
UNIT 15 CURRICULAR ISSUES AND QUALITY CONCERNS IN SECONDARY EDUCATION

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15.1 INTRODUCTION

You must have observed that starting from the implementation of National Curriculum Framework – 2005, lot of changes have taken place in maintaining quality in Secondary Education. In light of the recommendations of the National Curriculum Framework – 2005, NCTE has also developed National Curriculum Framework for Teacher Education – 2009. Further realizing the global changes and widening the perspectives and contexts of School and Teacher Education, it has recently notified in NCTE Regulation, 2014, to revise all teacher education curriculum.

The above developments on renovating curriculum for school and teacher education are necessarily mean to cope with the developments in global situations on education by addressing the curricular issues and quality concerns in Secondary Education. The present Unit is specifically designed to make you understand the relevance of present Secondary Curriculum in the light of the concerns of NCF, 2005. In Secondary Education Curriculum, there is still a problem to address the specific curricular areas of knowledge like, peace and values, work, life skills, art, health & physical education. These areas of knowledge have not been equally represented in Secondary School

Curriculum in comparison with the core areas of curriculum such as Languages, Science, Social Science, and Mathematics. Keeping in view the above issues, the present Unit will also make you understand and critically analyze in order to address the issues of specific curricular areas of knowledge. Assuring quality in Secondary Education is also another important component of this Unit. The quality indicators and strategies for quality improvement in Secondary Schools have also been discussed in this Unit.

15.2 OBJECTIVES

After going through this Unit, you will be able to:

- examine the relevance of present Secondary Curriculum;
- critically analyze the curricular and quality assurance concerns of National Curriculum Framework – 2005 on Secondary Education;
- discuss the essence of developing meta-cognitive skills and creative capitals in Secondary Education;
- reflect your opinion on addressing the issues of specific curricular areas of knowledge in Secondary Education; and
- get acquainted with the quality indicators and strategies for assuring quality in Secondary Education.

15.3 RELEVANCE OF PRESENT SECONDARY EDUCATION CURRICULUM

The two years period of Secondary Education is very crucial in terms of accommodating intense physical changes, vibrancy and energy of the adolescent children. Adjusting the children to the secondary classes who are at the transitive stage, coming from eight years of elementary classes and having high expectations from senior secondary classes, is really a difficult task for the schools and teachers as well. The widening of the thinking horizons of young children at this stage; their knowledge about world of work; and their personal, academic and other areas of interest make the teachers and the administrators sensitized enough to formulate suitable curriculum for them. The main aim of secondary curriculum should be to satisfy the needs and the aspirations of the adolescents.

Keeping in view the above, when we critically analyze the relevance of present secondary education curriculum, we find many crucial academic issues which need to be addressed. Let us discuss some of the major concerns:

- Present secondary education curriculum is more focused on the core subject areas like; Languages, Social Sciences, Science, and Mathematics. It has been observed that most academic experiences of the young children at this stage revolve around the above subjects. But it is a fact that in this stage, the children develop ideas and interest in many other areas of knowledge which they get very less opportunity to opt for and perform in. It is therefore, secondary education curriculum will be more relevant if the above areas of knowledge and interest of the children will be equally included and practiced in the school curriculum.

- If we critically analyze the curricular practices of the secondary students, we find that students hurriedly complete their entire Secondary Education Curriculum by the end of first term in Class-X. This is because of the craze to acquire high percentage of scores so that they can get admission in their choice of senior secondary schools and also in the stream they like. By doing so, they simply complete the secondary courses without understanding the details of the contents. This issue needs to be addressed. Positive attitudes of the students and the teachers need to be developed for completing the courses within the given time (not earlier) with detailed understanding. In this regard, the relevance of present secondary curriculum may be emphasized by conducting suitable guidance and counseling interventions for the students.
- The curriculum at the senior secondary stage is different from the secondary stage of education. At Senior Secondary stage, the students get an opportunity to choose the subjects and areas of study of their interest. But at the Secondary stage, hardly any choices are given to the students. Choices are given in few schools. But, interest of the students towards different vocations and world of works actually begins from secondary stage onwards. At this stage they also start developing ideas about various disciplines. A variety of vocational subject choices needs to be included in the secondary education curriculum for making it more relevant.
- The relevance of secondary education curriculum may be enhanced by connecting students' life experiences with the academic inputs that they get from the schools and widening their experiences to take a decision for particular types of study and professions they like.

Activity 1

Besides the points mentioned above, you as a teacher, analyze the present Secondary Curriculum and write its relevance for the Secondary Students. What changes do you propose to be included in the curriculum and why?

