



Research Article

Enhancing Life Skills Among Secondary School Students in Kerala: An Applied Educational Psychology Perspective

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Abstract

This study examines the effectiveness of different pedagogical approaches in enhancing life skills among secondary school students in Kerala, India. Life skills are essential competencies that enable individuals to effectively manage personal, social, and academic challenges in contemporary society. The study employed an experimental research design using a parallel group method to compare traditional teaching approaches with modern pedagogical methods such as experiential learning, project-based learning, and cooperative learning. A sample of 50 secondary school students and 30 teachers from selected schools in Kerala was selected using stratified random sampling participated in the study. Data were collected through standardized questionnaires and semi-structured interviews. Statistical techniques including descriptive analysis and t-test were used to analyse the data. The experimental group achieved a higher mean score in life skills development, indicating the effectiveness of experiential and student-centered teaching strategies. Teachers also expressed more positive perceptions toward the integration of life skills when using innovative teaching approaches. The findings of the study show that the students learned life skills through innovative pedagogical methods demonstrating higher levels of improvement as compared to the students learned through conventional methods. The study highlights the importance of incorporating modern pedagogical strategies in secondary education to enhance students' personal, interpersonal, and problem-solving competencies. The findings have significant implications for curriculum planners, educators, and policymakers, emphasizing the need to integrate life skills education systematically within the school curriculum to prepare students for the complex demands of the 21st century.

Keywords

Life Skills, Secondary School Students, Pedagogical Approaches, Experiential Learning, Social-emotional Learning, Curriculum Development

1. Introduction

Secondary education is a critical stage in a student's academic journey, laying the foundation for their future endeavors and personal development. Beyond the conventional curriculum of subjects like mathematics, science, and literature, there exists an equally vital dimension of education: life skills.

[1] Life skills encompass a broad range of competencies that enable individuals to effectively navigate the complexities of contemporary life, promoting personal well-being, successful social interactions, and professional achievement. [2] In an era marked by rapid technological advancements, global interconnectivity,

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and evolving social dynamics, the acquisition of life skills has become indispensable for adolescents transitioning into adulthood. Secondary school students in Kerala, as in many other regions, face an array of challenges as they prepare to enter higher education or the workforce. [3] These challenges encompass not only academic demands but also the demands of an ever-changing and multifaceted world. [4]

Life skills can be categorized into three primary domains: personal, interpersonal, and academic or vocational. [5] Personal life skills involve self-awareness, emotional regulation, decision-making, and problem-solving. Interpersonal life skills encompass effective communication, empathy, conflict resolution, and collaboration. Academic or vocational life skills include critical thinking, time management, goal setting, and adaptability. Developing proficiency in these areas equips students to tackle a wide range of situations, from managing personal relationships to thriving in the workplace. [6] The significance of incorporating life skills education into the secondary curriculum lies in its potential to empower students with the competencies required to navigate the complex web of challenges and opportunities that await them. Life skills provide adolescents with a toolkit for making informed choices, setting and achieving goals, and adapting to changing circumstances. [7] Moreover, they play a pivotal role in enhancing students' psychological well-being, resilience, and overall quality of life.

In Kerala, a region known for its diverse cultural fabric and educational excellence, the integration of life skills education into secondary schools holds the promise of producing well-rounded individuals who can not only excel academically but also contribute positively to society. [8] As educators and policymakers seek to enhance the educational experience of secondary school students, understanding the effectiveness of different pedagogical approaches in fostering life skills is of paramount importance. [9] This study aims to investigate and assess the efficacy of various pedagogical approaches in promoting life skills among secondary school students in Kerala. By doing so, it aspires to shed light on the best practices in life skills education, offering insights that can inform curriculum development and teaching methodologies to prepare students for the multifaceted challenges and opportunities they will encounter in their personal and professional lives. [10].

2. Life Skills

Life skills are a set of abilities and competencies that enable individuals to effectively deal with the challenges of everyday life and to adapt to various situations. [11] These skills are often categorized into several types or domains, each of which encompasses a range of specific skills. The following life skills used in this study. [12].

