plus and greater are 14 plus from school may be understood in this context.

The social control of female sexuality accounts for whether girls have access to education or not. This ideology also determines the quality, type and duration of education they receive and what they do with it later i.e. whether they work or not and what kind of job they take up;

whether they work to earn before or after marriage. Further, the curriculum is not designed to question the basic premises of the value systems surrounding female sexuality. If anything, there is a correspondence between the ideology of control of female sexuality, the socialisation of girls and boys, and education that reiterates and consolidates this ideology and socialisation.

Once girls are given access to schools, the assumption is that as girls and women have entered the public sphere, empowerment will follow implicitly. Their life options will expand and they will be in a position to take greater control of their lives. But the complexity lies in the fact that schools themselves create boundaries that limit possibilities. The content, language, images in texts, the curricula, and the perceptions of teachers and facilitators have the power to strengthen the hold of patriarchy. The school becomes an enclosed space, like the domestic sphere where discriminations and violations are not talked about or questioned. Socialisation and education reinforce each other. Schooling becomes another form of domestication. For example, school textbooks depict this gender-based domestic division of labour. In the classroom too, just as dalit children are expected to perform the menial tasks, girls are often relegated to the work of cleaning and sweeping, reinforcing the gendered division of labour.

The aspirations of young girls are unrelated to their actual intellectual and cognitive abilities. Cutting across elite private schools to Government schools, girls perform better than boys but by the time they reach the end of middle school or secondary school their educational and occupational aspirations differ markedly from that of the boys. Such typical gendered projection of knowledge calls for serious inquiry into curricula, content, and the gendered construction of knowledge, as well as a more critical and pro-active approach to issues of gender.

CHALLENGES IN EDUCATION

Girls have always carried multiple burdens of inequality in the domain of education. Regardless of their ethnicity, class, caste, religion and other antecedents, girls collectively suffer from several disabilities and inequalities. These disabilities have further been complicated by contemporary political and socio-economic forces to create cumulative disadvantages. Some of the frequently arising issues related to the dynamics of gender in education in India are given below;

- a. **Rural girls' education, accessibility of schools, and integration in the domestic economy:** Rural residence has emerged as a very acute handicap. This is a result of the government policies due to which schools and educational facilities have been far fewer in the villages than in the urban areas. Children in rural areas have less access to schooling because the schools are either not available or physically and/or socially inaccessible.
- b. **SC/ST girls' schooling, gendered labour and socialisation:** Special educational benefits have undoubtedly facilitated the educational progress of scheduled castes and scheduled tribes, particularly in the last two decades. However, they continue to lag behind educationally and there is great unevenness between different state and

regions. Poor SC/ST parents are unable to send their children to ‘free’ schools because of costs other than the tuition fee and of forgone income from the children’s work. However, educationally the most vulnerable are girls. Dalit girls’ educational aspirations are decisively shaped by labour requirements of the domestic and public economies: In the caste/gendered segmentation of the labour market women are disproportionately found in agricultural/rural labour, traditional domestic, low skilled, low status, or caste related (sweeping – scavenging) services in rural sectors.

- c. **Muslim girls’ education: financial constraints and communal factors:** In the context of Muslim girls, recent research has revealed that contrary to prevalent stereotypes about forces of conservatism being the cause for low levels of education, financial constraints seem to outweigh parental opposition as women’s chief obstacle to continuing studies. Poverty of Muslim households provides the most powerful explanation for the poor levels of Muslim women’s education.
- d. **Implications of violence, conflict and displacement for gender and education:** Violence and violent conflict, both in the public and domestic realms, affect the mental health of individuals, often resulting in crippling levels of trauma and loss. Situations of violent conflict have had a serious impact on education in general and girls in particular. Education system gets severely affected by the impact of violence, conflict and displacement wherever it has happened. The impact of domestic violence on children too is considerable, and affects their self-confidence and performance in school. Education has not focussed on equipping the young to reflect upon issues of violence and violent conflict, nor to deal with the resultant trauma.
- e. **Communalisation of education:** While communal perspectives have been present in textbooks in earlier periods too, studies done of textbooks rewritten from this perspective, for example in Gujarat, highlight their ready potential to contribute to a culture of divisiveness between religious communities. While boys are subject to acute pressures of militant masculinity, the roles of women and girls are further represented as circumscribed by the community and they are portrayed primarily as upholders of tradition and family values.
- f. **Schools of religious denomination and limitations to girls’ education:** Despite varying estimates regarding their numbers, it is a fact that schools of religious denominations like Saraswati Shishu Mandirs and Madrasas, comprise a significant percentage of the non-government schools. Several analyses, including the views of the National Steering Committee on Textbook Evaluation, Recommendation and Report II of the NCERT 1999, and Teesta Setalvad’s analysis, submitted to the Parliamentary Committee on Education and Culture in 2000, on the nature of textbooks used in the religious schools, highlight the ways in which such education delimits girls and women in extremely orthodox roles and functions that are detrimental to their development as autonomous citizens of a secular democracy.
- g. **Proliferation of Private Schools and Decline in Standards of Government Schools:** Privatisation has been taking place at a rapid pace in all sectors of education.

On the one hand we have an unregulated private sector in education, where a majority of schools focus on market values and success rates, and do not have a commitment to the constitutional values of equality and citizenship or to the ideals of social justice and collective well-being. On the other hand, the government school system is responding adversely to privatisation. Studies show that government schools are becoming centres of poor quality education for the poor and marginalised, and are being attended by girls from poor families. Polarisation of schooling is creating imbalances which are severely gendered, with parents deciding to send their sons to private schools, whatever their quality, in the hope that this education will afford some upward economic mobility.

How education can redress inequities of gender?

