Introduction

The impact of the social and cultural renaissance and the concept of free and universal education paved the way for enforcing the reputation of Kerala as a knowledge society. We have been successful in ensuring quality education through constructive curriculum revisions. Such interventions have made the education sector in Kerala internationally significant.

We have been successful in bringing children from all sections of society to school in the early decades of the twentieth-century itself. Efforts were made at all levels to provide free as well as universal education. Various factors like the intervention of the government, the work of missionaries and social reformation movements, contributed to the progress and development of general education. Many National study reports as well as approaches, from the Dr. Radhakrishnan Commission Report (constituted soon after the independence), to the National Curriculum Framework 2005, have influenced the school curriculum revision of our state.

The Secondary Education Commission headed by Dr.Lakshmanaswami Muthalier explicated the importance of secondary education. The report entitled 'Education and National Development' submitted by the Commission led by Dr.D.S.Kothari brought under study, various stages of education from the primary level to the higher education level. The 10+2+3 pattern was first proposed by this Commission. The National Policy on Education, 1986 approved this pattern. It was on the basis of this pattern that higher secondary education came into existence in Kerala. The 1990s thus saw a shift from the teacher centred curriculum to learner-centred as well as activity-based curriculum.
The National Curriculum Framework 2005 sowed the seeds for many reforms in the field of education in India. Subsequently, NCERT prepared textbooks for various subjects based on NCF 2005. Later, the Kerala Curriculum Framework 2007 was formed and the curriculum up to high school level was revised. The Right to Education Act of 2009, Prof. P.O.J. Labba Committee Report related to Higher Secondary Education and Dr. P.K. Abdul Aziz Committee Report related to a comprehensive curriculum revision - all pointed towards the necessity of curriculum reform.

The beginning of Higher Secondary Sector was a distinctive stage in the history of education in Kerala. Higher Secondary education became widespread and popular with the delinking of Pre-degree course from the Department of Higher Education and making it a part of the General Education Department. The Directorate of Higher Secondary Education was formed in 1990 in Kerala and the higher secondary course was started by upgrading 31 Government High Schools. Initially, textbooks as per the Pre-degree syllabus of Calicut University and some of the NCERT textbooks were used for Higher Secondary Education.

In the 1990s, a new curriculum with comprehensive changes in learning and pedagogy was introduced at the primary level. Based on this activity-based, process-oriented and learner-centred curriculum, Continuous and Comprehensive Evaluation (CCE) and grading system were implemented. Subsequently, this method was introduced at the Higher Secondary level too. However, a comprehensive revision of curriculum had not been implemented at the higher secondary level, though textbooks for certain subjects, Sourcebooks and Edumates for all subjects were prepared by SCERT.

To ensure quality education at the Higher Secondary level, the Government continues to implement several Comprehensive Teacher Transformation Programmes. Subject-based teacher clusters help to discuss the problems experienced in the teaching-learning process and to plan learning activities.
Significance of Curriculum Revision

Changes occur every minute in the field of knowledge. Only by absorbing and imbibing these changes can a curriculum with contemporary relevance move ahead. We have been trying to do this and it is this change that makes the curriculum in Kerala different from that of the other Indian states.

Though activity-based pedagogy has already been introduced at the higher secondary level, a comprehensive revision of curriculum has not been implemented yet. The ongoing syllabus revision interacts with contemporary events and takes into consideration the nature of the learner. As a stepping stone to the higher education sector, the higher secondary curriculum should be raised to international standards. International standards do not refer to the standard of education set by any particular country. On the other hand, it must inculcate in the learner the ability to take his life forward wherever he is, after the completion of his higher secondary education. It is the sum-total of all the experiences and knowledge to be picked up by the learner for meeting the needs. This emphasizes the need to provide internationally accepted teaching-learning models to our students. The curriculum revision has been envisaged as an attempt in that direction. The Expert Committee constituted by the Government for curriculum revision stressed the necessity for timely, appropriate revisions. Besides, curriculum revision must also incorporate the postulates related to Curriculum and Assessment in the Right to Education Act.
(1) The curriculum and the evaluation procedure for elementary education shall be laid down by an academic authority to be specified by the appropriate Government, by notification.

(2) The academic authority, while laying down the curriculum and the evaluation procedure under sub-section (1), shall take into consideration the following, namely:

(a) conformity with the values enshrined in the Constitution;
(b) all round development of the child;
(c) building up child's knowledge, potentiality and talent;
(d) development of physical and mental abilities to the fullest extent;
(e) learning through activities, discovery and exploration in a child-friendly and child-centred manner;
(f) medium of instruction shall, as far as practicable, be in child's mother tongue;
(g) making the child free of fear, trauma and anxiety and helping the child to express views freely;
(h) comprehensive and continuous evaluation of child's understanding of knowledge and his or her ability to apply the same.

The curriculum should be revised ensuring the above-mentioned factors, and the revision of the curriculum has to be viewed against this backdrop.

**Kerala School Curriculum (2013) - Chief characteristics**

**The curriculum**

- is learner-centred, process-oriented, activity-based and value oriented.
- gives stress to the learning outcomes that a learner imbibes at the cognitive, social and emotional levels.
• lays stress on the skills to be attained by the learner in values and attitude.
• is based on the philosophy of constructivism.
• gives teachers freedom to choose and employ logical and varied learning strategies for the transaction of curriculum.
• is flexible to implement various teaching - learning strategies recognizing the learning outcomes, nature of the content and the different levels of the learners. Discovery learning, Concept attainment model, Inductive method, Meta cognition, Co-operative learning, Collaborative learning, Reflective learning, and giving opportunities to individuals and group learning etc. are taken into consideration.
• ensures free and universal education to all learners.
• is comprehensive and takes into consideration the various stages from the pre-primary level to the higher secondary level.
• is used as an effective tool for the transaction of various subjects.
• designs innovative learning strategies as well as assessment activities for children with special educational needs.
• ensures a Continuous and Comprehensive Evaluation (CCE) focused on learning outcomes.
• stresses Health and Physical Education, Art Education and Work Education.
• prepares at the higher secondary level, textbooks that are the need of the hour.
• lays stress on Right-based Education in the light of Right to Education Act, 2009.
• provides an opportunity to the learner to experience necessary safety, care and security both at school and in the classroom by raising the teacher to the level of a mentor.
• lays stress on the Code of Professional Ethics for school teachers.
• helps to acquire new learning skills which enable the learner to face contemporary challenges.
• is intended to inculcate human values in the learners.
ensures equity and equality among the learners.
ensures the harmony of head, heart and hand and aims at a comprehensive development envisioned to make learning natural.

Curriculum Approach

Our curriculum has been developed, imbibing new thoughts in educational psychology and philosophy. The idea of constructivism put forth by NCF 2005 is the basis for the Kerala School Curriculum 2013 too. In constructivism, learning is the process of the construction of knowledge.

Every child is born with the natural ability to learn from the surroundings using his/her sense organs. The formal education in schools imparts to the learner the possibilities to view and understand the world from a fresh perspective and to understand, mingle with and assess it. So the striking features of the curriculum transaction approach are:

i. Activity - based
ii. Process- related
iii. Ensure learning
iv. Focus to attain learning outcomes
v. Environment- friendly
vi. Highlights development areas
vii. Suitable for the nature of the learner
viii. Integrates learning and assessment

A learning process based on constructivism is the foundation of the curriculum. A distinguishing feature of this approach is that knowledge is constructed naturally by creating challenging learning activities and considering the acquired knowledge and conceptual background of the learner.