2.1. Personal Skills

- 1) Self-awareness

- 2) Self-esteem and self-confidence
- 3) Decision-making
- 4) Time management
- 5) Goal setting
- 6) Stress management

2.2. Interpersonal Skills

- 1) Communication (verbal and non-verbal)
- 2) Active listening
- 3) Conflict resolution
- 4) Empathy
- 5) Assertiveness
- 6) Negotiation

2.3. Critical Thinking and Problem-solving Skills

- 1) Critical thinking
- 2) Creative thinking
- 3) Decision analysis and problem-solving
- 4) Research and information gathering
- 5) Innovation

2.4. Adaptability Skills

- 1) Resilience
- 2) Flexibility
- 3) Coping with change
- 4) Emotional intelligence
- 5) Tolerance of ambiguity

2.5. Other Skills

- 1) Emotional Intelligence
- 2) Communication Skills
- 3) Teamwork and Collaboration
- 4) Leadership Skills
- 5) Digital Literacy

3. Pedagogical Teaching Approach

In this study, researcher chose different teaching methods to see which one worked best for helping secondary school students in Kerala develop important life skills. [13] The researcher used traditional teaching methods, like lectures and textbooks, and compared them to more modern approaches, such as experiential learning, project-based learning, and cooperative learning. [14] By conducting the study, found that the newer methods, like project-based learning, were more effective in fostering life skills like problem-solving and teamwork. This showed that using these innovative teaching techniques could be a valuable way to help students grow and develop essential skills for their future. [15].

4. Need for the Study

In an ever-changing global landscape, life skills are vital for personal development, employability, and overall well-being. [16] Kerala, known for its progressive educational policies, stands to benefit from evidence-based insights into pedagogical methods that effectively nurture life skills. [17] By understanding which approaches are most effective, policymakers, educators, and schools can tailor their strategies to empower students with the essential life skills they need to thrive in an increasingly complex and competitive world. [18] This study can contribute to enhancing the quality of education in Kerala and, in turn, the overall socio-economic development of the region. [19].

Furthermore, this research holds significance not only at the regional level but also in the broader context of educational innovation. [20] By examining the outcomes of diverse pedagogical methods, it offers valuable insights into best practices that can be adapted and implemented in other educational systems both within India and internationally. The study's findings could serve as a model for educators, researchers, and policymakers seeking to refine their approaches to teaching life skills, ultimately better preparing students for the challenges and opportunities of the 21st century. [21] Additionally, understanding the specific needs and strengths of Kerala's secondary school students can lead to more tailored and effective education, promoting personal growth, community development, and, ultimately, the betterment of society as a whole. [22].

5. Objectives of the Study

- 1) To identify the life skills that are considered essential for secondary school students in Kerala.
- 2) To review and categorize various pedagogical approaches used in secondary education in Kerala.
- 3) To assess the existing level of life skills among secondary school students in Kerala.
- 4) To analyze the impact of traditional teaching methods on the development of life skills in secondary school students.
- 5) To examine the effectiveness of modern pedagogical approaches (e.g., experiential learning, project-based learning, role-playing) in fostering life skills among secondary school students in Kerala.
- 6) To compare and contrast the outcomes of different pedagogical approaches in terms of life skill development.
- 7) To investigate the perceptions and experiences of teachers regarding the integration of life skills in their teaching methods.
- 8) To gather feedback from secondary school students on their experiences with different pedagogical approaches in relation to life skills development.

- 9) To explore potential challenges and barriers in implementing various pedagogical approaches for life skills development in Kerala.

- 10) To recommend evidence-based strategies for enhancing the incorporation of life skills within the secondary school curriculum in Kerala.

6. Hypotheses of the Study

- 1) There is no significant difference in the development of life skills among secondary school students when exposed to different pedagogical approaches in Kerala.
- 2) Traditional teaching methods have an equal impact on the development of life skills in secondary school students compared to modern pedagogical approaches in Kerala.
- 3) The perceptions and experiences of teachers regarding the integration of life skills in their teaching methods do not vary significantly based on the pedagogical approach used in secondary schools in Kerala.

7. Research Methodology / Design

7.1. Research Method

For this study, Experimental method with parallel group design was employed.

7.2. Sample

The study involved secondary school 50 students in Kerala as the primary participants. A stratified random sampling technique was used to select a diverse group of students from different schools and regions in Kerala.

In addition, 30 teachers from these schools were interviewed to understand their experiences and perspectives on pedagogical approaches and life skills development.

7.3. Research Tools

Standardized questionnaires were administered to the selected students to assess their baseline life skills and gather information on their experiences with different pedagogical approaches.

Semi-structured interviews were conducted with teachers to gain qualitative insights into their teaching methods, challenges, and perceptions related to life skills development.

7.4. Statistical Techniques Used

The following statistical techniques were used in this study

- 1) Descriptive analysis
- 2) Differential Analysis

8. Analysis and Interpretation of Data

Table 1. Life Skills Identified among Secondary School Students.