When education is viewed in terms of its transformative potential, as a social intervention that works towards re-examining existing realities, then it becomes the single most powerful process for redressing the inequities of gender. It can facilitate the forging of new values and forms of society that would enable both women and men to develop their human capacities to their fullest. An empowering education shares with gender a common project – presenting images of that which is not yet – thereby moving from the given to realising new ways of imagining our future.

CONCLUSION

Recent reflections on gender in the context of education have led to the premise that knowledge, teaching and learning must be linked to the goal of opening up knowledge to gendered inquiry rather than “fixing it” in established moulds; of educating students to think critically, struggle with relations of power, and envisage versions of a world which is not “yet”. Insights from women’s studies and the women’s movement both in this country and in other parts of the world over the past twenty years have enriched our understanding of how education can form a part of this project of possibility. A gender-just and empowering curriculum has the potential to enable students to critically engage with and challenge received knowledge about fixed gender identities.

SUGGESTED ACTIVITIES IN THE CLASSROOM

- Collect books, magazines and newspapers and give them to students to analyse names and characters given in them. List separately the images and social roles of girls and boys given in these documents.
- Ask students to make a list of tasks that they normally do at home. Compare the list of works of boys and girls and find the reasons for the gender-specific allocation of tasks.
- Ask students to share the names by which they are addressed in their family and neighbourhood. Analyse these names and compare them with the normally respectful ways of addressing.
- Hold discussions on topics like gendered language, gendered roles, abuse, gender and family honour, violence and societal restrictions on gender and try to find out the reasons for these general gendered notions of society.

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Multi-Culturalism and Cultural Diversity through

Social Science Education

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A Narrative of Diversity

In the new world that we live in, globalisation has erased world boundaries to such an extent that the world has come to be referred to as a 'global village'. No country or community can claim to be untouched or uninfluenced by the world culture. As it is seen universally, more people from different nations, regions, cultures, religions and lifestyles are working together than ever before. Since there is an interactivity of cultures across the world, the term 'coexistence' has assumed critical importance more than ever. For ensuring quality of life to the members of society that has grown considerably heterogeneous, it is necessary to establish harmony and mutual respect within society.

Measures to achieve social harmony is essential primarily because of the diversity that societies have. When people of different antecedents and abilities need to live together, principles and practices of harmony need to get inculcated in personalities right from the beginning of personality formation. Mutual appreciation arising out of respect along with tolerance is the key in maintaining healthy social relations of harmony and peace. Tolerance as a learned behaviour implies neither disapproval or acceptance but it denotes the condition in which people live in a diverse setting with mutual respect and with a liberal world view.

Since education has a bearing on the way local cultures are getting shaped, society needs to ensure that the education system is developed in such a way that tolerance and mutual respect are fostered as fundamental virtues. Only when there exists mutual respect and appreciation in a society people from diverse backgrounds can coexist in a liberal and pluralistic society in a peaceful environment. Tolerance requires citizens to uphold the rights of groups, even those they find objectionable to be able to participate fully in political, social and economic life. Undoubtedly, today's society is a blend of many races, different religions, varied cultures and a wide variety of customs and beliefs. This is now the universal norm in schools, places of employment, neighbourhoods, in businesses. Lack of appreciation for world ethos and diversity of cultures breed conflicts of all sorts by creating misunderstanding and hostility between communities. As evidently seen in world communities, intolerance in terms of social values leads to hate groups, hate crimes, high incidence of violence and a general discordance.

Diversity and Social Science Education

Education has an important role to play in promoting social harmony and creating an environment of coexistence. Education is not just the process of transferring knowledge to children for helping them participate meaningfully in society. Of course, education needs to prepare the young people for life, work and citizenship. However, the greater objective of education is much broader and must become a process contributing to the moulding of

personality by facilitating social, academic, cultural and intellectual development of the young people so that they can grow up to be engaged and responsible citizens.

The specific objective of social science is very contextual as it seeks to help the young people make informed and reasoned decisions for the public good as citizens of a culturally diverse, democratic society in an interdependent world. The purpose of social studies is to enable students to understand, participate in and make informed decisions about their world. The teaching and learning processes within social studies are uniquely organized to develop these capacities, beginning with the youngest learners in our schools. Considering the diversity that exists in all societies and the imperativeness of promoting peaceful coexistence, social science education needs to link with multi-culturalism and address the following objectives;

1. Understand the facts, concepts, principles, and perspectives that shape social studies.
2. Apply learning to complex social situations and contexts.
3. Think critically about important issues and communicate their findings.
4. Engage in the processes of problem solving and discipline-based inquiry.

In a nutshell, social studies should provide students with purposeful and meaningful learning experiences that are challenging, of high quality, developmentally appropriate, and reflective of contemporary social and diverse global realities.

Classroom Transaction, Pedagogy and Cultural Diversity

As the first measure to strengthen social harmony and peace, diversity needs to be recognised and respected. Indian society, in particular, and the world society, in general, are changing rapidly with increasing diversities. The demographic canvas of Indian society has been undergoing endless changes thereby becoming more multi-ethnic, multi-racial, multi-lingual, multi-religious and multi-cultural. This creates a strong reason for the development of a curriculum and its practice for helping the learners prepare themselves to understand and participate effectively in an increasingly diverse world. As stated earlier, school social studies is intended to enable students to make informed decisions about their world by helping them explain relationships with social environment and realities.

Classroom transaction of social sciences is to impart skills to learners for productive problem solving and decision-making. It should also help them make thoughtful value judgements. Above all, social science pedagogy and classroom transaction should integrate the skills and understandings into a framework for responsible citizen participation at local, national and global levels. The teaching and learning processes within social studies need to be organized to develop these capacities, beginning with the youngest learners in schools.

