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Nurturing Soft Skills in Students: A Systematic Literature Review of Challenges, Strategies, and Frameworks used in Secondary Education

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ABSTRACT

This study examines the integration of soft skills into secondary school settings and secondary school teacher training institutions, based on studies published in SCOPUS between 2014 and 2024. A systematic literature review was conducted using the PRISMA protocol, in November 2024 to extract key trends and gaps. Two hundred and Sixty-Nine records were retrieved from the SCOPUS database, of which, 156 studies were selected for qualitative synthesis through thematic analysis. The study excluded records that failed to provide empirical data, focused on non-educational settings, and data that did not match the research questions. The review is categorised into three key areas (1) challenges teachers face in integrating soft skills into their teaching curricula, (2) innovative strategies adopted to overcome these challenges, and (3) frameworks or models proposed to enhance soft skills education. The analysis underscores the need to revise policies and implement comprehensive teacher training programs aligned with SDG 4 (specifically Targets 4.3, 4.4, and 4.7), emphasising inclusive and equitable learning opportunities for all. Most importantly, the review identifies the necessity to update school curricula and assessment strategies to ensure soft skills are taught and systematically assessed using structured models for soft skills measurement, to meet national and international standards. This review offers data-driven recommendations to guide teachers, teacher trainers, policymakers, and course developers to implement soft-skills training in secondary schools.

1. INTRODUCTION

Due to their prominent role in preparing students for real world challenges, workplace success, and lifelong learning; soft skills are gradually being introduced systematically across all levels of education, from primary, secondary to tertiary education and in teacher training programs. Frameworks such as the P21

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Framework and UNESCO's competency-based learning model, which emphasise the need to include soft skills such as critical thinking, adaptability, and collaboration to enable students for lifelong learning and success in a changing world are well known in academia (UNESCO, 2019; Chew et al., 2020). Soft skills are considered non-technical abilities which help both students and teachers to succeed in their educational environments such as interpersonal, intrapersonal, and cognitive skills. Specifically, skills such as effective communication, adaptability, collaboration, and problem- solving are pivotal for successful career progression, and for maintaining healthy relationships (Liu & Tan, 2024; Mailool et al., 2023; Tang et al., 2015).

Soft skills are important in enhancing students' engagement, learning, and performance in the classroom (Ricciardelli & Sabatino, 2021). The integration of soft skills within teacher training programs remains essential because it prepares future teachers for their profession. The achievement of this target requires universities to implement soft skills including communication skills, critical and creative thinking and collaborative hands-on authentic activities which will lead to conscious training of potential teachers (Thomas et al., 2023; Varadinov & Cardoso, 2024). The absence of soft skills instruction in university teacher training programs leads novice teachers in their first three years of entering the teaching profession, to experience difficulties when delivering lessons and building positive student relationships (Cilliers, 2020; Manchini et al., 2023; Mohiuddin et al., 2020; Schwendimann et al., 2022). Research indicates that emotional intelligence, together with communication and teamwork skills, remains essential for classroom achievement; yet most traditional teacher education systems fail to include them (Ilari, 2020; Punie & Caena, 2019).

Teachers play an essential role in fostering soft skills development in diverse classroom settings. This requires them to be trained to apply soft skills in their own teaching; and taught how to train their students in specific age-appropriate soft skills. Through knowledge and the use of effective strategies, teachers can influence how students learn and put these soft skills into practice in real-life situations (Urkia-Basterra et al., 2025). Such strategies can involve group assignments, workshop-based work, creative work, project work, and problem-solving activities (Orih et al., 2024).

In the 21st century, the rapid pace of technological advancement and the growing interconnectedness of the world have transformed every aspect of life. As automation transforms job roles the significance of human centred skills, such as communication, adaptability, and teamwork become critical (World Economic Forum, 2020). While soft skills are undeniably crucial, there is limited research and practical guidance available for teachers on how to effectively develop these soft skills in the classroom. This gap between educational theories and real-world teaching practices leaves many educators ill-equipped to develop essential soft skills, as they lack the tools and strategies to translate abstract concepts into practical classroom methods.

This review aligns with Sustainable Development Goal 4 through its focus on Targets 4.3 (access to teacher training), 4.4 (skills for employment) and 4.7 (education for global citizenship) to build inclusive, relevant, and forward-looking education systems.

Three main aspects related to soft skills education, and its implementation are reviewed in this study to address the following three research questions.

