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Developing Life Skills in Children at the Foundational and Preparatory Stages Through Environmental Education

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Abstract

This study investigates the critical role of life skill development in children during the Foundational and Preparatory stages of education, with a specific focus on environmental education as outlined in the National Education Policy (NEP) 2020, the National Curriculum Framework for Foundational Stage (NCF-FS) 2022, and the National Curriculum Framework for School Education (NCF-SE) 2023. The research delineates the rationale for emphasising life skills, identifies key skills pertinent to these educational stages, and proposes strategic methods for their integration into the curriculum. The analysis underscores the collaborative role of educators, parents, and policymakers in achieving the Curricular Goals established by NEP 2020, NCF-FS 2022, and NCF-SE 2023, which are aimed at holistic child development and skill acquisition.

Introduction

Life skills are defined by the World Health Organisation (WHO, 1999) as "abilities for adaptive and positive behaviour that enable individuals to deal effectively with the demands and challenges of everyday life". The prioritisation of self-awareness, effective communication, and problem-solving as critical life skills are well-documented (Antony & Tripathi, 2023). These skills encompass social and interpersonal domains (including communication, refusal skills, assertiveness, and empathy), cognitive domains (including decision-making, critical thinking and self-evaluation), and emotional coping domains (including stress management and an internal locus of control). Life skill education aims to equip adolescents with the competencies required for human development and the adoption of behaviours necessary to navigate daily life challenges effectively (Mangrulkar, Whitman, & Posner, 2001).

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UNICEF (2012) has further expanded on this definition by including the development of socio-emotional competencies that enable individuals to lead healthy, productive lives and become agents of change. The NEP 2020 underscores the importance of essential life skills, such as communication, collaboration, teamwork, and resilience, as foundational to the overarching education system. This study explores the critical role of the Foundational and Preparatory stages in fostering life skill development, with a focus on aligning with the goals set forth by the NEP 2020, the NCF-FS 2022, and the NCF-SE 2023.

Environmental Education

The NCF-SE 2023 identifies environmental conservation as one of the paramount challenges of the twenty-first century. The framework advocates for developing knowledge, capacities, values, and dispositions that promote responsible environmental stewardship. Environmental education at the Foundational and Preparatory stages is designed to cultivate environmental literacy, foster compassionate attitudes towards nature, and develop an action-oriented mindset capable of addressing environmental challenges locally, nationally, and globally.

The main aims of environmental education according to NCF-SE (2023) are:

(i) creating a strong foundation of environmental literacy, which includes understanding the interlinkages between ecological, social, economic, and political factors;

(ii) developing a more compassionate attitude towards the natural environment, drawing upon teachings from ancient Indian traditions and practices, the Indian Constitution, as well as scientific research on the effects of modern human activity on the environment; and

(iii) developing an action-oriented mindset and skillset to promote environmental causes, with a solid understanding of how individual, societal, national, and global actions can help us restore the balance between humans and nature, and thereby save our planet and ourselves.

(a) *Foundational stage:* At this stage, spending time in nature is an integral part of the pedagogy, encouraging children to observe and interact sensitively with plants, animals, insects, and birds. Stories, poems, and songs should have elements of the environment and appreciation of nature.

(b) *Preparatory stage:* Through the study of *The World Around Us*, students begin to appreciate the interdependence between human society and the natural environment.

Rationale for Prioritising Life Skill Development

The development of life skills is essential for individuals to navigate personal, intellectual, and professional challenges effectively. The NEP 2020 prioritises holistic development at the Foundational and Preparatory stages by advocating for play- and activity-based learning, which fosters critical thinking, creativity, communication, collaboration, and problem-solving skills. Additionally, including cultural elements and real-life experiences in the curriculum enhances understanding, while instruction in the mother tongue supports effective communication and socio-emotional growth.

Investing in life skill development at these educational stages has significant long-term implications for societal well-being. Students equipped with strong life skills are more likely to become active, responsible citizens, capable of addressing societal challenges effectively. This framework prepares young learners to thrive in an increasingly complex world by fostering their ability to adapt, innovate, and contribute meaningfully to the society.