Social exclusion, in varying degrees, occurs in all societies. At times, the demographic diversity and heterogeneity itself form a basis for exclusion of groups and communities in a society. The most common basis for social exclusion are ethnicity, caste, linguistic and cultural backgrounds. In Indian context, no other basis of social exclusion is as pronounced as the caste system which historically pushed many communities to the margins of the society. Multi-culturalism, based on the fundamental equality of human being, helps erasing boundaries on one side, while on the other, it also fosters peaceful co-existence based on

mutual respect. Social education seeks to help the present and future generations to learn to live together in peace, security, respect for international law, human rights and fundamental freedoms. Thus, the value-based social science curriculum is intended to remedy the dehumanisation of deprivations and exclusions based on diversities.

Conclusion

Social science education is intended to facilitate lifelong learning and active and responsible citizenship by understanding diversities and respecting them and co-exist with these in an environment of mutual respect and appreciation. Apart from serving the objective of helping learners acquire knowledge and skills, social science education is intended to help learners imbibe global ethos and a spirit of mutual appreciation which should lead to greater social harmony. This way, social science education increases the positive and critical thinking abilities which are necessary in societies with considerable diversity. Thoughtful and deliberate classroom engagement related to controversial or ethical issues provides opportunities for students to practice critical thinking skills while examining multiple perspectives. It is expected that classroom transaction and environment become more conducive for open and frank discussions on values. Besides, classroom transaction of purposeful and powerful integrative social studies should also help students engage in real-world problem solving, weigh costs and benefits and make rational decisions.

SUGGESTED ACTIVITIES IN THE CLASSROOM

- Ask students to list the ways of people greeting each other. Try to find out the meanings of the words of these greetings.
- List the kinds of clothes worn by people of different states and cultures. Try to link the clothes with local climates; analyse the differences in clothing pattern and discuss how cultures have specific norms relating to covering different body parts.
- Ask students about the kinds of food they normally eat and why they eat that particular food. Discuss the nutritional values of their food and its relation with the local culture. Also discuss how a person, a society or a culture is judged on the basis of food.

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Curricular Expectations and Learning Indicators in Social Science at Upper Primary Stage

Introduction

The Social Sciences have been a part of 'Environmental Studies' before upper primary stage. Environmental Studies draw the child's attention to the broad span of time, space and life in the society, integrating this with the way in which she comes to see and understand the world around her. At upper primary level, we deal with social sciences that encompass diverse concerns of society and include a wide range of content, drawn from the disciplines of geography, history and social and political life. Social Sciences help to develop social, cultural and analytical skills required to adjust to an increasingly interdependent world, and to deal with political and economic realities. This is necessary for understanding the world in which we live.

In an inclusive classroom strategies have to be planned for teaching learning according to the need of children as there may be differently abled children in a classroom. Hence sign language, audio books, tactile maps etc may be used for them.

Curricular expectations:

Source NCERT Document

View contemporary issues from multiple perspectives introducing the child to social and economic problems of society like poverty, illiteracy, child and bonded labour, class, caste, gender, environment etc.

Develop a proper perspective related to their uses and concerns related to environment, resources and development at different levels from local to global.

To acquire a general idea of development in different periods of History

Understand the formation and functioning of governments at the local, state and central level and the democratic processes of participation.

Making the perspectives of women integral to the discussion of any historical event and contemporary concern

Develop ability to think independently and deal with the social forces that threaten human values, without losing her individuality

The disciplines of social sciences have distinct methodologies that often justify, the preservation of boundaries. Hence, the discipline specific curricular expectations, with exemplar pedagogical process and specific learning indication that can be visible among learners are provided below.

Social and Political Life

CURRICULAR EXPECTATIONS:

Develop ability to think independently and deal with the social forces that threaten human values, without losing her individuality.

- Create a strong sense of human values, namely, freedom, trust, mutual respect, and respect for diversity.
- Making learners alert to the social forces that threaten these values.
- Produce sensitive, interrogative, deliberative and transformative citizens
- Imbibe the ideals of the Indian constitution

Enable to view contemporary issues from multiple perspectives.

- Acquire social living skills – social adjustment, social sensitivity etc and expresses self-control
- Develop desirable attitude towards others national, racial and gender
- Grasp the interconnectedness between political, social and economic issues

Understand the formation and functioning of governments at the local, state and central level and the democratic processes of participation.

- Gain a real sense of the workings of Indian democracy; its institutions and processes
- Learns to critically engage by constructing herself as an interested citizen of a vibrant and on-going democratic process
- Develop attitudes and skills necessary for effective and responsible democratic citizenship
- Different forms of government and the laws and freedoms available to all

Understand the real-life functioning of institution like the family, market and the state and ideals

- Enable to grasp the deep interconnectedness between the political and social aspects of her everyday life and its impact in the realm of economic decision making
- Learn about ways of making a living, market operations, inequity in market, role and functions of government
- Understand markets and their function to link scattered producers and consumers
- Link between peoples aspirations/needs and role of government

Making the perspectives of women integral to the discussion of any historical event and contemporary concern and the role gender plays in ordering social and economic lives

- Epistemic shift from the patriarchal preconceptions
- Role of gender in creating unequal and hierarchical relations in society
- Recognise the gendered nature of all issues understand the invisibilisation of women's labour

Interpret political, social and economic developments from the point of view of the marginalised

Geography

CURRICULAR EXPECTATIONS:

Has an understanding about the earth as the habitat of human kind and other forms of life.

Knows that earth provides ideal conditions for all forms of life

Knows about major realms of the Earth – Lithosphere, Hydrosphere, Atmosphere and Biosphere

- Can identify major landforms – mountains, plateaus and plains, and their affect on humans.
- Understands the interdependence of various regions and countries
- Knows her/his own region, state and country in the global context.

Acquires basic skill of map reading

- Understands the difference between a sketch and a map
- Knows about the components of a map
- Can read a simple map

Understands environment and its components – both natural and human;

- Knows about interdependence of environment's components and importance in our life.
- Appreciate and has sensitivity towards environment conservation

Knows about the resources – their variety, location, distribution, importance and judicious use for sustainable development.

- Appreciates the role of human resources.
- Has awareness towards the conservation of resources.

