



Centre for Assessment Evaluation & Research

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A Roadmap to Skills of the 21st Century - Part 2 (LIFE SKILLS)

The second part of the bulletin, Series-1, presents commonalities of competencies and life skills defined under various International organisations such as World Health Organisation (WHO)¹, United Nations International Children's Emergency Fund² (UNICEF), Association of Southeast Asian Nations³ (ASEAN), Asia Pacific Economic Cooperation⁴ (APEC) and various educational frameworks of Asian countries. It also examines the work done in India on 21st century skills that are collectively referred as Co-Scholastic and Life Skills.

This Bulletin speaks about those organisations and their frameworks for 21st century skills, which they generally believe, are indispensable for the development and progress of nations. Many of these International organisations and countries around the world have taken the initiative to develop these skills and competencies through the teaching of core subjects in the curriculum.

In India, the skills of 21st century are defined as Co-Scholastics Skills and Life Skills, which encourage teaching of higher order thinking skills through the core subjects.

Introduction

The rapid rate of accumulation of the latest knowledge and the fast pace of technological changes across the globe require regular updating and upgrading of knowledge skills. In an increasingly diverse society that embraces new technologies and inventions every day, students need to be well prepared with skills and competencies to deal with rapidly changing learning environments. Schools, vocational and professional institutions play a pivotal role in developing cognitive skills and values in students. They are charged with building the capacity of students to apply the thinking and reasoning skills and competencies in challenging situations.

Several organisations in developed countries like the United States, the United Kingdom, Australia etc., have identified sets of applied skills⁵, which are required worldwide to perform well in the workplaces of the future. These applied skills are also known by the name generic skills in some countries. Now, the developing countries of Asia and Pacific region are also in the process of defining sets of applied skills for the 21st century which are contextualised to the particular country.

Some countries within the Asian Education system, which are in a nascent stage of reforms, still focus on preparing students for the competitive world with a good grasp of content knowledge. This enables students to score high in science and mathematics but shows students lacking in applying the same knowledge to the real world situations. Countries like Singapore, China and South Korea have managed to link the two in such a way that their students are not only good at the content, but are also very good at

applying this knowledge to higher order skills such as problem solving, critical thinking and creative thinking. The western world tends to focus more on preparing students to apply knowledge to real life situations and to utilise higher order thinking skills.

Association of Southeast Asian Nations, (ASEAN)

The Association of Southeast Asian Nations (ASEAN⁶) shares a common vision for an ASEAN community, where education is the core to development and contributes to the enhancement of ASEAN competitiveness. According to the ASEAN Charter, a closer cooperation in education, inter-cultural exchange programs, language skills, professional skills, human resource development etc. will strengthen the ASEAN Community.

ASEAN nations emphasise incorporating and integrating 21st century skills and competencies into existing subjects taught at lower secondary school through compulsory education. All participating ASEAN countries include at least two languages, mathematics, science, social science and physical education in their academic program. The skills that have been given importance in all South East Asian countries are defined in Table -1.

Asia Pacific Economic Cooperation, (APEC)

The APEC 2008 Educational Reforms Symposium held in China, identified and emphasised four overarching competencies necessary for students to succeed in their 21st century careers.

1. Lifelong learning
2. Problem solving

¹http://en.wikipedia.org/wiki/World_Health_Organization;

²<http://en.wikipedia.org/wiki/UNICEF>; <http://www.unicef.org/>

³ASEAN countries include Brunei, Cambodia, Indonesia, Lao PDR, Malaysia, ⁴Myanmar, the Philippines, Singapore, Thailand, and Vietnam. ; <http://en.wikipedia.org/wiki/>

Association of Southeast Asian Nations

⁶http://hrd.apec.org/index.php/APEC_HRDWG_Wiki_Table_of_Contents

⁵Refer Bulletin-11: A Roadmap to Skills of 21st Century(Part-1)

⁶<http://www.asean.org/>

3. Self-management
4. Team work

The overarching four competencies identified above are included as outcomes in the core subject areas, which include mathematics, sciences, languages and ICT tools, etc. To achieve the competencies, the APEC education system emphasises quality teachers in the classrooms for developing skills, attitude and knowledge in students. APEC identifies abstract thinking, problem solving, and decision making as essential competencies within the mathematics curriculum.

