Chapter 4

Challenges &

Coping Skills for 21st Century
4. Introduction

The challenges of the 21st Century & expected Coping Skills for 21st Century have been presented in this chapter. This chapter presents analysis and interpretation of data collected to address the objective one, i.e.

*Objective 1: To explore the coping skills for 21st century expected in students of secondary level*

The objective was studied by analyzing the data collected through observations, interviews, focused group discussion and experiencing the field. The expected coping skills for 21st century were identified through analyzing the challenges faced by the students, interacting with experts of the field of education and literature reviewed. The detailed procedure is stated below

4.1. Identification of Challenges faced by the Students

To explore the expected coping skills for 21st century, it is essential to identify the challenges faced by the students. The challenges were identified through interactions with students, teachers and educationalists of the field. The detailed procedure is stated in chapter three of research methodology.

4.1.1. Challenges faced by students

The identified challenges were classified into three categories

1. **To be Appreciated, Accepted & Recognized**

   To be appreciated, accepted & recognized is the prominent challenge the adolescents are facing. The adolescents want to be appreciated in peers, family and society. They try to appeal peers through being a style icon. Some adolescents imitate and tag along with the allures in the rummage of acceptance and setting identity among the peers. Such a blind move leads them to try everything without estimating its consequence. They also want to be appreciated by the teachers and parents. If the teachers fail in doing so, either the students try to catch attention or withdrawn their self from
classroom activities. If they are not appreciated and accepted at home, it results into distances with the parents causing social alienation.

If they are appreciated, accepted and recognized in family and at school then they develop well.

**Skills required for coping up with this Challenge**

- **Reflective Skills & Critical Thinking Skills:** There is a need to develop reflective skills, so that an adolescent is in a position to identify own strengths & weakness. Further, critical thinking skill is required that makes the adolescent able to analyze, evaluate, judge the suitability, appreciate and implement the new perspective for own purpose. Reflective skills further demands skills, such as, acceptance and adaptations.

- **Communication Skills and Collaborative Skills:** In the presence of communication skills and collaborative skills the adolescent will find expression of their feelings & ideas and perspectives. Further they will converse optimally. Due to collaborative skills adolescent will be able to work in socially heterogeneous groups by sustaining own individuality. The collaborative skills further demand social skills, such as, acceptance, adaptation, adjustment and social responsibility.

2. **Energy of Students is not being Channelized and Student Unrest**

   In the conventional classroom environment and conservative teaching, the energy of adolescent is not being channelized which causes disciplinary issues. The indiscipline is in form of undue domination in teaching process, passing comments, lack of adjustment, anger and disrespect for the teachers. Some time it is also observed that the student tries to superimpose their knowledge on teacher and other peers. At times they neglect teaching and alienate from classes.

   **Skills required for coping up with this Challenge**

   - **Skills of Adjustment:** Presence of adjustment skills will raise tolerance level of the students. Hence, they could try to understand the environment and establish harmonious relationship with the
environmental conditions. Further, it helps in establishing mutual suitability.

- **Critical thinking Skills**: Presence of this skill will make the individual able to sense for holding, suspending or releasing the emotion and sentiments.

- **Social Relationship Skills**: This skill will make them polite and empathetic. They will have socially acceptable behaviour.

3. **Suffering from Superiority or Inferiority Complex**

At times the students are not in a position to understand their selves. Sometimes unequal opportunities and prejudiced behaviour with students, undermining and pampering of child cause many a problems.

- **Skills of Self Direction** should be developed amongst the students. They should know their strengths and weaknesses.

- They should understand that every entity has its own place. No one is superior or inferior.

4. **Establishing Rapport with Parents**

Rapport building between parents and their children is quite challenging. Due to lack of rapport children do not share problems and dilemmas they encounter in the adolescence age with their parents. Reasons are, they are not getting productive time to share their states with the working parents. They do not share their problems with parents as the parents are very strict. At times they underestimate their parents due to their low educational qualification and feel hesitation to share dilemmas related to hormonal changes. Sometimes parents hesitate to talk related to adolescent’s hormonal changes. Further, they also feel that their wards are too small to comprehend such a talk, even though the child tries to share such things, parents either scold them or are indifferent. Some of the adolescents do not get congenial culture at home.