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15.4 CONCERNS OF NCF (SECONDARY EDUCATION) - 2005

National Curriculum Framework, 2005, published by NCERT, is quite significant for bringing contemporary changes in school and teacher education curriculum. Keeping in view the changing perspectives and contexts of school

education across the globe, necessary curricular changes have been recommended in NCF, 2005. The major features of NCF, 2005 has been articulated in five different areas of School Curriculum, they are 'Perspectives of Education'; 'Learning and Knowledge'; 'Curricular Areas, School Stages and Assessment'; 'School and Classroom Environment'; and 'Systemic Reforms'. Let us focus on the major concerns of NCF, 2005, for Secondary Education.

Perspectives of Education:

- To strengthen a national system of education for a pluralistic society like India.
- To integrate examination into classroom learning and also to make it more informal, alternative, and flexible.
- Reducing the curriculum load based on insights provided in 'Learning Without Burden'.
- To practise curriculum based on enshrined values and caring concerns within the democratic policy of India.
- To ensure quality education for all levels of School Education.
- To ensure that irrespective of caste, creed, religion and sex, all are provided with a standard curriculum.

Learning and Knowledge:

- To focus on holistic development of the students to enhance their physical and mental development.
- To create an inclusive environment in the schools and classrooms for all students.
- To provide ample opportunity in the school for children voicing their thoughts, curiosity, and questions in curricular practices.
- Bringing children to connect their knowledge across disciplinary boundaries and to help them construct their knowledge.
- Engaging learners in observation, exploration, discovery, analyzing, critical reflection, inquiry etc. with the content knowledge.
- Connecting children's experiences and local knowledge with the content presented in the textbooks and practice of pedagogy.
- Encouraging students to interact with peers, teachers and other people which would open up many more rich learning opportunities.

Curricular Areas, School Stages and Assessment:

- **Language:** (a) Skills of language such as speech and listening, reading and writing across the school subjects and disciplines need to be practiced. (b) Discussing the functions of language across the curriculum. (c) To implement three languages formula including mother tongue as the medium of instruction at the elementary level. (d) English needs to

find its place along with other Indian languages. (e) The multilingual character of Indian society should be seen as a resource for the enrichment of school life.

- **Mathematics:** (a) Provide scope to students about Mathematics as a discipline, because at the secondary stage, students begin to perceive the structure of Mathematics as a discipline. (b) Make familiar the students with Mathematical communication such as: defining terms and concepts; use of symbols; stating propositions and providing justifications. (c) Consolidating Mathematical modeling, data analysis, and interpretation. (d) Individual and group exploration of connections and patterns, visualization and generalization, and making and proving conjectures. (e) Use of appropriate tools that include concrete models as in Mathematics laboratories and computers. (f) Teaching Mathematics should enhance children's ability to think and reason, to visualize and handle abstractions, to formulate and solve problems.
- **Science:** (a) The language of Science teaching along with the content and process needs to commensurate with the age and cognitive abilities of the learners. (b) To engage learners in acquiring scientific methods and processes that will help to nurture curiosity and creativity of the children particularly in relation to the environment. (c) To make the learners acquainted with their environment, to equip them with the requisite knowledge and skills to enter into the world of work. (d) Systematic experimentation for verifying theoretical principles and working on locally significant projects are to be an important part of the science curriculum at the Secondary stage.
- **Social Science:** (a) To focus on interdisciplinary approach of learning History, Geography, Economics, Sociology, and Political Science and dealing with the key national concerns such as gender, justice, human rights, and sensitivity towards the marginalized groups and minorities. (b) Contemporary Indian issues including deeper understanding of the social and economic challenges needs to be initiated. (c) Social Science content needs to be focused on conceptual understanding rather than linking up facts to memorize for examination. (d) Work, Art, Peace, Health and Physical Education, and Habitat and Learning needs to be properly represented in the Secondary curriculum not only in Social Science but also in other subjects.
- **School and Classroom Environment:** (a) Physical environment in the School has to be maintained favorable in terms of infrastructure, adequate light and ventilation, ratio of students and teacher, hygiene and safe environment. (b) School should treat students with equality, justice, respect and dignity. (c) Implementation of inclusive education policy where the differently-abled and children from marginalized sections get equal opportunities. (d) School should also be well equipped with libraries, laboratories, and educational technology laboratory.
- **Systemic Reforms:** (a) Ensuring quality at every sphere of school education including curricular activities, teaching-learning processes, examination, and development of overall personality of the learners. (b) Meaningful academic planning has to be done in a participatory manner by the head master/principal and the teachers. (c) Suggested reforms for

teacher education programmes. (d) Enhancing participation of the local government in school activities so that the democratic participation in development can be realized. (e) Reducing stress and enhancing success in examination. (f) Availability of multiple textbooks to widen teachers choices and provide for the diversity in children's need and interest. (g) Sharing of teaching experiences and diverse classroom practices to generate new ideas and facilitate innovation and experimentation. (h) Development of syllabi, textbooks, and teaching-learning resources could be carried out in a decentralized and participatory manner involving teachers, experts from Universities, NGOs and teachers' organizations.