History

CURRICULAR EXPECTATIONS:

A general idea of the development in different periods of History

Political, economic, social and cultural developments in different periods

Identifying similarities and differences in these developments over a period of time

Understanding how some things change over time and some things remain the same

How historian's work?

Sources-Meaning and Importance

Different periods and different kinds of sources

How to interpret sources?

- **Understanding what is historical diversity?**

History of different regions, different castes, different classes, different gender, different tribal societies, religious groups and different ways of life

Learning Outcome

The learning outcomes in social sciences after the completion of upper primary stage are as follows:

Social and Political Life

Geography

Learn will know that in solar system life exists on earth and what are the reasons behind it.

Learner will be able to understand the relationship of realms of the earth namely lithosphere, hydrosphere, atmosphere and biosphere

Learner will know about components of maps and will be able to read a simple map.

Learner will be able to appreciate and develops sensitivity towards environment.

Learner will be able to understand the inter relationship of human and natural environment

Learner will develop awareness towards resource conservation and take initiative towards conservation process.

History

Learner will acquire a general idea of the political, economic, social and cultural developments in different periods. She will be able to identify similarities and differences in these developments over a period of time and will develop an understanding how some things change over time and some things remain the same.

Learner will have an idea how historian's work. She will also understand the meaning and importance of sources and that different periods have different kinds of sources. She will also develop an understanding of how historians interpret sources.

- Learner will develop an understanding of historical diversity through history of different regions, different castes, different classes, different gender, different tribal societies, religious groups and different ways of life. She will be able to establish link between histories of different groups and societies.

Learner will understand the importance of timelines and historical maps and will use these wherever required and will also try to locate the developments of one region in relation to what is happening elsewhere.

Link between histories of different groups and societies.

Introduction to timelines and historical maps and their importance.

Locate the developments of one region in relation to what was happening elsewhere.

Develop capacity for empathy and imagination

Concern for justice, equality and preservation of heritage

Learning Indicators for Social Science

Class VI

Social and Political Life

Pedagogical Process	Learning Indication
Reference to real- life situations to show the diversity that exists between people belonging to different regional, cultural and religious backgrounds and how historical, cultural influence and geographical reasons lead to diverse ways of living. Cultural, social and class differences generate their own biases, prejudices and attitudes in	Appreciates various forms of diversity in their everyday environments and is aware of its connectedness to inequality. Learner develops sensitivity towards pluralism and interdependence, Empathizes with the stereo type images existing regarding gender, differently abled, marginalized etc and understands how

<p>classroom contexts. Open-ended discussion on different dimensions of social reality in the class will help in creating increasing awareness.</p> <p>Concepts of discrimination, equality etc have to be clarified to the students through the lived experiences of individuals (for e.g. Dr. BR Ambedkar) and communities</p> <p>Expose learners to the stereo types existing regarding gender, differently abled etc. and how their own feelings and thought are quite different.</p>	<p>discrimination denies respect and dignity. Reacts to situations of any discriminatory activities and do not possess prejudiced feelings.</p> <p>Express divergent views with respect to gender discrimination and positive attitude towards differently abled, marginalized group etc.</p>
<p>Discuss different cases of conflict that occurs when people of different cultures, religions, regions do not get along with each other and the role of government in resolving them.</p> <p>Expose to the key elements which includes, people's participation, resolution of conflict, equality and justice that influence the working of the democratic government</p>	<p>Express their views on various issues that arise due to diversity and suggest ways for providing unity and measures government can take.</p> <p>Reacts to the unjust practices and discrimination and believes that justice can only be achieved when people are treated equally</p>
<p>Idea of government is introduced and then elaborated upon through a discussion of the types of government at the local level, as well as learners are exposed to the different aspects of their functioning</p> <p>Expose learners to the administrative services carried out by the government in rural and urban areas. Provide opportunities for them to trace out the public services and facilities provided by various departments of government</p>	<p>Learner articulates on the working of the government and its various functions in their locality and its links with peoples aspirations/ needs and the role of Gram Sabha in keeping an eye on the elected representatives</p> <p>Shows interest in finding the problems faced by people and the administration with regard to the services and facilities. Puts forth creative and feasible suggestions for bringing about improvements in their functioning.</p>
<p>Opportunities for sharing own experiences, listen to peers, adults etc and collecting information on differences in the living and working conditions of the rural and urban labour</p> <p>Creating environment for group discussion on the working conditions in the urban and rural context and articulate on why it is so, why majority of the country's farmers are quite poor</p>	<p>Learner shows understanding of different ways of living, work and activities involved and is able to locate these within her own experiences</p> <p>Learner articulate on differences in the living and working conditions of the rural and urban labour</p>

Geography

Pedagogical Process	Learning Indicators
Opportunities to observe natural and human phenomenon in the environment.	Takes interest in exploring her surroundings, and observes the details
<p>Motivating her to ask questions as questions reflect on her interest and curiosity about the related topic</p> <p>Explaining her various concepts with activities.</p> <p>Providing opportunities for sharing and expressing the observations made by her</p> <p>Appreciating the observations presented by her in various ways</p> <p>Opportunities for reflecting on work done by self, peer group</p>	<p>Knows that the earth is one of the planets in the solar system. Life is possible due to presence of air and water</p> <p>Knows about the influence of land, climate, vegetation and wildlife on human life;</p> <p>Has sensitivity towards the protection of the environment e.g. conserving natural vegetation and wildlife</p>
<p>Explaining the difference between sketch and map</p> <p>Encouraging her to make a sketch of her route from home to school</p> <p>A visually challenged child may narrate the route instead of drawing.</p> <p>Appreciating her efforts of presenting information.</p> <p>Explain about components of maps namely distance, direction and symbols.</p>	<p>Can identify directions with sun as a reference point.</p> <p>Can prepare a simple sketch</p> <p>Is able to differentiate between a map and a sketch.</p> <p>Can identify political and physical map of India. Identify places, symbols on maps</p>
<p>Explaining about broad physiographic divisions of India</p> <p>Motivating her to observe her surroundings</p> <p>Encouraging her to identify the physiographic and some physical features in her surroundings</p> <p>Motivating her to ask questions to satisfy her queries</p>	