The adolescents try to find solutions of their problems and dilemmas from friends or internet or any other means which might not guide them in proper direction. It results into malpractices. The parents should spare time for their wards.
Skills required for coping up with this Challenge

➔ This challenge requires responsibility & respect on the part of the family members.

➔ Further, Info-savvy skills are required. If the adolescents know various source of information and are able to identify the relevant information, it can help them a lot.

5. Lack of Bonding between Students & Teachers

Bonding among students & teachers is essential for healthy ambience. Lack of bonding can make distances between the students and teacher. Establishing bonds with teachers is quite challenging. It demands balanced sharing and caring from both the sides.

The bonds could be strengthened through democratic classroom processes that provide equal opportunities to every student in classroom participation. Authoritarian classroom ambiance, favourism, bias and prejudices could weaken the bonds amongst teachers and students. Further, relevance of content methods & techniques of content transaction also affect the bonds a great deal. Sometime frequently changing teachers in school may also affect student teacher relationship.

Skills required for coping up with this Challenge

➔ This challenge also requires mutual respect, cooperation and responsibility on the part of the adolescents, teachers and school authority.

6. Finding leisure time out of the tight school schedule and then private tuitions

Students of Secondary Schools are so occupied in developing their cognitive faculties and getting grade in the Board Exams that they hardly get constructive leisure time where they can play physical games with their peers, converse with parents, devote time for hobbies & works of interest and participate with community. The free time they get, is being spent in watching TV or playing Computer Games or accessing social media & mobile phones. They rarely utilize leisure time for self development. Further, parents urge to make a child super-kid also kills students’ leisure time.
Skills required for coping up with this Challenge

- **Reflective Skills, Creative Thinking Skills and Self Direction Skills:** Presence of reflective skills will lead an individual to identify their needs, hobbies and talents. Combination of self directional skills and creative skills may lead to the innovative ideas.

- **Management Skills:** This skill helps an individual to set realistic goals. Everyone should be good at Time-Space-Personnel-Material Management. We should learn how to control & manipulate the variables.

7. Learning school subjects, such as, Social-Science, Mathematics, and Science

Students find subjects like Science, Social-Science and Mathematics tough. Teaching of Science & Mathematics gives undue emphasis on theoretical aspects without considering its applicability & practicality. Further, Teaching of Social-science in general and History in particular gives over emphasis on remembering dates and places without knowing its significance. Civics and Economics are being learned without live examples. The adolescents are learning such subjects for examinations sake.

Skills required for coping up with this Challenge

- **Study Skills:** Learning of school subjects like mathematics and science require full concentration. Analytical skills and reasoning skills are also required.

- **Learning skills:** Learning skills refers to learning to know, learning to be, learning to retain learning and learning to learn i.e. construct own meaning, establish relationships among various variables involved and set connections with observations, perceptions and experiences.

- **Observations:** Science and geography learning requires connection of the content with the world around. To explore the world around requires minute and detailed observations.

- **Communication Skills:** Social science learning in general and civic learning in particular require active dialogue with the society.
Further, teacher also plays an important role. The learning process should provide exposure of the world around. Students participate optimally in an active learning environment.

8. Language Learning

Language is rarely used as creative way of expression and means of communication. It has always been treated as easy scholastic subject, even though grammatical mistakes impede the learning significantly.

Skills required for coping up with this Challenge

- **Study Skills & Communication Skills**: Language learning requires Listening, Speaking, Reading and Writing skills. The language should be enriched through active dialogue with the society and exploring the various texts.

- Further, it is added responsibility of a teacher to give due importance to the language learning. The teacher should provide rich environment for language learning.