(Source: NCF, 2005)

Check Your Progress 1

- Notes:**
- a) Write your answers in the space given below.
 - b) Compare your answers with those given at the end of the Unit.

1. Critically analyze the perspectives of NCF, 2005 recommended for Secondary Education?

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2. Analyze the curricular changes made by NCF, 2005 for Secondary Education?

- Language:
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- Mathematics:
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- Social Science:
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- Science:
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15.5 DEVELOPING META COGNITIVE AND CREATIVE CAPITAL

You might know that learning takes place both in formal and informal processes. The difficulty of our schooling system is that it gives more stress on capturing the formal process of learning and on the contrary, it simply neglects the informal process. Knowledge construction is not only to focus on the formal process of learning, rather, it is evident that most learning experiences take place in an informal set up. It is, therefore, developing meta-cognitivism skills among the students which integrate formal and informal learning of the students need to be emphasized. It is, therefore, required to accomplish the major three pedagogical approaches, i.e. behaviorism, cognitivism, and constructivism in teaching and learning process. The contribution of cognitive abilities can never be neglected in the process of learning. The ability to access, analyze, and synthesize knowledge; select and evaluate knowledge in an informal world; ability to develop and apply several forms of intelligence; learning in collaboration (groups and peers); face, transform, and peacefully resolve conflicts; deal with ambiguous situations, unpredictable problems, and unforeseeable circumstances; and cope with multiple careers are the meta-cognitive abilities of the learners. Secondary schooling of the learners needs to be focused on the above meta-cognitive skills and practice it as an integral part of the curriculum. ‘Learning to Think and Learning to Learn’ are the philosophy to understand and realize the meta-cognitive skills.

Establishing creative capital by using the meta-cognitive skills of the learners are really the useful resources for the knowledge society. Creative capital is the capability of an individual, groups, family, and community to imagine and express new possibilities through creative activity. Creative capital defined as an ‘arsenal of creative thinkers whose ideas can be turned into valuable products and services’ (Florida & Goodnight, 2005: 124). Others argue that creative capital is a valuable resource in today’s creative workplaces in a wide variety of industries including, computing, engineering, architecture, science, education, arts and multimedia (McWilliam & Dawson, 2008). The form of work that requires creative ideas includes problem-solving, inquiry, generating solutions and addressing the ‘wicked problems’ involved in work with ill-defined often complex problems (Rittel & Webber, 1973). Because of the influence of globalization, creating a creative capital is not only useful for industrial process rather it is important to include in the school curriculum starting from secondary stage and students should practice it.

15.6 ADDRESSING THE SPECIFIC CURRICULAR ISSUES IN THE CURRICULUM

Traditional approach of organizing curriculum is mostly based upon the subject-centered approval. It often creates many difficulties for accommodating many areas of knowledge such as: Arts and Craft education, Work education, Peace education, Life skills education, Sports and physical education, Value education etc. These areas of knowledge have not yet been treated as distinct disciplines to be included in the school curriculum like; study of Languages, Social Science, Science, and Mathematics. ‘Those important areas of knowledge become sidelined and are then described as

‘extra’ or ‘co-curricular’ areas of study instead of being an integral part of the curriculum’ (NCF, 2005, p.29). This section will particularly address the issues and problems of specific curricular issues in the curriculum.

If we analyze the definition of education given by Mahatma Gandhi, “by education I mean an all-round drawing out of the best in child body, mind, and spirit”, we find that it focussed not only the development of human intellect alone but also the holistic development for total development of the personality. In traditional curriculum, though it demands that all types of disciplinary knowledge and practices are included in the curriculum, but really if we analyze, we find that the specific areas of knowledge are hardly integrated in the curriculum. However, few of them have haphazardly been placed in the time table of school curriculum that is also isolated from other areas of disciplinary knowledge in the school. Let us discuss some of the important specific curricular areas included in Secondary School curriculum.