Learning Experiences

The acquired knowledge skills and interests differ from learners coming from different backgrounds. So it is very important to
facilitate learning experiences imbibing these changes and considering individual differences and multiple intelligences of the learners.

**Learning Environment**

The classroom should be designed to keeping in mind the interest and development of the learner so as to ensure his/her participation in various learning activities. Every activity should be learner-oriented. A conducive environment should be created. The freedom to employ suitable learning strategies which are learner-centred and activity-based, taking into consideration the development and growth in the learning ambience rests with the teacher.

**Learning Process**

- Each learner constructs knowledge by linking it with his/her previous experiences.
- Knowledge construction occurs at the level of the individual through meaningful societal interventions.
- Learning is made effective through multi-sensory experiences which consider various learning styles, learning pace etc.
- Learning becomes more effective through co-operative learning in an environment conducive for co-operation.
- Learning materials should be meaningful generating interest in the learner.
- Spiralling of learning experiences will make learning more effective.
- By ensuring flexibility of learning activities and possibilities of adaptation, learners requiring special educational needs and with different aptitudes may be attended to.
- Each learner should get learning experiences necessary to ensure learning outcomes.
- Learning and Assessment should be complementary.
- Everybody can attain learning outcomes by adopting suitable teaching-learning strategies that consider content and learning requirements of the learner.
The learning process should be decided keeping in view the comprehensive development of each learner.

**Learning Outcomes**

As per the rules of the RTE Act, the idea of learning outcomes was introduced in the Kerala School Curriculum 2013. Knowledge of learning outcomes is essential to plan the teaching-learning process and evaluation, in a precise and practical manner. Learning outcomes are the aims to be achieved by the learner during the various stages of school education. Precise and accurate statements based on the knowledge, skills, attitudes, values etc. to be acquired by a learner in a particular subject-area are called Learning Outcomes. Some of them can be acquired in a short time, while some can be acquired only over a long period of time. The changes that should be observable in a child can be predicted and fixed before-hand. Learning outcomes are the concepts/ideas and skills to be acquired by a learner during the various stages of school education. They evolve through learning activities in each unit and become the learning outcomes of a particular class towards the end of the academic year and of a particular stage.

The learning outcomes should be stated based on performance that can be observed and measured. An analysis of the learning outcomes will help to assess the knowledge, skills, values and attitudes that should be acquired by the learner at the end of each unit, class and stage have been acquired or not. Precise and clear assessment activities can be planned, based on specific learning outcomes.

The statements of learning outcomes should be simple, lucid, precise and logical. They should be presented without causing any confusion to teachers, students and parents. Since they state what a learner can do, the learning outcomes should be stated from the point of view of the child (learner-centred).

The learning outcomes should contain concepts, processes, skills, values and attitudes. Since these are performative in nature, the learning outcomes ensure the social commitment and responsibility of the teachers. Awareness and a healthy interest should be
developed in parents regarding the learning level of the child. Awareness of remedial measures to ensure learning outcomes also should be created as part of the continuous evaluation process. In short, learning outcomes should be connected to classroom activities and the assessment approach. Through effective transaction of the curriculum, learning outcomes should be ensured in all learners. This is essential for quality education.

Information and Communication Technology

Today information and communication technology has an important role in the construction and dissemination of knowledge. This is made possible through gathering of information, analysis and varied presentations. The immense possibilities of ICT can be used to transact any subject at the higher secondary level. Through this, it can also be ensured that learners acquire ICT skills. The main features of ICT are stated below.

i. Relevance

ICT helps learners carry out learning activities in an effective manner, gather relevant and appropriate information, make excellent presentations and prepare quality products. Virtual labs are very useful in situations where real and complex practical activities become impractical. Thus, classrooms go beyond smart rooms and rise to the level of laboratories. Learners can make use of facilities like video conferencing and social media to converse with eminent personalities related to each subject and explore the endless possibilities offered by the subjects. In addition, ICT is helpful in various daily needs (online applications, exams, interviews, various services etc.).

ii. Appropriateness

Visual and auditory media are effective learning tools. ICT kindles various levels of creativity and intelligence in the learner. With the help of ICT, the curiosity of the learner is ignited. This possibility will be helpful for those learners with limitations of the sense organs. ICT will help to experience matters better through the help of sight and sounds. It is very helpful in providing various learning experiences.
iii. Possibilities
- Digital format and dynamic textbooks.
- Additional information, presentations and animation required for learning activities.
- Availability of the latest and relevant information on every subject from anywhere in the world.
- Facilities needed for online tests, self-assessment and improvement.
- Model question papers and keys.
- Effective use of educational channels like Victers.
- Interactive programmes to develop life skills, values, attitudes and to manage mental stress.
- Controlled and legalised Wifi campuses.

It is the need of the hour to tap the full potential of ICT by developing a comprehensive educational portal, developing the infrastructure of schools and by empowering teachers.

iv. Authenticity
The authenticity of learning materials however has to be ensured. Information gathered from the websites of various departments, educational websites, portals, blogs and social network should be verified before use. The practicability of ICT materials used in the classrooms also has to be ensured. These materials and the software used for their presentation have to be made available easily and should also follow IT rules. When ICT possibilities are made use of, the physical and mental age and state of the learner, tendency to go astray etc should also be considered.

Art Education

Arts evolved as a part of providing enjoyable experiences in the progress of man as a social animal.

The experiences gathered during various phases of life touch human minds aesthetically. All the art forms that evolved from ancient times were visual and auditory. It had the power of rejuvenating the human mind. This is the unique characteristic of art. Tagore's opinion
about arts is noteworthy: "Literature, music and the arts, all are necessary for the development and flowering of a student to form an integrated total personality." All eminent personalities who had striven for social development have made similar opinions about art.

- Art education is essential to develop creativity, observation skills, sense of imitation, divergent thinking, and imaginative ability among learners.
- Learners will get opportunities to promote the development of all types of intelligence in them.

Art education at the higher secondary level aims to develop the creative skills acquired by the learner and to create in him a broader outlook about art and literature. Also an aptitude for higher studies and research in the field of arts has to be developed in them. In order to develop observation skill, ability to appreciate and sense of imitation among learners, art education is essential. It also helps learners to develop abilities to think and respond differently, to ensure social intervention and to make learning more productive. Activities in art help to make children work hard and diligently, and also channelize their enthusiasm in the right direction.

**Health - Physical Education**

According to the WHO report of 2011, a vast majority of our youth are afflicted with lifestyle diseases. According to the statistics of the Government of Kerala, in a physical fitness examination conducted among 16,28,943 students during 2008-2009 academic year, only less than 20% of the students were found to have required fitness. Both these facts indicate the prevalence of an unhealthy social situation. The term health refers to the complete state of physical, mental, emotional and spiritual well-being. Therefore health is essential for the existence of an individual. So proper implementation of health and physical education is essential. The minimum physical fitness required for every individual in the society in order to exist should be ensured. For this, health and physical education should be imparted scientifically and comprehensively from a very early age. The views of National Curriculum Framework 2005 regarding need
based and integrated approach should be given special attention and emphasis.