Life Skill Category	Mean	SD	't' test Value
Personal Skills	4.1	0.8	3.17
Interpersonal Skills	4.2	0.7	4.56
Problem-Solving Skills	3.9	0.6	2.45
Adaptability Skills	4.0	0.9	3.75
Other Skills	3.8	0.7	1.98

Interpretation:

Personal Skills: The life skill category of "Personal Skills" has a mean rating of 4.1, with a standard deviation of 0.8. The 't' test value of 3.17 suggests that there is a significant difference in the perceived importance or proficiency of personal skills compared to a predefined criterion or benchmark.

Interpersonal Skills: In the "Interpersonal Skills" category, the mean rating is 4.2, with a standard deviation of 0.7. The 't' test value of 4.56 indicates a significant difference, suggesting that interpersonal skills are perceived as notably important or proficient compared to the reference point.

Problem-Solving Skills: For "Problem-Solving Skills," the mean rating is 3.9, with a standard deviation of 0.6. The 't' test value of 2.45 shows a significant difference, implying that there is a discernible variation in the importance or proficiency of problem-solving skills.

Adaptability Skills: In the "Adaptability Skills" category, the mean rating is 4.0, with a standard deviation of 0.9. The 't' test value of 3.75 indicates a significant difference, suggesting that adaptability skills are perceived as significantly important or proficient.

Other Skills: The "Other Skills" category has a mean rating of 3.8, with a standard deviation of 0.7. The 't' test value of 1.98 suggests a significant difference in the perceived importance or proficiency of these unspecified skills compared to the reference point.

Table 2. Mean, SD and t-test of Pedagogical Approaches.

Pedagogical Approach	N	Mean	SD	't' test
Experimental group	50	20.80	3.00	8.22
Control Group	50	12.46	2.56	

The 't' test value obtained is 8.22, which is significant at the 0.01 level. This means that there is a statistically significant difference in the life skills development scores between the experimental group (students exposed to the experimental pedagogical approach) and the control group (students exposed to the traditional approach).

The results suggest that the experimental pedagogical approach has a substantial positive impact on the development of life skills among secondary school students in comparison to the traditional teaching method. The significantly higher mean life skills development score in the experimental group (20.80) compared to the control group (12.46) indicates that the experimental approach is more effective in fostering life skills. This finding is important for educators and policymakers, emphasizing the importance of innovative teaching methods in enhancing students' essential life skills, which are vital for their overall personal and academic growth.

Table 3. Teacher Perceptions on Life Skills Integration.

Pedagogical Approach	Mean Score	SD	't' Test Value	Significance Level
Experimental Method	4.12	0.62	5.98	0.01
Traditional Method	3.78	0.68		

The mean teacher perception score for the Experimental Method is 4.12, with a standard deviation of 0.62. An independent t-test shows a significant difference ($t = 5.98$, $p < 0.01$), indicating that teachers have more positive perceptions of life skills integration when using the Experimental Method compared to the Traditional Method.

0.01), indicating that teachers have more positive perceptions of life skills integration when using the Experimental Method compared to the Traditional Method.

Table 4. Students' Feedback on Pedagogical Approach.

Pedagogical Approach	Mean	SD	't' Test	Significance Level
Experimental Method	4.25	0.71	7.12	0.01
Traditional Method	3.60	0.82		

The mean student satisfaction score for the Experimental Method is 4.25, with a standard deviation of 0.71. An independent t-test reveals a significant difference ($t = 7.12$, $p < 0.01$), indicating that students are more satisfied with the Experimental Method in terms of life skills development compared to the Traditional Method.

Table 5. Challenges in Implementing Pedagogical Approaches.

Challenge Type	Frequency	Percentage
Lack of Resources	8	26.67%
Resistance from Teachers	5	16.67%
Student Engagement Issues	9	30.00%
Curriculum Constraints	6	20.00%
Other Challenges	2	6.67%

The challenges in implementing pedagogical approaches include a lack of resources (26.67%), resistance from teachers (16.67%), student engagement issues (30.00%), curriculum constraints (20.00%), and other challenges (6.67%). These findings highlight the practical obstacles faced when implementing different pedagogical methods to foster life skills.

9. Major Findings of the Study

- 1) The study identified a range of essential life skills categorized into Personal Skills, Interpersonal Skills, Problem-Solving Skills, Adaptability Skills, and Other Skills.
- 2) These life skills are considered vital for the personal and academic development of secondary school students in Kerala.
- 3) The Experimental Method, on average, resulted in a higher life skills development score (Mean = 20.80) compared to the Traditional Method (Mean = 12.46). A significant difference was found ($t = 8.22$, $p < 0.01$), indicating that the Experimental Method is more effective

in fostering life skills among the students.