15.6.1 Education for Peace

Unprecedented growth of violence, intolerance, fanaticism, dispute, and discordance are a constant threat for our society. To make it stop, there is the need to train children and young adults to practice tolerance and peace at home, school, and society. In this regard, school is the important agent to include ‘Education for Peace’ in its curriculum. It essentially nurtures ethical development, inculcating the values, human rights, justice, tolerance, social responsibility, attitude and skills required for living in harmony with oneself and others. If we analyze our school curriculum, we find that very little components are included which address the issue of peace education; that too, is also limited to very few topics and subjects. It is important to mainstream peace education in school curriculum, not just limiting it to few topics or subjects, rather presenting in the contents across the subjects of the curriculum in various forms like; in stories, narrations, activities, interactions, etc. The strategic inclusion approach of peace education in school curriculum may bring benefits for the children to understand the importance of peace in life and live happily.

15.6.2 Work and Education

Work is an integral part of every individuals’ life, be an adult or child. It is important to understand that both the adults and the children are socialized in the same way. A child needs to be educated in the school in the way it required. Inclusion of work education in the school curriculum should never be used as the justification for the exploitation of the children; on the other hand, it needs to be included as an opportunity of learning for the children and preparing them for their future lives. Work is also an arena for learning for children at home, school, society, or workplace. The concept of Socially Useful and Productive Work (SUPW) period in school curriculum makes the children appreciate the worth of social life and that valued and appreciated in society. It enables the children making disciplined, self-controlled, focusing mental energies, and keeping emotions under check. But the stereotypical inclusion of SUPW periods in the school curriculum hardly helps the children the way it is aimed to, when designed. It needs to be more institutionalized.

15.6.3 Life Skills and Value Education

Life skills education is also equally neglected in school curriculum. True education is not merely teaching the subjects and certifying learners. It should

enable the children to be get acquainted with the life skills and values. “Nurturing Life-skills” includes developing an improved self-esteem, having empathy towards others and different cultures, improving their critical and creative thinking and making them better at problem solving with a balanced approach towards decision-making. The core life-skills must be integral to the whole process of education (CBSE, 2015). As a teacher, you might know that the practice of life skills in school curriculum is limited to conducting few activities and including it in student’s report card. This approach will not serve the basic purpose of practicing life skills in school curriculum. Sometimes it is difficult to assess the life skills as most of them are qualitative in nature. These can only be observed and descriptive reporting may be done. But the challenge is how to address and integrate it in the school curriculum. There is a need of strategic accommodation of core life skills in the topics of various subjects in the curriculum. It should necessarily be, an integrated part of core curriculum.

Like the life skills education, there is also a need to incorporate value education in the school curriculum. ‘The Aims of Education are landscaped in the guiding principles of Constitution which reflect a commitment to democracy and the values of equality, justice, freedom, concern for others’ well-being, secularism, respect for human dignity, and human rights. Education should aim to build a commitment to these values, which are based on reason and understanding. The curriculum, therefore, should provide adequate experience and space for dialogue and discourse in the school to promote such a commitment in children’ (CBSE, 2015-16). The concept of value education in school curriculum is not new. Almost all the education committees and commissions have recommended the inclusion of value education in curriculum, especially at school level. The Central Board of Secondary Education and all State boards of school education have tried to incorporate constitutional and other personal and social values in their curriculum, but still it seems as inadequate and inappropriate inclusion in the curriculum. There is the need of integration of values across the subjects in the curriculum at all level of school education.

15.6.4 Art and Craft Education

From decades, there has been a debate about whether the Arts and Crafts education should be included in school curriculum, but substantial development has not yet been achieved. Still it is not considered in the mainstream of school curriculum. Sometimes, it is included in the school curriculum but isolated from the core subject areas. The art and heritage craft needs to become an integral component of learning in the school curriculum. Children’s skills and abilities need to be nurtured in these areas and they should not be treated as mere entertaining fringes in the school curriculum. The sense of creativity, appreciation, skills, aesthetics, and value based learning opportunities are possible through art and craft education. Though there is a rising scope for career and jobs in arts and crafts at the higher stages, but substantial inclusion in lower level school curriculum is yet to be done.

15.6.5 Health and Physical Education

Health and physical education has a wide contribution towards the physical, social and emotional development of a child. It comes within the holistic

definition of school education. It has also a widespread implication towards preventing undernourishment and communicable diseases. The NCF, 2005, recommended including health and physical education at all levels of schooling with special attention to vulnerable social groups and girl children. Introducing Yoga is also another important addition for health and physical education. The fragmented approach of incorporating the health and physical education programme in school curriculum is not going to make much difference. It needs to treat 'yoga, health and physical education' as a core part of curriculum. Allotment of time in school curriculum for yoga, games and sports must not be reduced or taken away under any circumstances.