9. Absence of Creativity Culture

Over emphasis on the end-product rather than considering the inputs and processes is destroying the creativity culture. They become prone to think and act unidirectional. They rarely think of multiple dimensions of their experiences. Teaching-learning process of scholastic subjects provides inadequate means to develop lateral thinking and creative abilities of the learners. There ought to be due focus on the development of creative faculties in our educational institutions.

Skills required for coping up with this Challenge

- **Study Skills & Creative thinking skills**: Creativity requires multiple, multidimensional and multi-angular viewpoints. These could be developed only with exploring the field of interest. These skills are supported with skills of acceptance, adaptability, reading skills, info-savvy skills and communication skills.

- Further, role of teacher is to provide congenial learning environment to nurture the skills.
10. Wholistic Adjustment with the changing educational needs and social needs

Keeping pace with the changing needs demands higher level of social, emotional and health adjustment at home, school and society. Students are found to have lack of consistency in their wholistic adjustment that causes mood swing. They respond to same stimuli differently every time.

Reasons are students, their parents and even teachers & school may not be able to mark educational and societal changes and changing needs. Teachers and schools also fail to orient them toward the changes. As a result, the unequipped students face difficulties in keeping pace with the changes.

Skills required for coping up with this Challenge

⇒ Acceptance, Adaptation and Adjustment: There is a need to keep pace with and respond to the change. The initial step is to mark the change and accept it. The subsequent steps could be adaptation through thorough evaluation and adjustment. These skills should be coupled with thinking skills, self-directional skills and info-savvy skills.

11. Pressure for High Achievement

These days there is competition in every field, be it for vertical mobility or suitable placement in the field of interest. For that high academic achievement is required. The students are very often under stress for high academic achievement.

Skills required for coping up with this Challenge

⇒ The contents are un-wielding and aspirations are infinite. The focus should be on learning and wholistic development rather than merely high achievement. Wholistic development skills should be developed.

12. Gaps between Parental Expectation, Children Profile and Career Choice

Very often it has been observed that there are wide gaps between what the child likes to pursue and what the parents expect. Having entered into a non-compatible field, the learners lose their interest. It results into wastage of prime time of life.
Skills required for coping up with this Challenge

- **Self-directional skills, Info-savvy and Communication skills:** The student must be able to identify own potential and set goals. It is also essential to communicate their goals to parents. Info-savvy skill will make an individual to explore various career opportunities as per their interest and potential.

- Further, parents also have added responsibility to understand and respect the potential of their wards.

13. **Underestimation of Abilities of Children**

It has been observed that the strengths and weaknesses of the children are not properly estimated by them, by teachers and parents. Under estimation of their capabilities results into their deprivation of the career that they like to pursue.

Skills required for coping up with this Challenge

- It demands development of rapport between students and their parents, healthy and meaningful communication, respecting and appreciating feelings of children and guidance & counseling facilities in Educational Organizations.

14. **Role of Social Networking in the digital communication age**

We have not yet been in a position to keep pace with the technological evolution. Rather than social networking there is an alienation of the individual and institution. There is a need to realize social networking optimally.

Skills required for coping up with this Challenge

- There is a need to develop media literacy, info-savvy skills and communication skills. Networking tools, such as, moodle, classroom 2.0, C-Maps, Weblogs and Mahara should be thoroughly introduced.

15. **Value Dilemma among students**

With the changing culture and globalization there are value conflicts between the primitive values & the global values, ideal values & practiced values with respect to various facets of life. It has resulted into degeneration of values. There are generation gaps with respect to values. At times the elderly fail to
appreciate the new, whereas, the present generation fails to appreciate the old. Attempts should be made for amalgamation of all the desired values.

Skills required for coping up with this Challenge

⇒ Reflective Skills and Self-directional Skills: There is a need to develop reflective skills. Further, critical thinking skill should be developed to equip the adolescent to analyze, evaluate, judge the suitability, appreciate and adapt new values. They will adapt the best possible value system for them. Reflective skills further demand skills, such as, acceptance and adaptations.