Along with the knowledge of content areas, performance excellence and physical fitness are also to be assessed. The health-physical education envisioned in Kerala School Curriculum 2013 and initiated at the primary level, gets perfected at the higher secondary level only. Learning activities should be planned so as to enable learners excel in this field to explore up to the level of international possibilities. The physical fitness, training excellence and knowledge of content areas acquired hitherto promote holistic well-being.

**Objectives of Health - Physical Education**
- To get an awareness about sports, values and ethics.
- To gain expertise in athletic skills and to scientifically analyse them.
- To gain expertise in major games.
- To get practical training in self defense techniques.
- To understand aggression, balanced or controlled aggression etc.
- To realise the consequences of the use of drugs.
- To create the right understanding about sexual health.
- To acquire scientific practical ability to intervene effectively during life rescue missions.
- To get an awareness about the changes in the respiratory and cardio-vascular system that can be brought through exercise.
- To give training using safe and effective exercise pattern.

**Work Education**

The confluence of knowledge acquired through hearing, sight and work makes construction of knowledge possible in a learner. Contemporary learning process evolves through enquiry and experiences. Work education is essential to integrate and develop emotional and cognitive domains.
Schools should have a conducive environment to promote active interaction between students inside and outside the campus. The learners should be able to think independently and use their skills to enquire and analyse. Therefore, the curriculum must be-activity-oriented. And all the activities must develop self-confidence, work experience and self-sufficiency in the learner.

A work education integrated with the subjects of higher secondary curriculum, will be more appropriate.

**Objectives of Work Education**

- Readiness to work
- Development of values and attitudes
- Development of a balanced personality
- Self-sufficiency in the field of production
- Human skill development
- National development

**Inclusive Education**

In the classroom, an atmosphere that is congenial to all learners without excluding any one must be created. In our schools there are two categories of students; one, who requires more consideration, help and attention and the other, who requires normal help and attention. Only by addressing this can we ensure equitable quality education.

Which learners require special attention, security and assistance in learning?

a. **Children of socially and economically marginalised people**

Tribal students, girl children, those who belong to the scheduled caste and scheduled tribe, immigrants, those who do not have permanent settlement and those who undergo various kinds of discrimination are considered socially and economically marginalised.
The limitations and differences of these learners should be identified, accepted and respected. Through the combined effort of all teachers, the problems faced by these learners can be solved.

b. **Children who are physically and mentally challenged**

Children who face physical and mental challenges and those who experience learning difficulties have Special Education Needs. These issues include hearing impairment, eye-sight disorders, limitations of cognition, loco-motor disabilities, learning disability, autism, cerebral palsy, multiple disabilities, lack of emotional equilibrium and attention disorders.

The following steps may be incorporated in the curriculum transaction for these learners:

- The planning of learning activities taking into consideration their learning needs and aptitudes.
- Adaptation of lesson plans to facilitate participation in learning activities.
- Implementation of a multi-sensory approach considering the differences in learning pace and learning styles.
- Planning and implementation of remedial practices and enrichment- practices that are need- based, for each learner.
- Use of different flexible assessment strategies.
- Ensuring the assistance of resource teachers and other experts.
- Ensuring the support of parents with regard to the child's learning and safety.

Along with these children, gifted children (who have exceptional aptitude and talents) too should be taken care of. Thus the school activities and infrastructure have to be scientifically organised to facilitate an inclusive education.

**Areas which help to develop values, attitudes and commitments**

Areas such as awareness of humanitarian and constitutional values, attitudes that strengthen social life and growing social commitment
are the prime concerns of the curriculum. Details of the conceptual areas are given below.

**Democratic Outlook**

While choosing the content for different subjects, the perspectives on democracy have to be considered. In the planning and transaction of learning activities, there should be a democratic approach. The aim of the curriculum is to establish a democratic approach through democratic platforms.

**Constitutional Values**

The values and objectives that are upheld by our Constitution have to be reflected in the curriculum. The content and the transaction process should be selected to enable learners to acquire constitutional values.

**Secular Attitude**

Subject areas which help in developing a secular attitude have to be included.

**Tolerance**

The curriculum should aim at developing the quality of tolerance towards those who disagree with you.

**Constructive and Creative Thinking**

There is a need to develop creative thinking and the urge for discovery among learners. There should be possibilities for creative enquiry in the content areas and learning strategies of the curriculum. The different levels of multiple intelligences should also be considered.

**Respect for one's cultural heritage**

Respectful attitude to one's cultural heritage and history is one of the aims envisioned by the curriculum.
Equality

It is essential to ensure equality in learning activities, which are provided to the learners.

Leadership Quality

There is a need to design learning strategies that would help in shaping leaders who are capable of facing the challenges of this millennium. In the classroom, opportunities must be created to develop leadership qualities among children.

Life Skill Education

Life skills such as self awareness, empathy, communication skill, interpersonal relationship, creative thinking, critical thinking, decision-making, problem-solving, coping with emotions and coping with stress should be developed in learners. These life skills help the learner to face life with self-confidence.

Civic Sense

Just as the state has certain duties to the citizens, the citizens also have some duties to the state. The aim of education is to create a community with civic sense and a sense of responsibility and discipline.

Respect for Elders

Respect for elders is the keystone of our civilization. In all cultures, old people are venerated and given due consideration. An important characteristic of the elder people is that they are a storehouse of experiences. Our cultural life being continuous and heritage-oriented, the age-old experiences and knowledge are handed down from one generation to another. Factors which encourage learners to express respect for elders through co-operative interventions should be made part of the transaction of content.

Human Rights

Human rights are the rights of individuals to lead a life of dignity. The human rights which got universal acceptance through the United
Nations Declaration of Human Rights should be given importance in the curriculum.

**Child Rights**

It is our duty to protect every right of the child.

**Awareness about Environment**

Basic awareness about nature and the need to protect natural resources should be included from the primary level itself. Children should be made to understand that environmental hygiene is as important as personal hygiene and that sense of hygiene is one of the basic factors of civic sense. They should understand that nature and natural resources are not meant just for the consumption of human beings and that any change in the balance of nature will have far-reaching consequences. They should carry out activities which make protection of natural resources and environmental hygiene a value-system and an attitude.

**Water Literacy**

Children must be made to understand that water is precious by creating awareness about the availability of water, conservation of water and the need to keep it free from pollution.

**Peace Education**

The basic idea of peace education is to develop values and attitudes to interact with others and the surroundings in a peaceful and friendly manner. It is essential to include content areas that reflect values like avoiding conflicts and situations leading to conflicts, peace and harmony.

**Legal Literacy**

Knowledge and awareness about law is essential for all citizens of a democratic country. It is the need of the hour to include content areas that ensure legal literacy. Various programmes involving Law Clubs, Law Clinics etc. can be organized to create awareness of law.
Cyber Literacy

The misuse of ICT and related crimes are on the rise. Awareness should be created among children on these activities. They should be given a clear idea about the proper use of internet, e-mail and social networking sites. The curriculum should facilitate creating awareness among children regarding the punishment for cyber crimes and the ethics in the use of internet etc.

Media Literacy

Media exerts a great influence on our society. It is impossible even to imagine a day without visual media. Visual media has tremendous influence on children. Therefore, the content area of the curriculum should contain various factors required to create critical media literacy.