The National Curriculum Framework⁷ (2005) and Skills

A 21st century education in India has undergone a significant change over the last one and a half decades. It emphasises that education must prepare students with the competencies to rationally understand and manage their lives in society, work culture and the environment. The National Curriculum Framework NCF 2005 is one of four National Curriculum Frameworks published by the National Council of Educational Research and Training NCERT in India. The document provides the framework for constructing syllabi⁸, textbooks and teaching practices within the school education programmes in India.

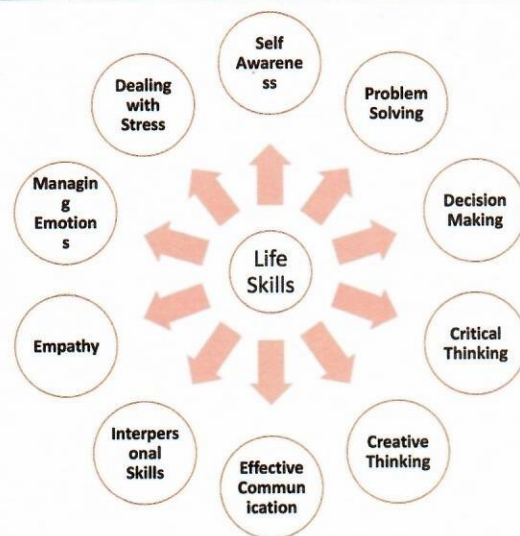
Co-Scholastics Skills in India

The term Co-Scholastics is an over-arching term to define skills of the 21st century in the Indian context. Co-Scholastic Skills include life skills, work experience, attitude and values, co-scholastic activities and health and physical education. The teaching of co-scholastics skills in addition to subject specific areas or scholastic skills prepares students for life by providing them with the most essential life skills/survival skills as described under various frameworks. The aim is to prepare students to communicate effectively across a range social and technical divides and must be able to respect social, cultural and religious diversity within the country and around the world. Life skills, work education, visual and performing arts, value education, co-curricular activities, sports, National cadets Corps (NCC), National Service Scheme (NSS) all are embraced under the co-scholastic areas in the curriculum.

Life Skills in Co-Scholastics

The initiative of introducing life skills education is a major step by most of the countries around the world. "Life Skills as defined by the World Health Organisation (WHO) are "the abilities for adaptive and positive behaviour that enable the individuals to deal effectively with the demands and challenges of everyday life". Life skills education is to develop in students the psychological skills⁹.

The CBSE defines life skills as the abilities that will help students be successful in living a productive life as defined by UNESCO, WHO and



UNICEF. Life skills help students improve their personal behaviour, attitudes and social qualities.

Life skills, according to UNICEF, UNESCO and WHO, are essential tools, which can help students to analyse own strength and weaknesses and make good knowledge and judgement about themselves. These skills help them navigate through the problems of day to day life and lead them to self-awareness and mental health by translating knowledge, attitudes and values into actual abilities.

"Life skills' are defined as psychosocial abilities for adaptive and positive behaviour that enable individuals to deal effectively with the demands and challenges of everyday life. They are loosely grouped into three broad categories of skills: cognitive skills for analysing and using information, personal skills for developing personal agency and managing oneself, and inter-personal skills for communicating and interacting effectively with others"

(Definition of Life skills from the factsheet of UNICEF,2012)

As stated above, there are many ways to conceptualise these skills within the Co-Scholastic area. CBSE defines these ten main components of life skills under three broad categories -thinking, social and emotional skills across all subjects. One skill may be effectively used in different situations. There is an overlapping of skills under these broad categories; for example, empathy is an emotional as well as social skill. Empathy is the ability to understand other person's emotions and feelings. Empathising with others indicates interpersonal skills;

The World Health Organisation (WHO) categorizes life skills into the following three components:

a) **Thinking Skills** are cognitive skills that include critical thinking, creative thinking, problem solving, decision-making and self-awareness skills. The skills help students develop high order thinking skills to solve problems, and settle complex issues

⁷www.ncert.nic.in/rightside/links/pdf/framework/english/nf2005.pdf; [en.wikipedia.org/wiki/National_Curriculum_Framework_\(NCF_2005\)](http://en.wikipedia.org/wiki/National_Curriculum_Framework_(NCF_2005))