16. Devoid of the Beauty of Nature

To be in nature, to experience nature, to feel nature is quite challenging for the students. The cognitive occupancy is to the extent that rather finding and getting natural things from nature surrounding they are finding it in stationary shops and electronic media. They are more with the virtual world than the real physical world. Further, with the obsession of possession the present day society has started treating the nature as resource rather than source; as a result there is depletion of nature. So, the nature is becoming hostile progressively. We ought to try our level best to be nature friendly.

Skills required for coping up with this Challenge

⇒ Skills of Acceptance and Observation: Sensitivity to the nature is the first step to accept and realize the nature. We should treat the nature as source and try our level best to sustain and adore the nature. There should be no tendency to exploit the nature.

17. Child Rights not fully observed

Despite the UN Convention on the Rights of Children (CRC) we have not yet integrated the CRC in our education system.

Skills required for coping up with this Challenge

⇒ The rights of children ought to be integrated, observed and respected.

4.2. Definitions of Cope Up Skills for 21st Century

To cope up with the above identified challenges, it is observed that there is a need to focus upon skills, such as, adaptability & adjustment, study skills, learning skills,
info-savvy skills, creative & critical thinking skills, reflective skills & self-directional skills, communication & collaboration, social responsibility and ICT & social networking skills. The identified skills are classified and categorized into three major concerns of DeSeCo (2001), i.e. Act Autonomously, Function in Socially Heterogeneous Groups and Using Tools Interactively. The following is description of the expected level of Coping Skills for 21st century

A. Act Autonomously

21st century demands sound and balanced development of individual, through knowledge of the cultural, social, political, economical, scientific & technological milieus of an individual. An individual should be able to explore the environment by studying these, through exposure of the interrelated and interconnected world.

Acting autonomously requires awareness of one’s environment, of social dynamics and of the roles one plays and wants to play. It requires individuals to be empowered to manage their lives in meaningful and responsible ways by exercising control over their living and working conditions. Individuals must act autonomously in order to participate effectively in the development of society and to function well in different spheres of life including the workplace, family life and social life. This is because they need to develop independently an identity and to make choices, rather than just follow the crowd/masses.

A.1. Study Skills

21st century demands wholistic knowledge of the system in which they exist, i.e. knowledge of cultural, social, political, economical, scientific & technological milieus and its interaction with the individual. Study skills will make an individual able to explore the interconnected and interrelated milieus and to understand the pattern by gathering relevant information and make sense of the information by reading various aspects. It is also expected that an individual can reproduce such knowledge for future reference. Further, such milieus should be interwoven within the core subjects. Study skills may be comprised of Reading Skills, Writing Skills, Info-savvy Skills, Information processing skills. The study skills will make an individual study the environmental factors and its interaction with the individual.
a. **Reading skills:** Reading skills refer to the ability of an individual to draw out meaning of what s/he reads. Further these skills also refer to the ability of an individual in identifying the essence of the text.

b. **Writing Skills:** Writing skills refer to the ability of an individual to reproduce the knowledge, observations, ideas and experiences as intelligible through creative expressions in various forms & types of writing. Further, writing skills also refers to the Creative Writing, Critical/Evaluative Writing, Formal Writing and Communicative Writing.

c. **Reasoning Skills:** Reasoning skills refers to the abilities to establish cause & affect relationships.

d. **Info-savvy Skills:** Info-savvy skills refer to a knack of an individual to locate, collect, analyze, apply, integrate, communicate and assess relevant information from various sources. It also refers to process the information and present it intelligible form to generate knowledge base.