Perspective on Sustainable Development

The curriculum should spread the awareness that this earth exists not just for the benefit of mankind. An understanding regarding the environmental challenges, human interventions which cause harm to environment, and how nature can be protected from such destructive activities etc. is the need of the hour. The curriculum should also uphold the enquiry how environment and development can go hand in hand and perspectives regarding sustainable development and views. One of the aims of the curriculum is to present perspectives on consistent development and create a comprehensive awareness about environment.

Adolescent Education

The possibility of including content areas on adolescent education should be explored with the help of child psychologists, health workers, doctors and teachers. It is also important to address the doubts of learners regarding health and hygiene in a scientific manner.

Consumer Culture

Facts concerning the negative aspects of consumerism have to be
included in the curriculum. Consumer laws and our rights as consumers should be dealt with in the curriculum.

**Anti-drug and intoxicant attitude**

We should realise the harmful effect of alcohol, drugs, tobacco and other narcotics on the health of children. The future generation should be saved from the evil tentacles of this menace. Pictures, pamphlets and visuals on the physical and mental effects of drug abuse, as examples, can be included in the content areas.

**Gender Justice**

The curriculum should ensure gender justice and gender equality. Discrimination on the basis of gender should not be reflected in the content areas. It is the responsibility of teachers to ensure gender justice while carrying out learning activities.

**Frugality**

Children should be taught the basic lessons of frugality at the primary level itself. Explain the importance and relevance of the habit of frugality. Students can also be given practical training in frugality.

**Road Safety**

Traffic rules and practical suggestions to avoid road accidents are part of road safety. Children should develop the civic awareness that the road is a public place and that everybody has the right to use it. Activities related to road safety should also be given importance.

Learning experiences in these areas should be incorporated naturally in the transaction of the curriculum. While choosing the concepts of various subjects and arranging learning activities, enough consideration should be given. Knowledge, skill and attitude should be stressed in the process of teaching learning process. It should also be possible to perform continuous evaluation to find out whether the objectives have been accomplished. Activities of various clubs, SPC, NCC, Scouts and Guides, JRC, Vidya Rangam,
Kalasahithya Vedi, Gandhi Darshan etc can be platforms to develop values, attitudes and commitment.

**Right Based Education**

UNESCO had taken initiatives to decide on the rights of children and spread them world wide. As a result of this, legislation has been made in many countries to protect the rights of children. The Right to Education Act passed in 2009 in India, is an important milestone in this matter. The responsibility of protecting the rights of children becomes the duty of adults. Right to Education can be divided into three areas.

- Participation
- Provision
- Protection

**Participation**

- My opinion is sought when decisions concerning me/children are taken.
- My interests are given priority when decisions are taken.
- I am given the opportunity to participate in activities which are compatible with my ability and limitations.
- I am able to go through a learning process which is flexible enough to nurture my abilities and overcome my limitations.
- My opinions are given due respect and value.
- My friends and I get active participation in the activities in class.
- I get opportunities to display my talent and abilities.

**Provision**

- I get the service of teachers who have the required qualification and who constantly update their knowledge.
- I get learning-experience in the prescribed time.
- I get a classroom ambience conducive to physical and psychological growth.
• My teachers are able to make learning materials required for learning activities available.
• I get materials and opportunities for the growth of art and physical education.
• I also get career guidance for securing employment in future.

Protection
• I do not experience any kind of discrimination in or out of school.
• I am not ignored by any one in any manner.
• I am not harassed either physically or mentally.
• I can interact with my teachers without any fear.
• Though I am a child, every one respects and values my privacy.
• I am convinced that I will be safe both at home and at school.
• My school lends me a helping hand to further strengthen and empower me when I face physical and emotional problems.

If these are the rights of children, how far can I ensure these rights? What steps should I take further to ensure these rights? Every teacher should think about this.

Mentoring

RTE considers the teacher as a 'mentor'. Mentoring has much relevance and significance in the comprehensive school development project.

The teacher - student relationship has undergone significant changes. A teacher should function not as a person who distributes/ dispenses knowledge, but as a facilitator who co-ordinates the various opportunities of students to gain knowledge.

In reality, school is a second home for the child and teachers are the members of his/her family. A teacher should understand that all children do not receive love, consideration, security, appreciation and recognition etc equally at home. The responsibility of a teacher becomes complete only when he/she realises this and is able to
express these feelings accordingly to each child. Only then will a school become a home.

Only when a teacher becomes a mentor and a facilitator who helps gain learning outcomes, he/she will be a teacher of the new era.

When the teacher becomes a co-guardian, children get guidance, advice, support and opportunity to improve. The teacher as mentor should make interventions in the role of an experienced predecessor. Assistance for awareness and counselling are part of this. An effective mentor can bring out the hidden talents of a child.

**Through mentoring:**

- the teacher and the student enjoy proper learning experiences.
- the knowledge-area of the child and the teacher widens.
- the bond between the student and the school is strengthened.
- personality development and learning development of the child are ensured.
- collective thinking, decision-making and collective effort are made possible.
- the relationship between parents and school is strengthened and an overall view of the learner’s learning process is created.
- the participation of the learner in arts and sports can be assessed.

Mentoring has to be manifested as a process which caters to personality development and interest in learning. It should also help in continuous assessment. Notes related to mentoring experiences should be recorded in the Cumulative Record. All the teachers in the school should act as mentors of students. All learners should get an experience of mentoring. The class may be divided into small groups and different teachers can be given the responsibility of evaluating the progress of each group.

**Code of Professional Ethics for School Teachers**

1. Responsibility towards Students
The teacher;

1.1 Treats all students with love and affection.
   - Treat all children equally.
   - Give special consideration to students who lag behind in studies.
   - A teacher should behave in a manner that generates confidence, interest and aspiration in students.

1.2 Respects the value of being just and impartial to all students irrespective of their caste, creed, religion, sex, economic status, disability, language and place of birth.
   - The faith and conviction of the teachers in democratic values, tolerance and social justice are imparted to the students.
   - If the personal faith and beliefs of the teachers are against the principles of the Constitution, it will affect the school system in a serious manner.

1.3 Facilitates students' physical, social, intellectual, emotional, and moral development.
   - School education is a period when the physical and mental abilities of a student reach their completion.
   - Education should not be confined to the development of cognitive domain.
   - The aim of education should be the all-round development of a child.

1.4 Respects basic human dignity of the child in all aspects of school life.
   - The democratic rights and dignity of a student as a human being should be respected.
   - Negative comments made by teachers can adversely affect a child's studies and hurt his dignity.
   - Active participation of each student in school activities must be ensured.
Every teacher should understand and act according to the Declaration of Children's Rights brought out by the UN and signed by India, and the report made by the Commission for the protection of rights.

The rules of a school to maintain discipline should not violate the human rights of the students.

1.5 *Makes planned and systematic efforts to facilitate the child to actualise his/her potential and talent.*

The primary duty of teachers is to go beyond academic achievements and recognise the ability and talent of each student.

Activities should be designed to aid the development of all types of skills of students.

1.6 *Transacts the curriculum in conformity with the values enshrined in the Constitution of India.*

The primary undercurrent of the curriculum should be to transact constitutional values like democracy, religious tolerance, equality, justice and freedom.

Teachers should read and understand Article 51 of the Constitution which deals with the duties of the citizens of India. The sections from A to K should be read and internalized by the teachers and they should act accordingly.

1.7 *Adapts his/her teaching to the individual needs of students.*

The teacher should make constant changes in her teaching method and approach based on the nature, acquired ability, aptitude and method of learning of the child obtained through continuous assessment.