Key Life Skills for the Preparatory Stage

Key life skills relevant to the Preparatory Stage include:

- *Communication:* mastery of language and expressive techniques for effective communication (Vygotsky, 1986).
- *Social skills:* the ability to collaborate and cooperate with peers and adults (Gresham and Elliott, 2008)
- *Emotional regulation:* the capacity to recognise and manage emotions in various contexts (Gross, 2015)
- *Problem-solving:* the ability to overcome obstacles through critical thinking (Bransford and Stein, 1984)
- *Creativity:* fostering imagination and innovation through experimentation (Runco, 2014)
- *Resilience:* developing adaptability to cope with setbacks (Masten and Barnes, 2018)
- *Self-regulation:* exercising control over emotions and behaviours (Zimmerman, 2000)
- *Empathy:* understanding and sharing the feelings of others (Eisenberg and Spinrad, 2014)

Life Skills as Envisioned in NEP 2020

Life skills are cultivated through the constructive processing of information, experiences, and encounters that individuals face in their daily lives and in response to the rapid changes in their environment (Ouane, 2002). The NEP 2020 emphasises communication, collaboration, teamwork, and resilience as essential life skills that must be integrated into the educational curriculum.

- *Effective communication:* Listening, speaking, reading and writing

in multiple languages are indispensable capacities. To be able to express oneself, both orally and in writing, in a lucid, well-articulated and coherent manner, is very important throughout life. This also includes the skilled use of digital media. The ability to use varied forms of communication in different contexts that are appropriate for the intended audience is very valuable in achieving all the aims (NCF-SE 2023, Section 1.3.2). Students should develop their language capacities to think critically, identify real-world problems, analyse them, make rational arguments, and work out solutions. The capacity to use language to think and communicate well in a variety of situations is critical for effective democratic, social and cultural participation (NCF-SE 2023, Section 2.1).

- *Collaboration:* At this stage, the students will spend most of their time in free-play and only a little time in structured sessions. Free-play allows students to use their imagination and develop creativity. It is widely known and accepted that free-play develops many important skills for students in the Preparatory Stage. It develops gross and fine motor skills along with auditory and visual perception. It also develops language, problem-solving ability, communication, collaboration, negotiation, and empathy (NCF-SE 2023, Section 8.6).
- *Teamwork:* It is important during the age range of 3–8 years to nurture and develop the child's innate abilities and capacities of curiosity, creativity, critical thinking, cooperation, teamwork, social interaction, empathy, compassion, inclusiveness, communication, cultural appreciation, playfulness, and awareness of the immediate environment, as well as the ability to interact with teachers, fellow students and others successfully and respectfully (NCF-SE 2023, Section 1.1.3).
- *Resilience:* Pachauri (2014) defines "resilience as the ability to recover social, economic, and environmental systems to confront, respond, or reorganise in the face of a hazardous event". Community resilience, rooted in individual resilience, can be fostered through education, with teachers playing a crucial role in building resilience in students, extending it to others, forming a network of resilience enriched by environmental education for sustainability.

Curriculum Integration for Life Skills

The effective integration of life skills into the curriculum at the Preparatory Stage requires a multifaceted approach that includes diverse teaching methodologies and experiential learning opportunities.

The NEP 2020 and NCF-SE 2023 suggest incorporating hands-on learning, arts-integrated education, and storytelling-based pedagogy to enhance life skill development. Teachers are encouraged to utilise the five-step learning process (*Panchaadi*) outlined in the NCF-FS 2022 to structure and plan instructional activities that promote life skills.

(i) The NEP 2020 suggests the following ways of integrating life skills among students:
   (a) Experiential learning will be adopted, including hands-on learning, arts-integrated and sports-integrated education, and a storytelling-based pedagogy.
   (b) Language teaching will be enriched through innovative methods, incorporating gamification; apps; and cultural elements like films, theatre, storytelling, poetry, and music. Connections with relevant subjects and real-life experiences will be emphasised, promoting experiential learning in language education.

(ii) For developing life skills among students, the NCF-FS suggests various ways of integration as illustrated below.

(iii) For the Preparatory Stage, NCF-SE suggests the following ways of integrating life skills among students:
   (a) Activity and discovery
   (b) Making art
   (c) Local games



Figure 1: Student-centric pedagogical approaches for developing life skills at Foundational Stage (NCF-FS)

(d) Storytelling
(e) Expression and communication
(f) Free-play
(g) Develop students' proficiency in fundamental mathematical concepts, such as numbers, basic operations, shapes, measurement, and data handling to foster procedural fluency, and enhance mathematical and computational thinking skills to enable students to solve real-life problems effectively.
(h) Understanding of the physical world through asking questions, observing, experimenting, making connections, analysing, and making explanations of phenomena in their immediate environment
(i) Individual, pair, and small group work
(j) Observe their local art and culture, and practise basic art forms, such as rangoli, and basic crafts such as clay work, pottery (without the wheel), puppetry, folk songs, folk dances, and so on.