**A.2. Thinking Skills**

Thinking skill refers to a novel and analytical ways of seeing and doing things. Thinking skills are essential to have variety of novel, innovative and original ideas and communicating the same effectively. Further, thinking skills are required to elaborate, refine, analyze and evaluate these ideas. Thinking skills will also help an individual to reason out and reflect upon the ideas, believes, evidences and viewpoints that can be used to solve problems and make decision/judgment. Thinking skills at its ultimate are used to produce a universalistic as well as collective vision of the future for the development. The process of envisioning the future should be wholistic and interwoven within the milieus of an individual. Thinking skills will make an individual able to explore interwoven milieus by studying various aspects of development and its interaction as a whole with self and envisioning the future. The thinking skills comprise of creative thinking skills, critical thinking skills, system thinking skills and strategic thinking skills.
a. **Creative Thinking Skills:** This skill refers to ability of an individual to do the tasks differently or to have originality in action in social/work setting. The skill also refers to the incubation of innovative/original ideas.

b. **Critical Thinking Skills:** This skill refers to ability of an individual to analyze, synthesize and study the interactions of various entities.

c. **System Thinking Skills:** This skill refers to the ability of an individual to sense a system as a mutual functioning of its parts and vise-a-versa. This skill also refers to defining symbiosis of various entities.

d. **Strategic Thinking Skills:** This skill refers to knack of an individual in the gradual and deliberate planning toward the specific aim.

**A.3. Skill of Problem Solving**

The problem solving skills refers to how effectively and preciously an individual can take decision and solve life problems. The problem solving skills is step by step process to solve problems with conventional and non-conventional ways. Various viewpoints are clarified to answer the question though thorough analysis. At the end of analysis, one solution is selected, implemented and consolidated out of a set of probable solutions. The problem solving skills are highly assisted by study skills and thinking skills at every step. The problem solving skill has the following steps

- Identifying the problem
- Analyzing the Problem
- Find alternative solutions to the Problem
- Selecting the best suitable solution of the Problem
- Implementing the Selected Solution
- Consolidation

**A.4. Reflective Skills**

The reflective skills are the skills, which are used to evaluate, refine and reflect upon the thinking and actions through applying creative abilities and critical stance. It is not just about how individuals think, but also about how they construct experience more generally, including their thoughts, feelings and social relations. That will be helpful to identify strengths, weaknesses,
opportunities and threats. Further it is also essential to evaluate the process of envisioning the future i.e. our vision is not a selfish one and it is for the universalistic and collective development of society and their members.

A.5. Research Skills

Research skills refer an ability of an individual in systematic investigation by studying materials, exploring the sources in order to establish facts and reach to new conclusions. Research skills demands detailed observation, identifying traits involved, defining the relationships, establishing connections, predicting the interactions, formulating hypothesis, quick reflection, asking significant questions, communication, information processing and neutral inferences. Research skills also demands skill of bracketing i.e. no influence of individual’s perception in inferences or on participants.

Research skills comprises creative thinking skills, critical thinking skills, reflective skills, problem solving things, info-savvy skills, self-management skills and social responsibility skills.

The following are steps involved in the process of research

- Identifying Problem
- Formulating Problem
- Designing Research
  - Objectives
  - Hypothesis
  - Research Method to be employed
  - Population
  - Sample
  - Tools & Techniques
  - Data Collection
  - Data Analysis & Interpretation
- Coming to Inference

A.6. Learning Skills

Learning skills refers to proficiency of an individual in constructing and acquiring knowledge or skills through experiences or by studying. Further, it
is essential to establish connections for unified knowledge. 21st century demands learning for acquisition of knowledge and skills. It also emphasizes on learning to know, learning to be, learning to do, learning to learn and learning to be together. The skills also demands retention of learning and transfer of learning from one context to another. Learning skills demands the following skills

- Study Skills
- Thinking Skills
- Reflective Skills
- Problem Solving Skills
- Research skills
- Constructivist Skills
- Connectivist Skills
- Skills for Retaining Learning