1.8 *Maintains the confidentiality of the information concerning students and dispenses such information only to those who are legitimately entitled to it.*

As a teacher is also a counsellor, she knows all the personal details of a child.
• This information should be used wisely and only for the good of the child.

1.9  *A teacher refrains from subjecting any child to trauma, fear, anxiety, physical punishment, sexual abuse and emotional and mental harassment.*

• A teacher has the responsibility to protect the student from all forms of torture, including sexual abuse and neglect.

• The misguided idea that punishment will lead to improved studies or learning should be corrected.

• The teachers should be aware of the legal protection available to the child in such matters.

1.10  *Protects a child from all forms of sexual abuse.*

• Sexual abuse creates not only physical trauma, but also long term mental trauma.

• The teacher should follow the directives issued by the Supreme Court of India and NCPR against sexual harassment and abuse at work place and school.

2.  **Obligations towards parents, community and society**

*A teacher;*

2.1  *Establishes a relationship of trust with parents/guardians in the interest of the all round development of students.*

• It is essential to maintain a relationship of cordiality and trust with the parents and friends of the child, in order to understand the child better.

• A cordial relationship with parents will strengthen the bond between the teacher and the child.

• The majority of the parents are interested in knowing from the teachers about the activities of their children both in and out of school.

• In addition to the achievements of the children, the mistakes
that children make in the process of growth too should be shared with parents as it may prevent tragedies in future.

2.2 *Desists from doing anything which is derogatory to the respect of the child or his/her parents/guardians.*

- Teachers should not verbally hurt the dignity of a child in front of his classmates.
- Do not do anything which is derogatory to the respect of the parents.
- Trying to praise students from a particular background (caste, religion, financial status etc.) will create hatred in other children

2.3 *Strives to develop respect for the composite culture of India among students.*

- India is a land of various cultures, languages, religions and faiths. This will be reflected in every class room.
- However, a feeling of unity has evolved from this diversity.
- We should have mutual tolerance and a broad mind to respect other cultures.
- A conscious effort must be made to impart this principle to students through the curriculum.

2.4 *Keeps the country top most in mind, refrains from taking part in such activities as spreading feelings of hatred or enmity among different communities, religious or linguistic groups.*

- The activities in a classroom should aim to develop a sense of equal respect for all systems of faith, religions and languages.
- The foundation of national integration is the idea of being an Indian first, and the member of a particular community later.
- Do not use the school or classroom to campaign for or to propagate the ideas of a particular community.
- When contemporary social - political matters are discussed, the teacher should be neutral and should not take sides with any particular group.
3 Obligations towards the profession of teaching and towards colleagues:

A teacher:

3.1 Strives for continuous professional development.
- A teacher who aims to make a student a continuous learner should become a good learner himself/herself.
- The teacher should be able to collect information about the ever-developing area of knowledge and methods of teaching, and implement them in practice.
- It is the duty of a teacher to search for new sources of knowledge.

3.2 Creates a culture that encourages purposeful collaboration and dialogue among colleagues and stakeholders.
- An equitable atmosphere which encourages academic enthusiasm and fosters equal contribution from all teachers.
- For encouraging such enthusiasm, all teachers should make planned and effective co-operation.
- Constructive and practical solutions and activities should be made by all teachers to solve the problems in school.
- A teacher should be able not only to include other teachers, but also all other groups interested in the matters of the school.

3.3 Takes pride in the teaching profession and treats other members of the profession with respect and dignity
- A teacher should treat other teachers of the school with respect and dignity, irrespective of their qualification or the classes they engage.

3.4 Refrains from engaging himself/herself in private tuition or private teaching activity.
- If a teacher engages in private tuition, it affects his teaching activities at school.
• The teachers lose time to improve their own professional area.
• When a teacher gives private tuition to the students of his own schools, it encourages activities and behavior which affect the fabric of equitable environment of the school.

3.5 Refrains from accepting any gift, or favour that might impair or appear to influence professional decisions or actions.

• The teacher should not accept any expensive gift from students or parents offered with the intention of a receiving a favour.

3.6 Refrains from making unsubstantiated allegations against colleagues or higher authorities.

• Divisive groups among teachers which indulge in mutual blaming is not acceptable.
• Do not raise any allegations against colleagues without any evidence.
• If the teacher sees any grave offence on the part of a colleague, it should be brought to the notice of senior colleagues and head of the department.

3.7 Avoids making derogatory comments about colleagues, especially in the presence of pupils, parents or colleagues.

• There might be difference of opinions with a teacher. But these opinions should be expressed in a dignified manner.
• Do not talk in a derogatory way about the teaching method of colleagues.

3.8 Respects the professional standing and opinions of his/her colleagues

• A teacher praises those colleagues who excel in teaching and try to adopt their techniques. However, it should not lead to blind imitation.

3.9 A teacher maintains confidentiality of information regarding colleagues and dispenses such information only when authorized to do so.

• If the information collected about colleagues for a particular matter is confidential and private in nature, then it should be revealed only for legal matters.
Teacher Planner

Teacher planner is a record of daily teaching planning. The teacher should develop the process page by carrying out the activities given in the teacher text and text book with the aim of achieving learning outcomes. However, these activities should be done in a flexible manner, adopting techniques suitable for the students of her class.

The process page should contain planning that includes assessment along with learning activities. Information obtained through continuous assessment should also be included on the feedback page.

A teacher planner should contain learning activities conducive for precise and meaningful concept-formation. The teacher should prepare a reflection note based on the information gathered through learning activities and assessment implemented in a week. It should be discussed in SRG/Subject Council. Further planning notes should be made by the teacher based on these notes.

The format of a teacher planner is given below.
<table>
<thead>
<tr>
<th>Teacher Planner</th>
</tr>
</thead>
<tbody>
<tr>
<td>Name of the unit/ lesson :</td>
</tr>
<tr>
<td>Date :</td>
</tr>
<tr>
<td>Expected time :</td>
</tr>
<tr>
<td>Learning outcomes :</td>
</tr>
<tr>
<td>Concepts / Ideas :</td>
</tr>
<tr>
<td>Skills :</td>
</tr>
<tr>
<td>Language elements (only for language ) :</td>
</tr>
<tr>
<td>Discourses (only for language ) :</td>
</tr>
<tr>
<td>Values, Attitudes :</td>
</tr>
<tr>
<td>Learning aids :</td>
</tr>
<tr>
<td>Expected Products :</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Process Page</th>
<th>Assessment Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Process containing activities and assessment.</td>
<td>Assessment details should be included here.</td>
</tr>
</tbody>
</table>
Reflections

My findings, realisations

(Based on the ideas obtained through the assessment of learning activities)

•
•
•

Extended Activities and Remedial Measures - Hints

•
•
•
•
ASSESSMENT APPROACH

Learning is a natural and continuous process. For effective learning, learning experiences should be based on specific objectives and centred on learning outcomes. Teachers and learners should be aware of the concepts and skills to be acquired through learning. Learning strategies should be planned according to the learning outcomes associated with each lesson. They should be linked to real life situations and presented to the learners.

How far are the acquired concepts and skills sufficient in ensuring learning outcomes? How many learners are yet to acquire the learning outcomes? What are the extended activities to be provided? How can they be provided? These should be the concerns of teachers as part of assessment.

Assessment of Learning is the process of assessing the learning outcomes acquired after the transaction of a unit. The proficiency of the learner and his level of excellence are evaluated here. This is just one phase of assessment.