Integrating Life Skills Among Students: NCERT's Recommendations

Teachers should use various fun activities to help students learn and grow. They should encourage picture reading, create portfolios of each students' likes and dislikes, and solve riddles about animals and plants. Students enjoy making bird and animal masks, reciting poems, and crafting finger puppets. They should also sketch animal and bird body parts, play group games, and share their daily routines. Students should discuss their observations from home to school, work together in group activities, and even plant and care for a tree. Additionally, they should learn about different symbols and signboards in their surroundings.

Five-step Learning Process (*Panchaadi*) As Per NCF-FS

In addition to integrating life skills into the curriculum, teachers can adopt the five-step learning process (*Panchaadi*) recommended by the NCF-FS. This framework serves as a practical guide for instructional planning, helping educators systematically develop essential life skills in students. These are explained on the following page.

- *Adhiti (Introduction):* The first step is to initiate the learning process. The educator initiates by linking a fresh idea or subject with the student's existing knowledge. Through inquiry, exploration and hands-on experimentation guided by the teacher, students acquire pertinent information about the novel topic.

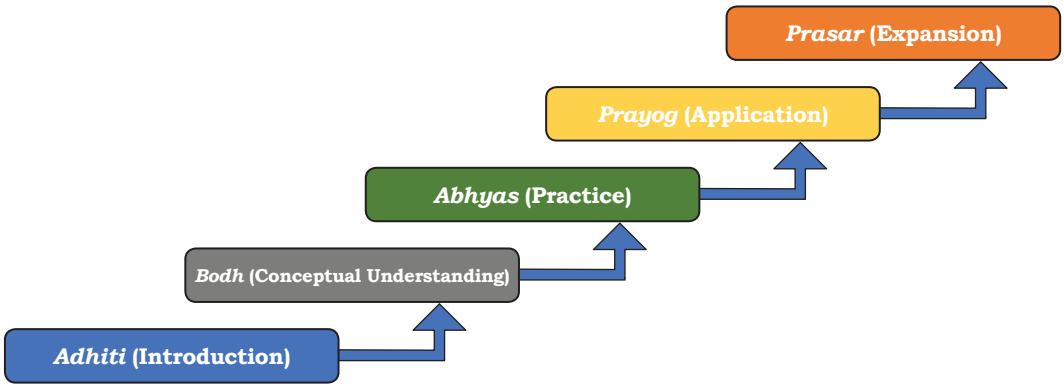


Figure 2: Five-step learning process (Panchaadi) for developing life skills among students

- *Bodh (Conceptual Understanding):* In the second step, students engage in various activities, such as play, inquiry, experiments, discussions, or reading to comprehend core concepts. The teacher closely observes this process, providing guidance and support as needed. The teaching plan outlines the concepts intended for children to learn during this phase, serving as a roadmap for the learning journey.
- *Abhyas (Practice):* The third step emphasises practising to enhance comprehension and skills through engaging activities. Teachers can arrange group work or small projects to solidify conceptual understanding and achieve competency.
- *Prayog (Application):* The fourth step involves applying acquired understanding in the child's daily life through diverse activities and small projects.
- *Prasar (Expansion):* The fifth step focuses on sharing acquired knowledge through conversations, storytelling, singing, reading together, and playing games with friends. Each new topic learned creates neural pathways in our brains, and sharing knowledge strengthens learning. Teaching what we have learned completes neural pathways, making learning clearer and more enduring.

Role of Teachers, Parents, and Policymakers

The effective development of life skills in children during the Foundational and Preparatory stages requires a coordinated effort among teachers, parents, educators, and policymakers. Teachers are central to this process, responsible for creating a classroom environment that promotes life skills through experiential and activity-based learning, aligned with

NEP 2020 and relevant curriculum frameworks. They also support socio-emotional development by modelling and facilitating positive behaviours.

Parents play a crucial role in reinforcing these skills outside the classroom by providing a supportive home environment where children can practice and apply what they learn.

Educators at the policy and administrative levels are tasked with designing curricula that prioritise holistic development and providing professional development for teachers to ensure effective implementation.

Policymakers are responsible for setting the strategic direction for life skill education, advocating for policies that prioritise early childhood development and ensuring that adequate resources and support are provided. They must also engage in continuous dialogue with stakeholders to monitor and adjust life skill initiatives based on empirical evidence. Together, these stakeholders create a sustainable foundation for future generations to thrive in a complex world.

Conclusion

The Foundational and Preparatory stages of education are pivotal in the development of essential life skills in children, which are crucial for their holistic growth and future success. The integration of life skill education within the curriculum, particularly through environmental education as emphasised by the National Education Policy (NEP) 2020, the National Curriculum Framework for Foundational Stage (NCF-FS) 2022, and the National Curriculum Framework for School Education (NCF-SE) 2023, provides a structured approach to nurturing critical competencies, such as communication, collaboration, resilience, and problem-solving.