A.7. Self Directional Skills

The Self directional skills refer to successive successful attempts to be focused or disciplined actions to achieve the life plans and realizing the vision of the self. The skills are essential for sound development of individual. These skills are helpful to manage self activities in the 21st century. Self directional skill is to develop self and act autonomously. Discipline, Determination and Dedication are foremost requisite qualities of an individual for self development. Along with these qualities, accountability, taking initiation and risk taking are the qualities that will lead an individual to function in socially heterogeneous groups. Thus, having the said qualities and self management skills will make an individual proactive i.e. an individual will not only respond to the situations but also be prepared for anticipatory conditions. Self directional skills could be stated as follow

- Dedication (devote/dedicate the self to the task undertaken)
- Take Initiative
- Skills of Decision Making
- Self Management
- Self Monitoring
- Leading
- Accountability (be answerable to the responsibility you are holding)
- Skills of resilience (Come back to normal within few time interval)
- Be Proactive

B. Function in Socially Heterogeneous Group

Throughout their lives human beings are dependent on ties to others, for material and psychological survival, as well as in relation to social identity. As societies become in some ways more fragmented and also more diverse, it becomes important to manage interpersonal relationships well both for the benefit of individuals and to build new forms of co-operation (DeSeCo, 2001).

B.1. Skill of Acceptance

Skill of Acceptance refers to how efficiently an individual can respond to the change. Skill of Acceptance is pre-requisite skill to function in socially heterogeneous groups. Acceptance skill is a process of giving consent to receive or undertake new ideas, belief, culture and people of diverse group and to allow or to tolerate the existence or occurrences. It is also a process of submitting self to the new people, belief, ideas and culture believed to be valid. Steps for skill of acceptance are as follow

- Sensitivity
- Awareness
- Openness
- Valuing
- Judging/selecting
- Responding

B.2. Skills of Adaptability

Skill of adaptability refers to how well an individual can make him fit to the diverse conditions. Skill of adaptability is a process to make our self suitable/familiar/fit to diverse conditions, such as, diversified culture, people, ideas, belief or pre-existed/occurred conditions, and emerging conditions. Skill of adaptability also implies to adopt the things, situations, ideas, belief, culture that are suitable for self development without altering
own culture, belief and value system. Steps for skill of acceptance are as follow

- Acceptance
- Respecting
- Selecting
- Trying out

B.3. Skills of Adjustment

Skill of adjustment refers to how well/efficiently an individual can establish harmonious relationship with self and diverse conditions and reflect to the change. Adjustment is a process of establishing harmony with self, people, culture and diverse conditions, wherein, an individual will slightly alter to the certain level of agreement in order to establish harmony. Further, skill of adjustment also refers to establishing mutual suitability and become familiar to each other, hence, functioning could be tuned. This skill is accomplished by skills of acceptance and adaptability. This is the highest level of skills an individual have in responding the diverse conditions. Steps for the skill of adjustment are as follow

- Acceptance
- Adaptation
- Understanding
- Harmony with self and diverse conditions

B.4. Skills of Social Responsibility

Skills of social responsibility refer to the fidelity of an individual in sensing and accomplish the duty. The skill also refers to the degree of trustworthiness in social enterprise. Further, the skill refers to how effectively and reliably an individual, as a member of society, can lead society to the envisioned future’s unified society by sustaining individuality. This skill will help an individual in striking a balance between the economy and the ecosystems, the primitive and emerging modern values, collective and universalistic development, unified culture and local culture, socio-centric and socially alienation. The skills of social responsibility demands following skills
- Skills of adjustment & Mutual respect
- Knowledge of Needs of the Society
- Produce universalistic as well as collective vision
- Initiation
- Execute plans and manage the resources
- Skills of Decision Making for social welfare
- Demonstrating balanced & Ethical Behavior

B.5. Human Relationship Skills

Social relationship is essential to function in socially heterogeneous group. Skill of social relationship refers to how well an individual can connect to the heterogeneous groups in diverse conditions. While functioning in any diverse group, it is required to know the group members in terms of their social structure, their social pattern and norms. Social relationship demands basic human qualities, such as, politeness, decency, decorum, discipline, respect and empathy. Further, skills of acceptance, adaptability and skill of adjustment are pre-requisite skills for the Skills of social relationship. The social relationship could be more harmonious & nurtured through meaningful & momentous sharing and healthy competitions.