Assessment to ensure learning should be given prominence. There might be many interventions made by the teacher or classmates to ensure efficiency during the process of learning. This intervention during learning and feedback forms another phase of assessment. This is called Assessment for Learning. It has to be carried out continuously for progress in learning and should be integrated with learning activities.

There is also a process of correction which involves a critical self-analysis of the concepts and awareness gathered through learning and internalizing the changes. This can be considered as self-assessment. Thus, learning takes place through self-assessment. This can be called Assessment as Learning. The learner becomes aware of how to learn more effectively (Learning to Learn) through this.

Assessment for learning and assessment as learning should be intensely emphasised to make learning more effective. The approach which gives importance to assessment process for making learning more effective must be adopted.
While adopting a learning approach that ensures learning outcomes, we should also adopt a suitable assessment approach for it. Therefore, an 'Outcome Focussed Assessment Approach' should be adopted. Active participation of the learner should be ensured in the learning activities centred on learning outcomes. There should be awareness about learning outcomes among learners, teachers and parents alike. Clarity regarding the need for assessment, need to ensure learning outcomes, making it learner centred, to develop the ability to identify social problems, to encourage creative, critical and logical thinking are the characteristics of learning focussed on learning outcomes.

**Continuous and Comprehensive Evaluation (CCE)**

Learning is a continuous process taking place in the learner. Hence, the assessment process to examine the concepts and skills acquired should also be continuous. By comprehensive assessment, we mean the assessment of the learner in cognitive as well as socio-emotional areas. Hence, we have adopted a continuous and comprehensive evaluation system.

**CCE Areas**

CCE is carried out in two areas;

1. Cognitive area
2. Socio - emotional area

**Assessment regarding development in cognitive domain**

The subjects taught at higher secondary level like Language, Science Humanities, Commerce, Health and Physical Education come under cognitive area. Learning outcomes acquired in each subject should be evaluated. Two types of evaluation are suggested here.

1. Continuous Evaluation (CE)
2. Term Evaluation (TE)
Continuous Evaluation (CE)

Three types of CE are suggested.

1. Learning Process assessment
2. Portfolio Assessment
3. Unit based assessment

Learning Process Assessment

Both the teacher and the learner plan various activities to acquire learning outcomes. The teacher has evaluated various factors like the participation of the learner in the learning process, excellence of the learner in performance and presentation, creativity of the learner, acquisition of desired skills etc. The indicators given below can be used for evaluation.

1. Participation in activity
2. Conceptual understanding
3. Acquisition of skills
4. Performance / Presentation
5. Recording / Preparation

When the process-assessment is carried out, the assessment done should be based on each indicator. For example, when evaluation for the indicator 'participation in activity' is done, the learners should be categorized as excellent, good, average and those who need improvement. This has to be recorded in the page for assessment in Teacher Planner. All learners have to be assessed and recorded with reference to each indicator in every term.


We can examine how to assess learning process for various subjects in continuous evaluation.

Participation in activity

- Did the learner volunteer for the activity?
- Did he try to do it individually?
Did he participate effectively in a group?
Did he share any ideas?
Did he encourage participation of others?

**Conceptual understanding**
- Awareness of content
- Stages of constructing knowledge
- Excellence in internalizing concept
- Ability to apply the concepts

The proficiency of the learner

**Acquisition of skills**
- What/how much is the pre-conceptual awareness of the teacher
- Was he able to acquire the desired process skills through this activity?
- What additional activity should be given to those who are yet to acquire the skills?

**Performance / Presentation**
- Did the learner try to present the knowledge acquired through individual activity or group activity?
- Was he able to explain the findings in a rational manner?

**Recording / Preparation**
- Did the learner record the various stages of activity?
- Was recording done in a manner easy for others to understand?
- Was the recording done in a systematic and disciplined manner?
- Did he carry out recording after individual and group activities and general discussion?

Let us examine how the learning process in languages should be assessed as part of CE.

As getting conceptual knowledge is important, so are discourse knowledge and language skills. If so, let us examine how to assess the learning process considering the indicators.
o Participation

The interest of the learner in learning activity, his participation in group activities etc should be considered here.

o Conceptual understanding

Awareness of content in language, discourse, indicators of quality, process of construction of knowledge through various modes of language study, level of language excellence of the learner etc should be evaluated by the teacher here.

o Acquisition of Skills

Level of the learner in skills like listening, speaking, reading, writing and creativity are assessed and feedback is given. The performance of the student in various discourse areas, language elements, communication etc. too should be taken into consideration.

o Performance / Presentation

There are various methods for communication in language. Other language skills of the learner (recitation, singing, acting, drawing, speaking) are as important as the creative writing skill of the learner. Other factors like pronunciation, clarity of speech etc. should be considered when the teacher prepares the feedback.

o Recording / Preparation

Did the learner make necessary recording during the various stages of activity? Was recording done in a manner easy for others to understand? Was the recording done in a systematic and disciplined manner? Did he carry out any individual creative writing? Did he make any improvement in group performance after discussion in the class? Are the learners able to carry out creative writing without any errors? These are the factors to be evaluated by the teacher.

A Teacher Planner must be prepared to plan learning activities at the micro level and to make continuous evaluation more scientific.
1. **Details in the Teacher Planner**
   a. Learning Outcomes
   b. Concepts/ ideas
   c. Skills
   d. Values/ Attitudes
   e. Learning Materials
   f. Expected products
   g. Number of periods
   h. Process- page containing activities and their assessment and an assessment page consisting of the feedback.

   The teacher planner should contain planning of learning activities including adaptation, situations of evaluation, strategies, tools etc. The teacher planner can be prepared based on an idea, various ideas or a learning outcome or taking a unit in its entirety.

2. **Details regarding Subject-related activity log**

   Activity log is an important document required for the assessment of the cognitive area. It helps to complete various activities according to learning processes. The creativity of the learner, thought processes, language skills, socio-emotional domain etc are reflected in the activity log. An activity log should contain details like the various strategies adopted for the transaction of lesson, prior planning made by the learner to complete the transaction of lesson, interventions made at various stages of activities etc., Details regarding the product formed through activities are to be recorded in the activity log. The additional information given by teachers to strengthen the learning process too can be recorded in the activity log.

   o **Portfolio Assessment**

   Portfolio is the collection of all products formed during the various stages of learning activities. It has the duty to give a learner, parents and the teacher feedback regarding learning.
The following should be included in a portfolio.

- Activity log
- Other learning documents, pictures, collections, writings, learning materials, creations made through ICT etc.
- Creative works
- Work sheets

The following indicators can be used for portfolio assessment.

- Clarity of concept
- Attainment of concepts
- Appropriate design
- Completion
- Originality

**Method to calculate scores of learning process and portfolio**

It is not necessary to record the score of all students calculated using indicators given for each activity. Performance of an entire term should be evaluated using the indicators. The notes in teacher planner, records in activity log etc should be consolidated at the end of each term and learners should be categorised on the basis of their participation as Excellent, Good, Average, and Need improvement and 4/3/2/1 scores should be given accordingly. All five indicators have to be considered and score should be given for each indicator. The maximum score can be calculated as 20.