⁸http://www.ncert.nic.in/Syllabus/Syllabus_logo.htm

⁹Psychological skills can be defined as personal, interpersonal, social, emotional, cognitive and affective domains.

by gathering and analysing information. Creative thinking contributes to both decision-making and problem solving by enabling students to identify and explore the available alternatives. Similarly, problem solving and decision making enables them to deal constructively with the unresolved issues, without causing anxiety, mental or physical stress.

b) **Social Skills** comprise an effective communication (verbal and non-verbal); interpersonal relationships, teamwork, cooperativeness, social responsibility, respect for all, active listening, express opinions and give feedback; self-awareness – knowing one’s own capabilities, strengths and weaknesses to manage conflicts. Self-awareness is necessary for effective communication and interpersonal relationships. Empathy, which is an ability to listen, understand, and respect others’ needs, is also a key interpersonal skill. Development of this skill set enables the adolescent to be more positive and adaptive to social changes. These skills result in the acceptance of social norms that provide the foundation for adult social behaviour.

c) **Emotional Skills** refers to “recognising emotions in one’s own self and others.” It deals with self-management skills such as self-esteem, self-confidence, self-reflection, regulation of self-emotions, which are needed for a healthy, productive, personal development. Emotions like anger, grief, anxiety or depression must all be dealt appropriately with positive thinking. To deal with the emotions of others, one needs to respect and appreciate other peoples’ perspectives. Self-esteem, self-awareness, self-evaluation skills and the ability to set goals are self-management skills.

Life Skills in South East Asian Countries – An Overview

The countries in the Asian region have developed their own definitions of life skills, as shown in Table 1: Each country has a different reason for developing or teaching life skills to youth/adolescents. The most sighted reasons by the countries for initiating teaching of life skills in school education is for the prevention of HIV/AIDs, child abuse, adolescent pregnancies, drugs, community problems, etc. Life Skills education in all countries concentrates on the development of the skills needed for life such as communication, decision-making, thinking, managing emotions, assertiveness, self-esteem building, resisting peer

pressure, and relationship skills. Additionally, it addresses the important adolescent issues that can empower girls and guide boys towards new values, gender equity and healthy behaviour towards life.

Recommendations

The existing educational systems have all developed 21st century skills. However, these skills differ from country to country. There are some general points that become evident through the development and implementation of 21st century skills throughout Asia. These are:

- Education systems must define clear standards that lay out knowledge, skills, and attitudes that students should acquire at each grade level.
- School education must prepare students with basic workplace skills through curriculum and through participative pedagogical methods to ensure that future workforce is well equipped to work with efficiency.
- Teachers’ professional development must incorporate training in teaching and assessing key skills and competencies that are required in the competitive contemporary world.
- Researchers must develop new ways of measuring performance of students in 21st century skills, and tracking the relationship between these skills and success in tertiary education, the workforce and beyond.
- Government policies must support/facilitate the learning of life skills as a central component of schools’ curriculum in order to prioritize 21st century skills.
- Schools must keep Life Skills teaching interactive, using role plays, games, puzzles, group discussions etc. so that innovative teaching techniques keep students wholly engaged in the sessions

Recommendations for Teachers: Teachers should/must

- have a thorough understanding of curriculum framework and proficiency to make curriculum relevant through generative topics/issues such as gender disparity, women empowerment, adult education, e-governance etc., which would help students to connect to the real-life around them.
- develop learning strategies /activities for integrating theories and practices, which require students to use content knowledge in new ways, thus, stimulate in students inquiry-based learning through collaborative approach.
- be able to identify the correlation between interdisciplinary themes and generic skills and should be able to integrate across and within the core subjects to achieve the learning outcomes
- do away with the transmission model of delivering factual knowledge through text books and lecture and later testing the same through recall based understanding
- ensure that the role of their instructions shifts from ‘knowing’ information to ‘applying’ information.