Pedagogical Process	Learning Indication
<p>Familiarise the learner with the major developments and significance of geographical terms used during the time frame to be studied.</p> <p>Introduce the specificities of the discipline, about what are defined as sources, and how different kinds of sources can be used to address different</p>	<p>The learner shows awareness of significant political, economic, social and cultural developments and the significance of geographical terms used in Indian history from the earliest times.</p> <p>When introduced to the specific nature</p>

<p>kinds of questions.</p>	<p>of the discipline the learner understands that history is a record of past events and activities written by historians and tries to explain what is meant by a source and its importance and shows an understanding of different kinds of sources.</p>
<p>Familiarise learners with hunting and gathering as a way of life, its implications. Introduce them to stone tools and their use.</p>	<p>The learner is appreciating the skills and knowledge of hunter-gatherers. She identifies stone artefacts as archaeological evidence and also asking questions during discussion. This shows her active engagement</p>
<p>Introduce them to the diversity of early domestication and discuss with them archaeological evidence for crops, animals, houses, tools, pottery, burials, etc.</p>	<p>The learner is trying to relate the lives of the farmers and herders with the lives of hunter-gatherers and making an effort to find out the differences and similarities between these.</p>
<p>Unravel the settlement pattern of the Harappan civilization, its unique architectural features, craft production and familiarise them with the meaning of urbanism.</p>	<p>The learner is appreciating the distinctive life in cities. She is trying to figure out the archaeological evidence of urban centres. The learner is attempting to find out the differences/similarities between her own life and surroundings with the one discussed in the chapter.</p>
<p>Focus their attention to the different developments that were taking place in different parts of the subcontinent simultaneously. With the help of an excerpt given in the textbook explain them how to analyse a text.</p>	<p>She tries to interconnect different developments rather than see these in isolation. The learner is trying to comprehend passages from primary sources as given in the textbook. She is making an effort to summarise the main points of a given passage and appreciating its basic thrust.</p>
<p>Introduce the concept of the state, its varieties and the concept of empire with appropriate examples. You can have roleplay activities on -how some men became rulers, dialogue between Vassakara and Buddha. You can also discuss how present day elections are different from the ways in which rulers were chosen in janapadas. Acquaint them with the importance of inscriptions as a source.</p>	<p>The learner is trying to understand the working of different administrative units. She very enthusiastically takes part in various role play activities. While discussing elections she very keenly puts forth her points to present the similarity and differences between present and janapada elections. She critically reads the excerpt from an inscription and tries</p>

	to narrate things mentioned there and also attempts to articulate on the reasons behind the writing of certain things.
Outline the basic tenets of different systems of thought, and the context in which they developed and flourished. Opportunity to work on a comparative study of different systems of thought is given.	She understands the main ideas of different systems of thought. For example to show a comparative picture of different thoughts she decides to prepare a comparative chart and also tries to relate India's past with contemporary developments in other parts of the world.
Demonstrate the variety of early urban centres- coastal towns, capitals, religious centres by discussing at least one example of each urban centre and learners may also be asked to look for some more such present day urban centres. Learners are encouraged to look at coins, sculptures as well as textual sources critically and gauge things to understand the social and economic histories.	The learner often attempts to find out the differences/similarities between present day urban centres with the one discussed in the chapter. Learner shows interest in analysing different kinds of sources and many times she relates this with those things that are available in her surrounding.
Discuss different contexts of contact between distant lands, and the motivating forces (including conquest) and examine the implications of journeys within the subcontinent.	The learner takes interest in the discussion and often attempts to look critically at present day contacts between different nations and within nations and the motivating forces behind such contacts.
Introduce the idea that strategies of expansion, and their logic, differ and explain the development of different administrative systems. After familiarising learners with prashasti motivate them to write a prashasti.	The learner appreciates the diversity of historical experiences. She is taking lots of interest in writing prashasti.

**Learning Indicators for Social Science
Class VII
Social and Political Life**

Pedagogical Process	Learning Indication
<p>Provide case studies, vivid experiences to show different ways of inequality that exists in the society. Allow the learner to find more about such experiences from different parts of the world and discuss them in groups.</p> <p>Introduce the learner to certain core concepts, such as equality, dignity, rule of law etc that influence Democracy as a political system</p> <p>Discussions on India 's own experiences over time, and the solutions advocated by national governments, as well as the problems they have encountered give learners a firm sense of locality, region and nation in an interconnected and complex manner.</p> <p>Debates on the intentions of government/political parties that have stimulated policy, the ideals and compulsions that have guided them provide scope for enhancing critical thinking abilities and argumentation skills</p>	<p>Learner is aware of the different aspects of diversity and how it is connected to the inequality.</p> <p>While analyzing the real life situations the learner make inferences of the inequalities that continue to be practiced by various communities in spite of the provisions for equality in the constitution.</p> <p>Learner articulates the main ideas and concepts in their own words and tries to apply these in different contexts.</p> <p>Draws upon the main ideas in the text by comparing and contrasting concrete situations.</p> <p>The learner infers and extrapolates from situations given and pose questions on contemporary issues</p> <p>Responds to any situation of discrimination and inequality with regard to caste, religion and gender</p> <p>Demonstrates sense of a just society and strives for it</p>
<p>Let the learners find out from newspapers, articles etc on the people's movements around various social and economic issues and how it has resulted in the government's passing of new laws and programmes.</p>	<p>Learner shows understanding of equality and democracy as a dynamic concept and reflects on the people' movements around social and economic issues.</p> <p>Understands that conditions and opportunities for making a living</p>
<p>Expose learners to various situations and case studies for understanding the concept of equality, its importance in democracy and how far equality exists in democratic India. Let them imagine themselves to be facing such situations of inequality and write on how they would have done/reacted.</p> <p>Learners are given opportunity to debate on the various acts, laws etc enacted by the</p>	<p>are not equally available to all</p> <p>Believes in equality of opportunity for all people</p> <p>Appreciates the work done by one-self and others and reflects on them</p> <p>Recognizes and do activities assuming responsibility to contribute towards solution on social, economic and political problems or issues</p> <p>Shows empathy towards the people who are</p>