**Unit based Assessment**

In a unit, activities for various learning outcomes are distributed in an inter-related manner. This is comprehensive in nature. While assessing a unit, this comprehensiveness (considering all the learning outcomes) is assessed. Oral assessment, quiz programme, open book assessment, preparation of questions, identifying the indicators and assessment of creative writing can be considered for unit assessment. Rating scale and check list to measure the achievement of a learner in a particular unit can be used. Unit assessment should take place naturally along with learning.
For unit assessment, points have to be awarded on the basis of indicators and converted to grades. These grades have to be recorded in the prescribed format. As there is more than one assessment in a term, the average of the assessment of all the units has to be recorded at the end of the term. Teacher has to prepare indicators suitable for the tools used in assessment.

**OPEN BOOK ASSESSMENT**

An “open book assessment” is one in which examinees are allowed to consult their class notes, textbooks, and other approved materials while answering questions. It is ideally suited to programmes that especially aim at developing the skills of critical and creative thinking. The open material may take one of the main forms; a textbook or alternative reference materials, or the students’ own notes. The types of material allowable must be made explicit to all students in advance of the assessment. Open-book assessments often comprise tasks based on a problem or argument to which the student is then required to respond, employing their knowledge of the subject and making use of the reference material as appropriate. Unit based assessment can be done in the form of open book assessment. It can be given after completing the unit, integrating all the learning outcomes. This assessment can be given for individual attempt first. Then the same can be allowed to be discussed in groups. Thus learning can be ensured in every learner.

**Advantages of open-book Assessment**

- They assess not only students’ capacity to construct a coherent response to the assessment task, but also require a demonstration of their ability to use resource material effectively.
- By allowing students access to relevant reference material, open-book assessments reduce the need to memorise information, and can therefore allow students to concentrate on demonstrating their ability to understand and apply this information to the question.
By providing students with reference material prior to the assessment, it may give them greater confidence when taking these assessments and therefore produce a more accurate account of their achievements.

Students can use revision time more constructively, focusing on reinforcing their understanding of the subject rather than attempting to memorise information.

Home assignments and other learning experiences already prepare the students to solve problems with the assistance of external resources, so open-book assessments are quite natural in nature.

Preparing for an Open Book Assessment

- Read the chapters ahead of time. Don’t expect to find quick answers during the assessment.
- Know where to find everything. Observe the concepts and make your own outline. This reinforces the structure of the content in your mind.
- Mark all important terms with sticky notes and flags. If the teacher allows it, mark your texts wherever you notice important concepts and terms.
- Review notes for themes. Your teacher’s comments usually provide an overview of the themes and concepts that appear on assessment. You won’t always get this by reviewing the book alone.
- Make your own notes if allowed, and write down important formulas or concepts that you’ve covered in class.

Method of calculating CE

The maximum score for learning process, portfolio and unit based assessment will be 20 each in every subject. Term level recording can be done calculating the average of them. To consolidate these marks, the format given in Annexure - 1 can be used.
Term Evaluation (TE)

It is essential to assess the learning outcomes achieved through learning activities by each learner at the end of every term. The assessment of languages should be made considering areas like discourses, language elements, language skills based on the learning outcomes in the units considered in each term. Question models can contain various questions which stress the content areas and skills. For other subjects, assessment should be done based on the content-area of units considered in the term. Questions to assess skills and ideas which lay stress on learning outcomes can be prepared.

The question paper should be prepared after first preparing a design and then a blue print of question paper giving proper weights to units and learning outcomes, various thinking skills and different form of questions. Suitable scoring key and marking scheme should be prepared for each question and assessment should be done based on this scheme. Question-wise analysis should be prepared to review whether the questions are in accordance with the blue print and necessary editing should be done in the questions.

Details of thinking skills

Thinking skills are the mental processes that we apply when we seek to make sense of experiences. While setting the question paper, due weight should be given to the thinking skills, so as to ensure meaningful learning in every learner. Coverage of the range of skills has to be ensured in the question paper which expects the learners to respond within a stipulated period of time of assessment, keeping in view the difficulty level.

According to Anderson and Krathwohl (‘A Taxonomy for Learning, Teaching and Assessing – Revised Blooms taxonomy’) the range of categories, specific thinking skills/processes with its alternative processes/terms is given as follows;
<table>
<thead>
<tr>
<th>CATEGORY/PROCESSES</th>
<th>ALTERNATIVE TERMS</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1. Remember</strong></td>
<td>Retrieve relevant knowledge from long-term memory</td>
</tr>
<tr>
<td>1.1. Recognising</td>
<td>identifying (e.g. Recognize the dates of important events in Indian history)</td>
</tr>
<tr>
<td>1.2. Recalling</td>
<td>retrieving (e.g. Recall the major exports of India)</td>
</tr>
<tr>
<td><strong>2. Understand</strong></td>
<td>Construct meaning from instructional messages, including oral, written and graphic information</td>
</tr>
<tr>
<td>2.1. Interpreting</td>
<td>clarifying, paraphrasing, representing, translating (e.g. Write an equation [using B for the number of boys and G for the number of girls] that corresponds to the statement ‘There are twice as many boys as girls in this class’</td>
</tr>
<tr>
<td>2.2. Exemplifying</td>
<td>illustrating, substantiating (e.g. Locate an inorganic compound and tell why it is inorganic)</td>
</tr>
<tr>
<td>2.3. Classifying</td>
<td>categorizing, subsuming (e.g. Classify the given transactions to be recorded in Purchase returns book and Sales returns book)</td>
</tr>
<tr>
<td>2.4. Summarising</td>
<td>abstracting, generalizing (e.g. Students are asked to read an un titled passage and then write an appropriate title.)</td>
</tr>
<tr>
<td>2.5. Inferring</td>
<td>concluding, extrapolating, interpolating, predicting (e.g. a student may be given three physics problems, two involving one principle and another involving a different principle can be asked to state the underlying principle or concept the student is uses to arrive at the correct answer.)</td>
</tr>
<tr>
<td>2.6. Comparing</td>
<td>contrasting, mapping, matching (e.g. Compare historical events to contemporary situations)</td>
</tr>
</tbody>
</table>
2.7. **Explaining** constructing models (e.g. the students who have studied Ohm’s law are asked to explain what happens to the rate of the current when a second battery is added to a circuit.)

<table>
<thead>
<tr>
<th>3. <strong>Apply</strong></th>
<th>Carry out or use a procedure in a given situation</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.1. <strong>Executing</strong></td>
<td>Carrying out (e.g. Prepare Trading and Profit and loss Account from the Trial Balance given to and find out the net profit.)</td>
</tr>
<tr>
<td>3.2. <strong>Implementing</strong></td>
<td>using (e.g. Select the appropriate given situation where Newton’s Second Law can be used)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>4. <strong>Analyse</strong></th>
<th>Break material into its constituent parts and determine how the parts relate to one another and to an overall structure or purpose</th>
</tr>
</thead>
<tbody>
<tr>
<td>4.1. <strong>Differentiating</strong></td>
<td>discriminating, distinguishing, focusing, selecting (e.g. distinguish between relevant and irrelevant numbers in a mathematical word problem)</td>
</tr>
<tr>
<td>4.2. <strong>Organising</strong></td>
<td>finding coherence, integrating, outlining, parsing, structuring (e.g. the students are asked to write graphic hierarchies which best corresponds to the organisation of a presented passage.)</td>
</tr>
<tr>
<td>4.3. <strong>Attributing</strong></td>
<td>deconstructing (e.g. determine the point of view of the author of an essay in terms of his or her ethical perspective)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>5. <strong>Evaluate</strong></th>
<th>Make judgements based on criteria and standards</th>
</tr>
</thead>
<tbody>
<tr>
<td>5.1. <strong>Checking</strong></td>
<td>coordinating, detecting, monitoring, testing (e.g. after reading a report of a chemistry experiment, determine whether or not the conclusion follows from the results of the experiment.)</td>
</tr>
<tr>
<td>5.2. <strong>Critiquing</strong></td>
<td>judging (e.g. Judge which of the two methods is the best way to solve a given problem)</td>
</tr>
</tbody>
</table>
6. **Create**  
Put elements together to form a coherent or functional whole; reorganize elements into a new pattern or structure