- Politeness
- Decency & Decorum
- Discipline
- Acceptance and Respect
- Adaptability
- Knowledge of peers in terms of their social pattern, structure and norms
- Empathy
- Sharing
- Adjustment
- Peace and Harmony

B.6. Skills of Synergy

Skill of synergy is the ultimate skill in functioning in socially heterogeneous group. The skill refers to effective mutual interaction or cooperation of
group members to produce a collective/wholistic effect that is greater than the sum of individual effect. This skill demands responsible action in social arena and skills of social relationship at the core. Further, skill to synergize is supported by skills of acceptance, adaptation, adjustment, interrelation and interdependence.

- Acceptance
- Adaptation
- Adjustment
- Empathy/Fellow Feeling
- Skills of human relationship
- Knowledge of strengths and weaknesses of self & peers
- Skills of social responsibility
- Management Skills

C. Use Tools Interactively

Individuals encounter the world through cognitive, socio-cultural (communication, collaboration, social networking tools and human resources) and physical tools (such as physical resources, communication channels & media and ICT). These encounters, in turn, shape how they make sense of and become competent in the world, deal with transformation and change, and respond to long-term challenges. Using tools interactively opens up new possibilities in the way individuals perceive and relate to the world (DeSeCo, 2001). Further, DeSeCo (2001) emphasized that using tools interactively requires understanding of use to accomplish the goals.

C.1. Communication Skills

The skills of communications refer to effective, precise and contextual conversations among individuals that include exchanging information, ideas, experiences & observations. Further, it extends to convening the feelings, concerns and intensions verbally or nonverbally and oral or written. The skills also refer to addressing the mass. The skills of communication demand understanding of the culture, context and the target group. The skill contains many skills, these skills are as follow
a. Listening/Paying Attention
   - Concentration and Energy
   - Connection with Speaker
   - Desire & Willingness to try and see from another perspective
   - Suspending Judgment/Holding and Evaluation

b. Decoding Message
   - Understand Codes (Non-Verbal message, words and feelings)
   - Understand the intensions (Attacking/Moralizing/Preaching/Advise/Order/Power/Gestures)

c. Encoding Message
   - Language
   - Social Context
   - Symbols
   - Structure of Message
   - Feelings

d. Articulating Message
   - Paraphrasing
   - Reflecting Feelings
   - Summarizing
   - Questioning
   - Use of appropriate media

e. Reflecting/Responding/Feedback

f. Choosing Medium

C.2. Collaborative Skills

Collaborative skills refers to ability to work effectively and respectfully with diverse team (using social context, codes, conducts and symbols), exercising flexibility and willingness to be helpful in making necessary compromises to accomplish a common goal, assuming shared responsibility for collaborative work and value the individual contributions. The skill also refers to communicating the tasks, roles & responsibility, feelings and intensions through proper modes and media. The collaboration also demands use of various tools of communications, such as ICT and social-networking.
C.3. Skills of ICT & Social Networking

ICT & Social Networking skills refer to ability of accessing credible media, information sources and connect well with the world outside. Followings are the sub skills required for ICT and Social Networking.

a. Info-savvy skills
b. Digital Age Skills
c. Media Literacy
d. Social Networking Skills
e. Techno-savvy Skills

C.4. Management Skills (Time-Space-Personnel-Material)

Management skills are step by step processes to manage time-space, personnel and material. Each step of management is assisted by study skills, thinking skills, problem solving skills, reflective skills, research skills, learning skills, self-directional skills and communication skills. Management skills effectively demonstrated when, time-space, personnel and material management are synchronized. The management skills follow the following steps

- Know strength and weaknesses
- Set Priorities: Priority in First Out/First In, First Out
- Setting Goals
- Estimating Time, Personnel and Resources Required
- Plan out Strategies
- Implement/Tryout the Strategy
- Monitoring
- Mentoring

4.3. Outline of the Challenges & Coping Skills for 21st Century

The adolescents are facing challenges are as follow

- To be appreciated, accepted & recognized and to meet this challenge they require reflective skills, critical thinking skills, social responsibility skills and communication & collaboration skills.
- Energy of students is not being channelized and student unrest: to meet this challenge skill of adjustment, critical thinking skills and social relationship skills are required.