This study underscores the importance of a multifaceted educational approach that combines experiential learning, cultural elements, and socio-emotional development to equip young learners with the skills necessary to navigate an increasingly complex and interconnected world. The role of educators, parents, and policymakers is central to the successful implementation of these curricular interventions, as they collaboratively work to create a supportive and inclusive learning environment that prioritises holistic development of children.

In conclusion, the strategic emphasis on life skill development at these early stages not only aligns with national educational goals but also addresses global educational imperatives, thereby preparing children to become adaptive, responsible, and productive members of society. The adoption of innovative pedagogical practices and continuous support from all educational stakeholders will be critical in realising the full potential of life skill education for the next generation.

References

Antony, N.J. and S. Tripathi. 2023. 'Life Skills to Be Developed for Students at the School Level'. *International Journal of Educational Management*. Vol. 37, No. 6–7. pp. 1425–1444.

Bransford, J.D. and B.S. Stein. 1984. *The IDEAL Problem Solver: A Guide for Improving Thinking, Learning, and Creativity*. W.H. Freeman.

Eisenberg, N. and T.L. Spinrad. 2014. 'Multidimensionality of Prosocial Behavior: Types, Causes, and Links to Well-being'. *Handbook of Child Psychology and Developmental Science*. pp. 1–41.

Gresham, F.M. and S.N. Elliott. 2008. *Social Skills Improvement System (SSIS)*. Pearson.

Gross, J.J. 2015. 'Emotion Regulation: Current Status and Future Prospects'. *Psychological Inquiry*. Vol. 26, No. 1. pp. 1–26.

Mangrulkar, L., C.V. Whitman and M. Posner. 2001. *Life Skills Approach to Child and Adolescent Health Human Development*. Pan American Health Organization, Washington, DC.

Masten, A.S. and A.J. Barnes. 2018. 'Resilience in Children: Developmental Perspectives'. *Children (Basel)*. Vol. 5, No. 7. pp. 2–16. doi:10.3390/children5070098

Ministry of Education, Government of India. 2020. *National Education Policy 2020*. Retrieved from https://www.education.gov.in/sites/upload_files/mhrd/files/NEP_Final_English_0.pdf

National Council of Educational Research and Training. 2022. *National Curriculum Framework for Foundational Stage*. Retrieved from https://ncert.nic.in/pdf/NCF_for_Foundational_Stage_20_October_2022.pdf

———. 2023. *National Curriculum Framework for School Education 2023*. Retrieved from https://ncert.nic.in/pdf/NCFSE-2023-August_2023.pdf

Ouane, A. 2002. 'Key Competencies In Lifelong Learning'. *Institutionalising Lifelong Learning: Creating Conducive Environments for Adult Learning in the Asian Context*. UNESCO Institute for Education, Hamburg.

Pachauri, R.K., M.R. Allen, V.R. Barros, J. Broome, W. Cramer, R. Christ, J.A. Church, L. Clarke, Q.D. Dahe, Dasgupta, P., N.K. Dubash, O. Edenhofer, I. Elgizouli, C.B. Field, P. Forster, P. Friedlingstein, J. Fuglestvedt, L. Gomez-Echeverri, S. Hallegatte, ... J-P. Van Ypersele. 2014. 'Climate Change 2014: Synthesis Report'. *Contribution of Working Groups I, II, and III to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change*. Geneva, Switzerland, IPCC, 151. 9-98–92–9169–143–2. Retrieved from http://www.mendeley.com/research/climate-change-2014-synthesis-report-contribution-working-groups-i-ii-iii-fifth-assessment-report-in-20

Runco, M.A. 2014. *Creativity: Theories and Themes: Research, Development, and Practice*. Elsevier.

United Nations International Children's Emergency Fund. 2012. *Global Learning for Educators: The Case for Life Skills Education*. Retrieved from https://www.edu-links.org/sites/default/files/media/file/GLSEE_Booklet_Web.pdf

Vygotsky, L.S. 1986. *Thought and Language*. MIT Press.

World Health Organization. 1999. *Skills for Health: Skills-based Health Education Including Life Skills: An Important Component of a Child-friendly/Health-promoting School*. WHO, Geneva.

Zimmerman, B.J. 2000. Attaining Self-regulation: A Social Cognitive Perspective. In M. Boekaerts, P.R. Pintrich, and M. Zeindner (Eds.), *Handbook of Self-regulation*. pp. 13–39. San Diego, CA: Academic Press. Retrieved from http://dx.doi.org/10.1016/B978-012109890-2/50031-7