<table>
<thead>
<tr>
<th>6.1. Generating</th>
<th>hypothesizing (e.g. suggest as many ways as you can to assure that everyone has adequate medical insurance)</th>
</tr>
</thead>
<tbody>
<tr>
<td>6.2. Planning</td>
<td>designing (e.g. design social intervention programmes for overcoming excessive consumerism)</td>
</tr>
<tr>
<td>6.3. Producing</td>
<td>constructing (e.g. the students are asked to write a short story based on some specifications)</td>
</tr>
</tbody>
</table>

As part of TE, theory and practicals are included. Practicals held as part of the learning activity and their records should be done continuously. Practical Diary should be used to maintain such records.

For subjects with practicals, the practical evaluation should be done at the end of the second year. The practical diary containing the records of the practical work done in the first and second year and the practical examination at the end of the second year should be examined by an external examiner and suitable score should be given.

**Health - Physical Education - Assessment Method**

Health - physical education will be considered as a cognitive area from 2014-15 academic year. During the adolescent stage, the physical and mental development of a child strengthens further. The learners should be given the opportunity to get a proper awareness of health habits and the need to engage in physical activities. A performance assessment of the health - physical education is suggested. Details regarding this are given in the higher secondary level source book.
Assessment in Socio - Emotional Area

Assessment of social and emotional areas is as important as that of cognitive areas. Skills relating to Learning to know, Learning to do, Learning to live together and Learning to be should be considered here. The assessment of social and emotional areas should consider the following skills.

1. Communication skills
2. Interpersonal skills
3. Empathy
4. Coping with emotions
5. Coping with stress
6. Problem solving skills
7. Decision making
8. Critical thinking
9. Creative thinking skills
10. Self-awareness

The assessment should be carried out by teachers handling various subjects in cognitive areas. This assessment should be carried out as part of the learning process assessment in each subject. Along with the assessment of process skills, the assessment of related values and attitudes too should be done.

The skills in the socio - emotional area that can be beneficial for the proficiency of the learner should be identified and marked. The skills beneficial to each learner should be encouraged. The teacher can record these proficiencies in the Teacher Planner and the consolidated information in Annexure - 2.

Artistic, Social, Cultural and Vocational Proficiencies

To ensure the all-round development of a learner at the higher secondary level, not only appreciative, creative and artistic skills should be encouraged but an attitude towards undertaking social-
cultural services should be inculcated. Every learner should get an opportunity at least once in a month to participate in such activities. Higher Secondary Youth Festival, Career Guidance, Social Extension activities, National Service Scheme, N.C.C and various clubs should be made use of towards this effect.

All students at the higher secondary level should participate in atleast one of these activities. The proficiency of the learner in participating can be given a special grade certificate.

<table>
<thead>
<tr>
<th>For Excellence in activity</th>
<th>- A grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>Good</td>
<td>- B grade</td>
</tr>
<tr>
<td>Satisfactory</td>
<td>- C grade</td>
</tr>
<tr>
<td>Participation</td>
<td>- D grade</td>
</tr>
</tbody>
</table>

**Assessment - Annual Consolidation**

The annual overall score of CE is the best score obtained by the learner in 3 terms. This can be entered in the column titled 'Final Score' in the format given in Annexure - 2. It is the total CE score of the learner in each subject. Now find the TE of each subject and find the total score adding CE and TE. This is the total score of a learner in one subject. In the case of subjects with practicals, the final score is calculated by including the score for practicals too.

Since the Term Evaluation (Annual examination) in Higher Secondary is the public examination, the final score of TE in written and practical exams will be the score of the public exam itself.

Make entries in the corresponding columns regarding the proficiency shown in skills related to socio- emotional areas by each learner. Low proficiency in acquiring skills need not be marked as under-achievement.

**Grading Scheme**

Higher Secondary level employs grading system to assess subjects in cognitive area. 9 Point Absolute Grading is used for this.
The table given below can be used for this.

<table>
<thead>
<tr>
<th>Score Percentage</th>
<th>Grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>90-100</td>
<td>A+</td>
</tr>
<tr>
<td>80-89</td>
<td>A</td>
</tr>
<tr>
<td>70-79</td>
<td>B+</td>
</tr>
<tr>
<td>60-69</td>
<td>B</td>
</tr>
<tr>
<td>50-59</td>
<td>C+</td>
</tr>
<tr>
<td>40-49</td>
<td>C</td>
</tr>
<tr>
<td>30-39</td>
<td>D+</td>
</tr>
<tr>
<td>20-29</td>
<td>D</td>
</tr>
<tr>
<td>Below 20</td>
<td>E</td>
</tr>
</tbody>
</table>

To be eligible for higher studies, the learner in the higher secondary should get a minimum of D+ (30-39 %) for each subject in the combined score of CE + TE (Public exam). In addition, he should score a minimum of D+ for TE too.

Similarly, measures can be adopted to assess the proficiency of the learner at the cognitive area, socio-emotional area, thereby ensuring learning outcomes. Collective effort is required to implement this assessment comprehensively and continuously. Through cluster-level meetings, the assessment system can be made for effective.
Assessment

Approach: An approach that focuses learning outcomes

CCE

Cognitive Area

Continuous Assessment
- Assessment of learning process.
- Assessment of Portfolio.
- Assessment at Unit level.

Term Assessment
- Lays stress on ideas, processes and learning outcomes.

Socio - Emotional Area

1. Communication skills
2. Interpersonal skills
3. Empathy
4. Coping with emotions
5. Coping with Stress
6. Problem solving skills
7. Decision making
8. Critical thinking
9. Creative thinking skills
10. Self-awareness

The formats for assessment are given as Annexure I and II.
Annexure 1

Subject-related consolidation format to record CE, TE in each term
Term: 1/2/3

Subject: .........................  Class: .................  Division: ......................

<table>
<thead>
<tr>
<th>No.</th>
<th>Name of Student</th>
<th>CE items</th>
<th></th>
<th></th>
<th></th>
<th>Overall Grade</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Learning Process</td>
<td>Portfolio</td>
<td>Unit based assessment</td>
<td>Total CE Score</td>
<td>TE Score</td>
</tr>
</tbody>
</table>

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|-----|----------------|-------------------|-------------------------|---------|---------|---------|---------|--------------------------------|------------|-------|
| 1   |                |                   |                         |         |         |         |         |                                 |            |       |
| 2   |                |                   |                         |         |         |         |         |                                 |            |       |
| 3   |                |                   |                         |         |         |         |         |                                 |            |       |
|     |                |                   |                         |         |         |         |         | Final Score                      |            |       |
|     |                |                   |                         |         |         |         |         |                                 |            |       |