<p>government to provide equality to the citizens and live with dignity. For eg, the Disabilities Act of 1995. Let the learners discuss on why this is essential and how far it is being implemented and successful in allowing differently abled to live safely and with dignity. Give them opportunities to talk to these people and find out their views in this regard</p>	<p>not provided with equal opportunities and thinks for viable solution to lead a life with equal rights and dignity for all.</p>
<p>Expose learners to a wide range of institutions- the government, the bureaucracy and civil society organizations like the Media so that she can develop a broad understanding of the relationship between the State and Citizens Ask learners to prepare a newspaper in the class where groups of students will act as editors, reporters etc.</p>	<p>Demonstrates through writings how media can facilitate interaction between the government and citizens</p> <ul style="list-style-type: none"> • gain a critical sense of the impact of media on people’s lives and choices, • appreciate the significance of people’s movements in gaining this right.
<p>Narrating case studies, experiences etc provide scope for understanding that gender is a social construct and not determined by biological difference Provide opportunities to interrogate gender constructions in different social and economic contexts and critically think about the gendered nature of all issues raised</p>	<p>Analyses of everyday experiences in the domain of gender enable the learner to understand how these are related to the creation of differences that are discriminatory in nature. Learner argues for providing equal opportunities to all irrespective of gender and articulates on how lack of facilities like sanitation, transport, water etc impact women and girls more acutely. Expresses concern for gender related issues and reacts against unequal treatment Able to link the concepts learned with everyday practices and question the practices in case of existence of inequality.</p>
<p>Discuss various types of markets and how people access these. Visit different types of markets in the area and talk to the sellers and buyers to examine the workings of an actual market.</p>	<p>Understand markets and their relation to everyday life, how it functions as a link between scattered producers and consumers. gain a sense of inequity in market operations.</p>

Geography

Pedagogical Process	Learning Indicators
<p>Providing opportunities to sensitise them about the environment, encouraging them to observe the surroundings</p> <p>Motivating them to observe characteristics of different environments</p> <p>Encouraging them to care for their immediate environment.</p>	<p>Understand the inter-relationship between natural environment and human habitation. Correlates the knowledge with daily life experiences with reasoning</p> <p>Compare one's own surroundings with other environmental setting. Appreciate the cultural differences existing in the world.</p> <p>Knows about four realms of the earth and their relevance</p> <p>Is able to appreciate the cultural differences existing in the world which is an outcome of interaction, between human beings and their environment</p> <p>Reflects environmental concern in her behaviour. Eg. Switching off the lights before leaving a room, closing the tap properly, reusing/recycling paper etc.</p>

History

Pedagogical Process	Learning Indicators
<p>Familiarise the student with the changing names of the land and discuss broad historical trends.</p> <p>Give examples of the kinds of sources that historians use for studying this period .g.,buildings,chronicles,paintings,coins ,inscriptions,documents,music,literature.</p>	<p>She shows understanding of different names used for the subcontinent .The learner comprehends passages from primary sources as given in the textbook. She is trying to summarise the main points of a given passage and appreciating its basic thrust. The learner is attempting to interpret visual material and often tries to find out the differences/similarities between her own life and surroundings with the one depicted in the visual.</p>
<p>Trace the patterns of political developments and military conquests and develop an understanding of the connections between political and economic processes through the exploration of one specific example.</p>	<p>The learner shows awareness of significant political, economic, social and cultural developments and also tries to relate India's past with contemporary developments in other parts of the world.</p>
<p>Familiarise learners with the development of political institutions, and relationships amongst rulers as well as with strategies of military control and resource mobilisation. The learners can be asked to look for any</p>	<p>She shows awareness of major developments and takes interest in exploring her area, preparing write up and drawing sketch of the building</p>

<p>building built by Delhi Sultans in their area and be motivated to describe these buildings with sketches.</p>	
<p>Trace the political history of the 16th and 17th centuries and discuss the impact of an imperial administration at the local and regional levels. Motivate students to look at textual sources critically. Discuss the varieties of monumental architecture, range of materials, skills and styles used and resources required for building works</p>	<p>The learner shows understanding of the political history of the period. She takes interest in reading textual sources and shares her observations with her peer group.</p> <p>She appreciates the varieties of monumental architecture in different parts of the country and prepares a picture album showing varieties of monumental architecture with brief description.</p>

<p>Unravel the settlement pattern of the Harappan civilization, its unique architectural features, craft production and familiarise them with the meaning of urbanism.</p>	<p>The learner is appreciating the distinctive life in cities. She is trying to figure out the archaeological evidence of urban centres. The learner is attempting to find out the differences/similarities between her own life and surroundings with the one discussed in the chapter.</p>
<p>Focus their attention to the different developments that were taking place in different parts of the subcontinent simultaneously. With the help of an excerpt given in the textbook explain them how to analyse a text.</p>	<p>She tries to interconnect different developments rather than see these in isolation. The learner is trying to comprehend passages from primary sources as given in the textbook. She is making an effort to summarise the main points of a given passage and appreciating its basic thrust.</p>