Life Skills in Co-Scholastics

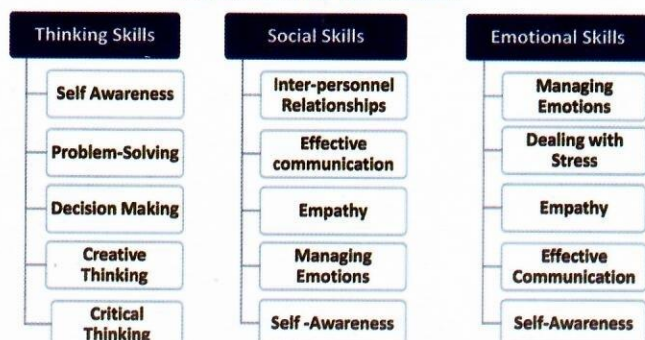


Table 1: Selected country definitions of life skills education

Life Skills Definitions in South East Asian Countries	
Cambodia	Life skills are defined as: the intellectual, personal, interpersonal and vocational skills that enable informed decision-making, effective communication and coping and self-management skills that contribute to a healthy and productive life to ensure successfully solving daily problems. (Policy for Curriculum Development, 2005-2009) Basic life skills. These include general life skills and pre-vocational skills. General life skills include personal hygiene, safety, planning for daily life, organization, relationships, morality and good citizenship. Pre-vocational skills include communication and mathematics skills, problem solving and team work. Career skills. These include simple career skills which depend on local needs and individual interests and vocational skills which require long training courses and technical capacity for professional development.
Indonesia	Life skills are defined in the EFA National Plan of Action as the skills or capability that must be owned by each individual in order that they can adapt, act positively and be able to face the various challenges of daily life. Life skills are subdivided into: Generic life skills. These are psychosocial skills for healthy life, cooperation, communication, critical thinking, values and attitudes (discipline, responsibility and respect towards other people). Specific skills. These are academic and vocational skills. Science skills are emphasized.
Malaysia	Malaysia defines life skills as essentially those that encompass the following: Basic skills: literacy, numeracy and information and communication technology skills. Psychosocial skills: reflective, personal and interpersonal skills including problemsolving, critical thinking and communication. Practical or contextual skills: technical or vocational, income-generation, and those skills pertaining to health, gender, family, environment and civics. Living skills: manipulative skills, those relevant to orientation and mobility, behaviour management, self-management, selfcare, home living and leisure.
Laos PDR	Life skills are defined as: Knowledge and abilities needed by people to improve their quality of life, such as basic vocational skills, together with support activities such as improved technologies, product development and development of market linkages. Reproductive health and the environment are components of life skills.
Philippines	Life skills are defined as abilities for positive and adaptive behaviour that enable individuals to deal effectively with the demands, challenges, experiences and situations of everyday life. The following life skills are considered to be of critical importance: self-awareness, empathy, effective communication, and interpersonal relationship skills, decision-making, problemsolving, creative thinking, and critical thinking skills, understanding one's emotions, coping with stress, and production and entrepreneurial skills.
Thailand	The Ministry of Education (MOE) defines life skills as characteristics or social and psychological capability enabling an individual to effectively cope with various situations in daily life. Topics within the life skills syllabus can cover health care, HIV prevention, substance abuse awareness, safety, the environment, morality and ethics, decision-making, problem solving, intellectual capacity, interpersonal and intrapersonal intelligence, understanding and sympathy for others, and management of emotions and stress. Four basic life skills are identified: (1) Health care and disease prevention; (2) Security in life and property, disaster relief and protection, keeping order and safety in society, traffic etc.; (3) Preservation of the natural environment and environmental resources etc.; and (4) Morality, ethics, and desirable values and characteristics.

Source: (Adapted from Life Skills 3 UNESCO)

- Keep themselves abreast by joining professional development programs that aim to support the implementation of skills and competencies of 21st century.
- be competent to use technology as a powerful tool and learning resource to support classroom learning
- be trained in identifying, training and measuring student performance in these skills.

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CAER Leadership Team

Shri Vineet Joshi, IAS
Chairman, Central Board of Secondary Education (CBSE)

Dr Sadhana Parashar
Prof & Director (A,R,T,I), CBSE

Ms Sarita Manuja
Director, Centre for Assessment, Evaluation and Research (CAER)

Contact Us:

Centre for Assessment Evaluation and Research (CAER)
4th Floor, Shiksha Sadan, 17 Rouse Avenue, New Delhi 110002
Office: +91 (011) 2323 1820
Email: publications@indiacar.in | Website: www.indiacar.org
Facebook: www.facebook.com/indiacar
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