15.6.6 Environmental Conservation and Sustainable Development

You might be aware about the environmental issues which are not limited to a particular Country or region. Global warming has made us conscious about relooking at developmental works at the cost of the extreme use of natural resources. Rising temperature and acute pollution in the environment causes global warming. You know that non-renewable resources get exhausted as they are consumed. Even the renewable resources, when consumed, take some time to get replaced. Crops are replaced quickly; soil nutrients and water may take several years to get restored. Many a times, resources also get unfit for use because of human activities. If we do not preserve the quantity and quality of our resources and protect our resources from depletion, a time may come when usable resources will be exhausted. In the name of development, the resource requirements of future generations cannot be limited or destroyed.

For continuous economic development, we must ensure the future availability of resources. For this, we must conserve our resources. It means protecting them from getting polluted or depleted, so that they can be used in future. Proper strategic use of natural resources can be done so that present needs can be met without destroying the ability of future generations to meet their needs. Sustainable development also involves:

- Preventing wastage and excess conservation of resources.
- Protecting and controlling the kinds of pollution.
- Maintaining biological diversity on earth.
- Recycling reusable resources.
- Using alternative resources for developmental work.

Realizing the gravity of the matter, environmental conservation and sustainable development now become an important academic area of study in the university education system across the world. For better implementation of the policies of environmental construction and sustainable development, there is a need to include it in the curriculum of School education at all levels. Positive attitude may be developed among students to conserve environment and righteous use of resources. In a variety of ways, this can be addressed in the school curriculum, like:

- By including it in the main course of school curriculum.
- By organizing various activities in the schools such as: environmental debate and discussion, workshops, exhibitions, and field study.

- By organizing community awareness programmes, road shows etc.
- By awarding prizes to the individual, groups, and community for success stories in environmental conservation. This may be done at School, local, national, and international level.

Activity 2

How does your school manage to address the specific curricular issues like, peace, work, values, art, and health education in the curriculum at the Secondary level? Are you satisfy with it? Justify your opinion.

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Check Your Progress 2

- Notes:** a) Write your answers in the space given below.
b) Compare your answers with those given at the end of the Unit.

3. How the specific curricular areas are different from core curricular areas in School curriculum?

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4. What suggestions do you want to put forth for providing equal treatment to the specific curricular areas of study?

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15.7 QUALITY ASSURANCE IN SECONDARY EDUCATION

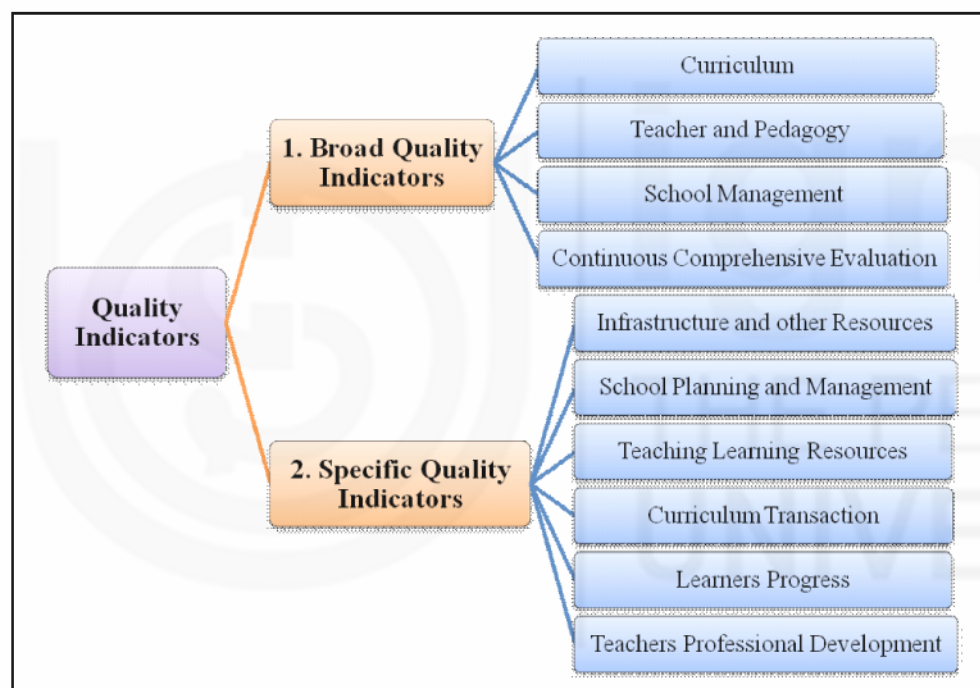
As you know, secondary education is a very crucial stage in every student's life. At this stage, they get a base for detailed studies in any particular discipline of their interest in future and go for higher education. It is, therefore, required to get substantial knowledge at this stage. Currently, you might have observed that a lot of changes have taken place in the curriculum and pedagogy for transacting curriculum in the School education including

Secondary education. Curriculum reform is the most important aspect for assuring quality in secondary education. The curricular environment and teaching-learning process of the school is the heart of the system. It is, therefore, that the curriculum needs to be revised and quality secondary education should be retained. Assuring quality is not an independent and isolated matter. It depends upon many criteria such as practicing quality indicators and strategies adopted for quality improvement in secondary education. Let us discuss the quality indicators and the strategies for improving quality in secondary education.