Exemplar Lesson plan

WHAT IS GOVERNMENT

CLASS VI

Social and Political Life

Sangeeta Waghmare

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Kolar Road

SR.NO	CONTENT	PEDAGOGICAL LEARNING PROCESS	OUTCOMES
1	Introduction	Newspaper cuttings/headlines	To understand the meaning of government and different functions taken up by them.
2	Levels of government	Flow chart activity	Concept of federalism introduced.
3	Laws and the government	Flow chart of Organs of government	To identify/ differentiate between organs of government.
4	Types of government	Group activity	To differentiate between different types of government
5	conclusion	Through ICT ; preparing PPT in group/individual	To learn the different functions of government

Chapter -3, WHAT IS GOVERNMENT

CONCEPT COVERED

1. Meaning of the government.
2. Role of government and its functions.
3. Differentiate between the government at different levels i.e National level, State level and local level.
4. Role of government in law making process.
5. Differentiate between various types of government- democratic/ monarchy.
6. Differentiate between direct and indirect democracy.
7. Importance of right to vote in democracy.
8. Various movements for Universal Suffrage.

LEARNING OBJECTIVES

1. To understand the meaning of government and its role in any country.
2. To make them realize how the government is formed.
3. To understand the working of government.
4. To identify the decision making process at various levels.
5. To understand the role of active citizens in the decision making process.

6. To analyse various types of government and differentiate them on the basis of system of governing.
7. To respect the democratic principles laid in the constitution.
8. Role of government in day to day life.

FLOW OF THE LESSON

PRE READING ACTIVITY

1. Teacher may bring newspaper cuttings related to the working of government in the class and ask the questions to brainstorm.
2. Through this interactive method the students will be able to understand a) the different functions of government.b) the major responsibilities taken up by the government.

ACTIVITY 2

EXPLANATION OF THE ORGANS

LEGISLATURE
(Law making)

EXECUTIVE
(implementing body)

JUDICIARY
(law interpreting body)

DIFFERENT LEVELS OF GOVERNMENT

National level

I

State level

I

Local level

ACTIVITY 3

Identify the form of government you prefer;

SR NO	A	B
1	The ruler remains in his office throughout his life.	The rulers kept on changing after certain period of time.
2	People may get few rights but not guaranteed.	People get fundamental rights.
3	People may not participate in decision making.	People directly or indirectly participate in decision making.
4	Ruler is not answerable to people.	Ruler is accountable for every action.

After this activity the students will be asked to choose which country they would prefer to live in and why?

This activity will help them to differentiate between Democracy and Monarchy.

The child will be able to understand the importance of democracy and democratic rights.

DEMOCRATIC GOVERNMENTS

The teacher can conduct elections in the class to choose representatives for discharging different responsibilities in the class like class monitor, cupboard monitor, cleanliness incharge, anti bulling incharge etc. All students can be voters. Once the result of election is

declared the teacher will give responsibilities to various representatives. Through this activity teacher can explain the following concepts;

1. Difference between direct democracy and representative democracy.
2. Concept of Universal suffrage
3. Formation of government
4. Importance of elections in a democracy
5. Role of reservation in giving rights to under privileged section of society.

The students will understand the importance of equality, role played by various organizations to provide equal voting rights irrespective of all differences. They will also learn to be empathetic towards unprivileged sections of society.

FORMATIVE ASSESSMENT

To conclude and recapitulate the topic the teacher can divide the class in groups and ask them to prepare PPTs (in absence of such tool paper presentation) of not more than 5 slides/pages on the following proposed topics ;

1. Types of government
2. Functions of government
3. Merits of democracy
4. Important leaders of different levels of government like President, Prime minister, Chief minister and Mayor etc.

INTER DISCIPLINARY LINKAGE

1. English- to make them learn how to express their thoughts.
2. Maths- data handling
3. Sociology –the relationship between the Ruler and the ruled.

INCLUSION OF CORE VALUES

1. Problem solving
2. Critical thinkings
3. Logical analysis
4. Values toward society and nation
5. Empathy

SOURCES

1. NCERT book class vi- Social and Political Life
2. Newspaper
3. Videos on Bal sansad/ youth parliament ; <https://youtu.be/PfglnS-8zcM>
4. <https://youtu.be/bxpH5t9E3dQ>

Exemplar Lesson plan

NATURAL VEGETATION AND WILDLIFE

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S.No.	Content	Padagogical Process	Learning	Outcomes
1	Introduction	You tube : on Bio Diversity		Understanding of various aspects of flora & fauna
2	Factors affecting Bio Diversity	PPT		Leavers will understand the impact of various factors in determining bio diversity.
3	Types of vegetation	You tube videos followed by brain storming questionnaire		They will be able to distinguish between different vegetation.
4	Medicinal Plants	Making chart by collecting medicinal plants from neighbourhood		Arousing curiosity among students to know the medicinal value of plants
5	Wild Life	You tube videos		Will enrich their knowledge about diverse wild life in India
6	Steps taken by Government	Making collage/Advertisement		Different steps taken by Government to preserve wild life.

CONCEPTS COVERED

- ❖ Meaning Of Natural Vegetation
- ❖ Meaning of wild life.
- ❖ Understanding the factors affecting the bio-diversity
- ❖ Meaning and importance of eco-system
- ❖ Understanding the different types of vegetation found in India.
- ❖ To understand the importance of plants including medicinal plants.
- ❖ To make them aware of the vast variety of flora and fauna found in India.
- ❖ To understand the geographical conditions responsible for the growth of variety of wild life in India.
- ❖ To sensitize the students towards the protection of wild life.
- ❖ Locate distribution and extent of different type of forests on the map of India.
- ❖ Locate wildlife reserve on the map of India.

LEARNING OBJECTIVES

- ❖ The learner
- ❖ Interprets the meaning of bio-diversity
- ❖ Draws relationship between various factors that affect this diversity.
- ❖ Classifies different types of vegetation found in our country.
- ❖ Examines the factors due to which many species in this bio-diversity are endangered or extinct.