- Suffering from superiority or inferiority complex: to meet this challenge self-directional skills is required.

- Establishing Rapport with Parents: This challenge requires responsibility & respect on the part of the family members. Further, Info-savvy skills are required.

- Lack of Bonding between Students & Teachers: This challenge also requires mutual respect, cooperation and responsibility on the part of the adolescents, teachers and school authority.

- Finding leisure time out of the tight school schedule and then private tuitions: to meet this challenge reflective skills, creative thinking skills and self direction skills, management skills are required.

- Learning school subjects, such as, Social-Science, Mathematics, and Science: to meet his challenge study skills, learning skills, observations skill and communication skills are required. Further, providing learning environment is aided responsibility of teacher and school.

- Language learning: to meet this challenge study skills and communication skills and required. Further, proving environment is added responsibility on the part of teacher.

- Absence of creativity culture: To meet this challenge study skills & creative thinking skills. Further, role of teacher is to provide congenial learning environment to nurture the skills.

- Wholistic adjustment with the changing educational needs and social needs: to meet this challenge skill of acceptance, adaptation and adjustment are essential.

- Pressure for high achievement: to meet this challenge skill of study and learning are required. Further, the focus should be on wholistic development.

- Gaps between parental expectation, children profile and career choice: to meet this challenge self-directional skills, info-savvy skills and communication
skill. Further, parents also have aided responsibility to understand and respect the potential of their wards.

- Underestimation of abilities of children: It demands development of rapport between students and their parents, healthy and meaningful communication, respecting and appreciating feelings of children and guidance & counseling facilities in Educational Organizations.

- Role of social networking in the digital communication age: There is a need to develop media literacy, info-savvy skills and communication skills. Further, networking tools, such as, moodle, classroom 2.0, C-Maps, Weblogs and Mahara should be thoroughly introduced.

- Value dilemma among students: to meet this challenge reflective skills and self-directional Skills are needed.

- Devoid of the beauty of nature: Skills of acceptance (sensitivity) and observation is essential to realize the nature.

- Child rights not fully observed: The rights of children ought to be integrated, observed and respected.

There is felt a need of synchronized efforts to cope up skills, that enables adolescents in identifying and addressing the needs in contemporary society as well as in future’s diverse and advanced society of 21st century. The requisite skills are classified in three major aspects, i.e. Skills required for Act Autonomously, function in socially heterogeneous groups and use tools interactively.

A. Act Autonomously

A.1. Study Skills
   a. Reading
   b. Writing
   c. Reasoning
   d. Info-savvy Skills

A.2. Thinking Skills
   a. Creative Thinking
   b. Critical Thinking
   c. System Thinking
   d. Strategic Thinking
A.3. Skill of Problem Solving
A.4. Reflective Skills
A.5. Research Skills
A.6. Learning Skills  
  a. Skills of Construction  
  b. Skills of Connections  
  c. Skills for Retaining Learning
A.7. Self Directional Skills

B. Function in Socially Heterogeneous Group
   B.1. Skill of Acceptance
   B.2. Skill of Adaptability
   B.3. Skills of Adjustment
   B.4. Skills of Social Responsibility
   B.5. Human Relationship Skills
   B.6. Skill of Synergy

C. Use Tools Interactively
   C.1. Communication Skills
   C.2. Collaborative Skills
   C.3. Skills of ICT & Social Networking
   C.4. Management Skills (Time-Space-Personnel-Material)