15.7.1 Quality Indicators for Secondary Education

The most important areas of concerns for assuring quality in secondary education are curriculum, teaching-learning resources, pedagogy etc. The indicators for assuring quality may further be divided into two major sections such as: broad quality indicators and specific quality indicators. Let us discuss the necessary indicators that need to be taken care of into two major sections.

Chart 1: Quality indicators for quality assurance in Secondary Education



1. Broad Quality Indicators for Secondary Education:

Let us discuss the indicators under the broad quality indicators for assuring quality in Secondary education.

Curriculum:

- Ensuring Learner friendly inclusive curriculum at the Secondary stage, adequately equipped with subject knowledge; knowledge on art and aesthetics, work, physical, peace education, science, practical skills, etc.
- Emphasizing the social context of education in secondary curriculum.
- Engaging learners in the process of acquiring and constructing knowledge through varieties of teaching-learning activities.

Issues and Concerns in Secondary Education

- Requiring learner's reflection on texts, contents, and activities in curriculum.
- Including the components of curriculum like art, craft, health and peace education in the subjects of Science, Mathematics, Social Sciences and Languages.
- Providing opportunity to the learners to discuss with teachers, about social and national concerns such as social discrimination with regard to gender and marginalized groups, unemployment, poverty, etc.
- Providing scope to the learners for developing vocational skills in the areas of their interest in the curriculum.

Teacher and Pedagogy:

- Well qualified and eligible teachers for teaching in secondary classes.
- Properly coped with Pedagogical Content Knowledge (PCK).
- Awareness about the current development of pedagogical practices as well as current trends in specific subject areas.
- Linking curriculum, syllabus, and text books with the learner's experiences.
- Maintaining regularity, punctuality and cooperation with school management.
- Practising research findings in the classroom in the field of school education and also able enough to conduct research at the school level.
- Utilising the experiences of the learners and to use various innovative ways of teaching.
- Understanding the contextual use of generic, course, and content specific pedagogy in teaching.
- Understanding the students, their ability, aptitude, interest, attitude, and personality patterns.

School Management:

- Essentiality of academic leadership quality of the head teachers and the principles for effective management of schools.
- Well oriented about the emerging curricular vision of flexibility, contextually, perspectives, and plurality.
- Informed about the goals of Universalisation of Secondary Education and various schemes subsumed under RMSA related to equity and other concerns.
- Motivates teachers to create an inclusive environment in the schools, ensure participation of the students in classroom interaction, and provide opportunities for the teachers for their professional development.

Continuous Comprehensive Evaluation:

- Integrating assessment as one of the components in teaching learning process.

- Ensuring assessment strategies which enhance learning of students and assess behaviour of students.
- Creating an environment for practicing formal as well as informal strategies of assessment both in and outside the classroom situations.
- Practicing constructive assessment techniques such as observation, peer and self- assessment, group participation, etc.

2. Specific Qualitative Indicators for Secondary Education:

Infrastructure and other Resources:

School infrastructure and other resources are also necessary indicators for achieving quality in Secondary education. Effective transaction of the curriculum depends highly upon the material and other resources available in schools. Conducive environment at the school, well equipped laboratories, libraries, ICT rooms, adequate number of classrooms, place for art and craft, games and sports, recreation, etc. needs to be maintained in the schools. Maintaining proper ratio of teachers to students is also another criterion for achieving quality in instruction.

School Planning and Management:

Ensuring proper planning and management in schools is necessary for assuring quality in schools. Starting from the beginning of the session till the end, there is a need for planning the school activities. Broadly the activities may be:

- Preparing school calendar depicting school times, hours of study at schools, time table for each class including space to adjust art & craft, health and physical education, library and reading work, practical activities, and recreations.
- Providing resource and other ICT based technical support to teachers for better academic interaction in the classroom teaching.
- Establishing an environment of weekly, monthly, and terminal meeting of the principal with the teachers, PTMs, and SMCs for better functioning of the Schools.
- Conducting remedial classes apart from the regular classes for accommodating the learners with certain learning difficulties in particular subjects and content.
- Creating inclusive classroom situations in the school.