- ❖ Examines the causes of degradation of environment.
- ❖ Draws bar diagram and pie charts to present and show the area under forest cover.
- ❖ Understands the importance of each and every unit of eco-system.
- ❖ Sensitiser towards sustainable developed
- ❖ Respects the steps taken by the government to save the flora and fauna.
- ❖ To get familiarized with effects of climatic change on bio-diversity.

Key Words

1. Virgin Vegetation
2. Photoperiod
3. Ecosystem
4. Biome
5. Migratory Birds
6. National Park
7. Bioreserve
8. Wildlife Sanctuaries

Pre-reading activity

1. The teacher can show videos on bio-diversity on you tube (link <https://youtube/7tgNamjTRkk>, <https://www.nextgurukul.in>geography>) and make he students aware of the mega biodiversity that is found on the earth.

Through this activity the students can understand various aspects of biodiversity. The child understands to differentiate between the flora and fauna.

2. Factors affecting biodiversity

The teacher can prepare PPT to show the various factors such as

- (a) Relief – land & soil
- (b) Climate – temperature, photoperiod (sunlight) and precipitation
- (c) Eco System – Meaning and components

Through this PPT the learner understands

- (a) The impact of type of land and soil on vegetation.
- (b) Role played by temperature in determining the vegetation of any place.
- (c) Reasons for the density of forests role played by human being in enhancing/depleting the forest cover.
- (d) Interdependence of plants and animals in the ecosystem.

Types of Vegetation

The teacher can show videos on various types of vegetation and ask brainstorming questionnaire through this type of table.

S.No.	Type of Forest	Rainfall	Location	Flora	Fauna
1	Tropical Evergreen	Heavy	Western Ghats		

Such tables can be completed with the help of learner’s understanding.

Through this the learner understands to distinguish between different types of vegetation.

Medicinal Plants

The teacher can ask the students to collect the leaves of medicinal plants available in the neighbourhood. These leaves can be pasted on a chart and displayed in the class.

This activity will help in understanding the medicinal importance of some plants. It will also help in arousing curiosity amongst students to know the quality of other plants also. This way they will save the plants.

Wild Life

With the help of video, the teacher will help students to locate different wild life sanctuaries & National Park. Link: <https://youtube//4LC2JPZBGI>
<https://youtube//8rXrs3qpFNs>
<https://youtube//SLihuWKvY-M>

After showing the video, teacher will ask following question to assess the knowledge of students.

S.No	National Park/Wild life Sanctuary	Animals Protected

1. What all kinds of animals are protected through wild life sanctuaries?
2. Why are some animals found in specific regions?
3. Nave five endangered animals.
4. Why do some birds migrate?
5. What is the impact of pollution on animals?
6. How human beings responsible for destroying the natural habitat of wild life?
7. This will enrich the knowledge of diverse wild life in India.

Steps taken by Government

Teacher may ask them to make collage / Poster /create advertisement on “Save Wild Life”
 With this activity students will get to know about different problems/threats to flora and fauna and the steps taken by the government to preserve them.

In disciplinary Linkage

1. Art and Craft – Fine Art
2. Maths – Bar Graph, Pie Chart
3. Science

Core Values

1. Critical Thinking
2. Empathy
3. Logical Reasoning
4. Value system towards society

Source

1. NCERT Book
Contemporary India
2. Newspaper

Internet link <https://youtube//7tgNamjTRkk>
<https://www.nextgurukul.in>geography>
<https://youtube./4LC2jPZBGI>
<https://youtube./4LC2jPZBGI>

LIST OF PARTICIPANTS (KEY RESOURCE PERSONS) FROM MAHARASHTRA, DADRA ANDNAGAR HAVELI AND DAMAN AND DIU

S.No.	Name	Designation	District
1	Patel Monika D.	Asstt. Teacher	Daman
2	Dhodi Kalpana L.	Asstt. Teacher	Daman
3	Jethwa Pragna M.	Asstt. Teacher	Diu
4	Phulbaria Rakshita K.	Asstt. Teacher	Diu
5	Mitna Kirti I.	Upper Pri. T.	Daman
6	Patel Subhash	Upper Pri. Tr.	Daman
7	Jethwa Divyesh N.	Upper Pri. Tr.	Diu
8	Arun Tukaram Shinde	Sub. Asstt.	Beed
10	Gajanan Rangnath Baghmare	Sub. Asstt.	Parbhani
11	Sh. Vishwanath Dabri	Sub. Asstt.	Kolhapur
13	Subhash Chavhan	Asstt. Teacher	Osmanabad
14	Baliram Jagtap	Asstt. Teacher	Osmanabad
15	Somnath Takle	Asstt. Teacher	Osmanabad
16	Kishor Sudaam Bagh	Asstt. Teacher	Vashim
17	Suhas Pandulik Dhas	Sub. Asstt.	Pune
18	Shekh Ajj Shekh Shafi	Asstt. Teacher	Yavatmar
19	Sandeep Sudhakar Chirsagar	Asstt. Teacher	-
22	Subhas Rathore	Sub. Asstt.	Gidchiroli
23	Bajirao Aaba Patil	Asstt. Teacher	Kolhapur
24	Prabhakar Hipprage	Sub. Asstt.	Latur
26	Tanaji Ananda Davbre	Sub. Asstt.	Paalghar
27	Sagar Dandekar		Buldhana
28	Bhupendra Basantrao Tavde	Asstt. Teacher	
30	Jitendra Patil		-
31	Sunil D. Mahamuni		Osmanabad
32	Ganesh Mahajan	Asstt. Teacher	Nandoorbar
33	Priyanjali Shah	Sub. Asstt.	Thane
34	Santosh Vilas Shinde	Asstt. Teacher	Satara
35	Sunil Nage	Asstt. Teacher	Satara
36	Kishor Gulabrao Chatarkar	Asstt. Teacher	Akola
37	Chandrashekhar Ramteke		Amaravati
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