- 4) Teachers' perceptions of life skills integration were more positive for the Experimental Method (Mean = 4.12) compared to the Traditional Method (Mean = 3.78). A significant difference was observed ($t = 5.98$, $p < 0.01$), indicating that teachers had more favourable perceptions of life skills integration when using the Experimental Method.
- 5) Students expressed higher satisfaction with the Experimental Method (Mean = 4.25) in terms of life skills development compared to the Traditional Method (Mean = 3.60). A significant difference was found ($t = 7.12$, $p < 0.01$), suggesting that students were more satisfied with the Experimental Method.
- 6) Challenges in implementing pedagogical approaches included a lack of resources (26.67%), resistance from teachers (16.67%), student engagement issues (30.00%), curriculum constraints (20.00%), and other challenges (6.67%). These findings highlight the practical obstacles faced when implementing different pedagogical methods to foster life skills.
- 7) The study's overall findings suggest that the Experimental Method, characterized by modern pedagogical approaches, is more effective in fostering life skills among secondary school students in Kerala. Both teachers and students express more positive perceptions and higher satisfaction with this method. However, challenges in implementation, such as resource limitations and curriculum constraints, need to be addressed for successful integration.

10. Conclusions

The study identified a comprehensive set of essential life skills categorized into Personal Skills, Interpersonal Skills, Problem-Solving Skills, Adaptability Skills, and Other Skills. These skills are considered crucial for the holistic development of students. The findings indicate that the Experimental Method, characterized by modern pedagogical approaches, is significantly more effective in fostering life skills among secondary school students compared to the Traditional Method.

Students exposed to the Experimental Method demonstrated higher life skills development scores, and both teachers and students expressed more positive perceptions and higher satisfaction with this approach. Despite the advantages of the Experimental Method, challenges in implementation were observed. These included a lack of resources, resistance from teachers, student engagement issues, curriculum constraints, and other challenges. Addressing these obstacles is essential to successful integration of innovative pedagogical approaches.

The study underscores the importance of innovative pedagogical approaches in fostering life skills among secondary school students in Kerala. It highlights the significant impact of the Experimental Method, which not only enhances life skills but also garners positive feedback from both teachers and students. Addressing implementation challenges is crucial to ensuring the successful adoption of these approaches in the education system. These findings have important implications for educators and policymakers, emphasizing the need for pedagogical innovation to support students' overall personal and academic growth.

Abbreviations

SD	Standard Deviation
ICT	Information and Communication Technology
SEL	Social Emotional Learning
DOE	Department of Education

Author Contributions

Bindu Thazhathumadathil Vipinachandran: Conceptualization, Data curation, Formal analysis

Arumugam Saravanakumar: Conceptualization, Formal Analysis, Investigation, Methodology, Supervision

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Data Availability Statement

The data supporting the outcome of this research work has been reported in this manuscript.

Conflicts of Interest

The authors declare no conflicts of interest.

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Biography



Bindu Thazhathumadathil Vipinachandran is a faculty member of the Department of Education, under ITEP, Central University of Kerala, Kasargod. She did M.Com. and M.A. (Sociology) from University of Calicut, M.Ed. from Mahatma Gandhi University, MBA from University of Madras, Ph.D. from Alagappa University, Karaikudi, and a short-term course on Life Skills from Central University of Kerala (CUK). Before Joining CUK, Dr Bindu T V worked as an Assistant Professor in Farook Training College, Kozhikode, and Principal in Mother Teresa College of Teacher Education, Perambra, Kozhikode. She is having nearly 15 years of teaching experience in colleges and 3 years of experience in Schools. She has published 7 Papers, 5 Edited Books, 10 Chapters in Edited Books, and 40 Publications

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Arumugam Saravanakumar is a Professor in the Department of Education (CDOE) at Alagappa University with notable contributions in academics and administration. He has served in several key leadership roles, including Head In-charge of the Department of History, Special Officer (ED&M), Coordinator of the Vallal Dr. Alagappar Museum, Overall, Campus Coordinator, Campus Development Coordinator, Nodal Officer for the Indian Electoral Forum, Deputy Director of Ilanthakara Archaeological Excavations, Chief Warden of Men's Hostels, and Coordinator of the Anti-Drug Club. A dedicated research supervisor, he has guided 24 Ph.D. scholars, published 176 research articles in reputed indexed journals, completed 16 funded projects, authored 35 books, holds four patents, and has received 29

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Research Field

Bindu Thazhathumadathil Vipinachandran: School Education

Arumugam Saravanakumar: Education Psychology, Science Education, Educational Technology, Distance and Online Education