Teaching Learning Resources:

- Timely availability of syllabi, textbooks, workbooks, supplementary reading materials, etc. to the students.
- A set of syllabi, textbooks with teacher manuals, resource books, references, assessment manuals, teaching aids, etc. need to be timely available to the teachers.
- Practical kits for the practical oriented subjects should be available for both the teachers and the students as well.

Curriculum Transaction:

All the pedagogical strategies need effective curriculum transaction to be practiced. Adequate space for teaching art and craft, health and physical education, exhibitions, workshops, practical, skill development, enquiry and problem solving approaches of teaching needs to be practiced. There is also the need for associating formal and informal assessment strategies in the process of teaching and learning. Care should be given to effective use of formative and summative assessment in the Schools.

Learners Progress:

Getting idea about the progress of learners, their areas of difficulties, mastery in subjects, achieving practical and skill based orientation in vocational subjects, engaged in field based activities, etc., are also important aspects for assuring quality in secondary education. Diagnosing learning difficulties of the students in particular content and subjects and providing remedial instruction is also needed for achieving quality in instruction.

Teachers Professional Development:

Quality assurance in secondary education is also equally dependent upon the teachers engaged in transacting curriculum at the classroom level. Teachers need to be empowered, skilled, informative, and accept the timely changes occurred in secondary education in terms of curriculum, pedagogy, evaluation, and management of the schools. For this, regular professional development of the teachers is required. Professional development of teachers may focus on the following aspects:

- Participation of teachers in seminars, workshops, conferences organized in different themes on school education at local, State, and National levels.
- Participation of each secondary stage teacher in regular training programmes organised by Dept. of Education of concerned Governments, SCERTs, NCERT, CTE, and other institutes.
- Induction training programme for newly recruited teachers at the secondary level.
- Training of school principals and educational administrators in the area of school management and leadership.
- To motivate and sponsor teachers for pursuing different certificate and diploma programmes on teaching learning strategies, pedagogy of teaching different subjects, use of innovative techniques for classroom management, action research, students evaluation, educational administration and management, school leadership etc.

15.7.2 Strategies for Quality Improvement in Secondary Schools

On the basis of the quality, indicators for assuring quality in secondary education, suitable strategies need to be adopted for improving quality in the Schools. The following strategies may be adopted for improving quality in the secondary schools:

- There is a need for involvement of all stakeholders in the management of schools. The individuals, and groups like the students, teachers, community members, members of the School Management Committees, local governments like the Panchayats and the Panchayat Samitis, Department of Education, SCERT, NCERT, DIET, Teacher Education institutes, etc. should be involved in the development of the Schools at their capacity.
- The School activities, including classroom teaching, and all other school functioning should be proceed as per the annual plan of the schools prepared before the commencement of the session.
- Changes and new developments in the school including curriculum and other areas should be communicated to all the stakeholders of the school and timely training should be initiated for the concerned individuals, if required.
- Appropriate strategies should be adopted for schools so that the syllabus should be completed in time with practicing all necessary learning experiences for the students, transparency in students evaluation, organizing academic activities including games & sports, cultural activities, visit to the places of importance, involvement in various project based activities in and out of school etc.
- Pedagogic strategies should be adopted which are child friendly, child centered, activity based, emphasizing inquiry and problem based learning, linking children's experiences with the learning strategies in the classroom, practicing assessment strategies which enhance learning of the students, and broadly, to practice the constructive pedagogic approach in the teaching and learning process in Schools.

To clarify this point, we can take an example of the chapter, 'Democracy in the Contemporary World' (NCERT, 2014). In this chapter, two tales of democracy have been described, such as: one is the tale of leader of the Socialist Party of Chile, Salvador Allende, who led the popular unity coalition to victory in the presidential election of 1970, and further he killed shortly after giving his last speech. Another tale was on President Michelle Bachelet addressing her supporters after her victory in the presidential election in January 2006 in Chile. The text depicts two photographs of the events:



The then President of Chile, Salvador Allende, 11th September, 1973.
(Source: NCERT, 2014)



President of Chile, Michelle Bachelet, addressing her supporters after her victory in the parliamentary election in January, 2006.

(Source: NCERT, 2014)

After showing these photos with descriptions, students are asked the following questions which clarify the constructivist, and activity based pedagogy used in the classroom teaching.

| Activity | Specific Pedagogy Used |
|---|---|
| From these photographs, do you notice any difference between the election rally in Chile and India? | Encouraging students' thinking power imagination and expression |
| Locate the shape of Chile on the map. Which State in our Country has a shape similar to that of Chile? | Inquiry and activity based learning |
| Does the army have any legal right to arrest the defense minister or any citizen of a democratic Country? | Debate and discussion |

- Finally, to provide a definite space to the teachers for ensuring their professional development and also helping them get well equipped with the changing scenario of Secondary education.

Activity 3

1. *As a teacher in a secondary school, what is your experience regarding the method your School adopts for assuring quality in teaching learning process in your School? What necessary changes do you suggest in this regard?*

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2. *How does the leadership qualities of the Principal of the School help assure quality in Secondary Schools? Illustrate with suitable examples.*

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Check Your Progress 3

- Notes:** a) Write your answers in the space given below.
b) Compare your answers with those given at the end of the Unit.

5. Explain the quality indicators required with regard to maintaining suitable pedagogic practices in the classroom teaching?

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6. Describe the quality indicators practices in the Secondary Schools for assuring quality in student's evaluation?

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15.8 LET US SUM UP

In present times, you must have observed that a lot of changes have taken place in the school education in general and secondary education in particular. The National Curriculum Framework, 2005, has been implemented across the country for bringing necessary changes in school and teacher education as well. NCTE has also implemented its Curriculum Framework for Teacher Education, 2009, in connection with NCF, 2005, and has also implemented New Curricular guidelines based on NCTE Regulation, 2014. New developments in school as well as teacher education provide a base to the present Unit for discussing the curricular and quality assurance issues in Secondary Education.

Keeping in view the above, the Unit starts with a discussion on the relevance of present secondary education curriculum and the way it helps the students to construct their learning behavior. The Unit has also discussed the major pedagogies, subject, and other related concerns of the recommendations of NCF, 2005. The wider concern of secondary education curriculum, like how the curriculum helps for developing meta-cognitive skills of the students and creative capital has also been elaborately discussed in the Unit. Apart from this, the issues of addressing specific curricular knowledge in the secondary school curriculum like Peace, Work, Life Skills & Values, Art, Health, and Environmental conservation education have also been discussed with examples. The Unit is concluded with substantial discussion on the indicators and strategies adopted for assuring quality in secondary education.

15.9 REFERENCES AND SUGGESTED READINGS

CBSE, (2015).Secondary School Curriculum, 2015. New Delhi: Secondary Board of Secondary Education.

Florida, R. & Goodnight, J. (2005) Managing for Creativity, Harvard Business Review , 83, 7, 124-131.

McWilliam, E. & Dawson, S. (2008) Teaching for Creativity: towards sustainable and replicable pedagogical practice, Higher Education.

NCERT (2005).National Curriculum Framework (2005). New Delhi: National Council of Educational Research and Training.

NCERT (2006).Arts, Music, Dance and Theatre – Position Paper National Focus Group. New Delhi: National Council of Educational Research and Training.

NCERT (2006).Curriculum Syllabus and Textbooks – Position Paper National Focus Group. New Delhi: National Council of Educational Research and Training.

NCERT (2006).Heritage Craft – Position Paper National Focus Group. New Delhi: National Council of Educational Research and Training.

NCERT (2006).Systemic Reforms for Curriculum Change – Position Paper National Focus Group. New Delhi: National Council of Educational Research and Training.

NCERT (2006).Teaching of Social Sciences – Position Paper National Focus Group. New Delhi: National Council of Educational Research and Training.

NCERT, (2014).Democracy in the Contemporary World.Class-IX Social Science Text. NCERT: New Delhi.

NCERT (2007). Work Education – Position Paper National Focus Group. New Delhi: National Council of Educational Research and Training.

NCTE (2009).National Curriculum Framework for Teacher Education – Towards Preparing Professional and Humane Teachers. New Delhi: National Council for Teacher Education.

NCTE (2014).Teacher Education Regulations 2014, Norms and Standards, and New Curriculum Frameworks. New Delhi: National Council for Teacher Education.

Rittel, H.W.J. & Webber, M.M. (1973) Dilemmas in a General Theory of Planning, Policy Sciences Vol. 4, pp.155-169.

15.10 ANSWER TO CHECK YOUR PROGRESS

1. The section 15.4 will help you to answer the question. For more detail, you may refer NCF, 2005.
2. Use of constructivist pedagogical approaches of teaching and assessment of various subjects like Languages, Mathematics, Social Sciences, and Science. It emphasizes inquiry and problem based learning in Mathematics, Science, and Social Sciences; addressing multi lingual and difference in practice of School and Home Languages, etc. are the major concerns.
3. Core curriculum areas like Science, Social Science, Mathematics, and Languages get adequate place in School curriculum for teaching whereas the specific areas of knowledge like, art & craft, peace, health, life skills and value education do not get equal status in School curriculum. They are always neglected in the School time table.
4. Self-exercise.
5. Section 15.7.1 will help you to get the answer.
6. Self-exercise.