1. What are the challenges teachers encounter in implementing soft skills education in their classroom teaching?
2. What are the innovative strategies employed by the teachers and teacher training institutions to overcome these challenges?
3. What are the frameworks and models proposed in the literature to cultivate soft skills in students?

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2. RESEARCH METHOD

This research employed a systematic literature review process guided by PRISMA (Preferred Reporting Items for Systematic Reviews and Meta-Analyses) protocol to examine the challenges, strategies, and frameworks for soft skills development in educational settings. The review focused on peer-reviewed articles in the SCOPUS database, from 2014 to 2024, and written in English.

A search strategy using structured keywords and Boolean operators was defined to cover the literature related to soft skill development in school children. These keywords were clustered into four thematic areas:

1. Skills: “soft skills,” “non-technical skills,” “21st-century skills,” “communication,” “teamwork,” “problem-solving,” and “transferable skills.”
2. Roadblocks: “challenges,” “barriers,” and “issues.”
3. Approaches: “strategies,” “tactics,” and “techniques.”
4. Teachers: "educators," and "pre-service teachers."

Search Strings: "soft skills" AND challenges AND strategies AND "teachers" ("interpersonal skills" OR "communication skills") AND ("obstacles" OR "barriers") AND ("methods" OR "techniques") AND ("teachers" OR " educators"). This approach ensured the identification of studies focusing specifically on challenges, innovative strategies, and frameworks in the educational context.

A preliminary review of 269 articles was conducted to assess their relevance based on keywords and abstracts. Articles shortlisted from the initial screening were reviewed in detail to evaluate their contribution to the understanding of soft skill development. The final 156 articles were analysed to identify (1) Challenges faced by teachers in implementing soft skills. (2) Innovative strategies employed by teachers to cultivate soft skills and (3) Frameworks or models proposed for advancing soft skill development.

The research included sources from Australia, Brazil, China, France, India, Japan, Korea, Spain, the United Kingdom, and the United States. The broad international range of sources makes the research findings more relevant for different educational systems and sociocultural environments.

3. FINDINGS

The findings are presented in three parts (I) challenges, (II) strategies, and (III) frameworks and models adopted in secondary schools. The findings provide broader implications for educational policies and practices through evidence-based recommendations to enhance teacher training programs as well as to provide support to novice teachers, specifically within the South Asian and Southeast Asian context in which the researchers are located. The primary researcher of this paper is a college lecturer who trains students, and colleagues in soft skills, and has extensive experience as a schoolteacher and curriculum developer in Social Studies in the Maldives.

3.1 Challenges in Implementing Soft Skills Education

According to UNESCO (2019), insufficient budgets, outdated facilities, and untrained staff are critical barriers to soft skills development. In low-income countries, global standards and frameworks are often not matched by local teacher education due to limited institutional capacity (World Bank, 2019). Reliance on external funding sources further complicates most of the schools' ability to sustain core teacher development programs in developing nations (Susilawati et al., 2020). Feelings of disparity exacerbate the already significant challenges of teacher preparation in rural and underdeveloped areas (Nguyen & Yousuf, 2021).

Most teacher preparation programs globally fall behind in integrating soft skills into their curricula. According to research, in the Netherlands and Ghana, novice teachers struggle with classroom management and student engagement due to insufficient training in soft skills (Adeyemo et al., 2019; Hosenfeld et al., 2021). Poorly prepared teachers have been associated with higher teacher turnover and lower levels of job

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satisfaction (Luksyte & Spitzmueller, 2020). Continuous professional development (CPD) initiatives targeting emotional intelligence and soft skills could fill these skills voids in teachers. (Kim & Lee, 2021).

Educational cultures that prioritise standardised testing downplay essential soft skills such as critical thinking and collaboration. In South Asia, traditional curricula and test-based pedagogies preclude arts-based growth (Mehendale, 2020; Ouchen et al., 2022). In addition, the lack of innovative teaching models contributes to attitudes of resistance to change (Jaedun et al., 2022), making the integration of soft skills into classroom instruction even more challenging.

The following section analyses in-depth, how several factors from strict curricula together with limited assessment methods, lack of teacher preparation and skills, ineffective and haphazard policy on soft skills implementation and resistive ingrained school cultures prevent soft skills integration which restricts students from achieving holistic development.

3.1.1. Curriculum Rigidity and Assessment Limitations

Teachers are limited in their ability to integrate soft skills into the classroom due to the rigid nature of curricula and assessments. Many education systems still value theoretical learning and standardised testing over practical, interactive methods like group activities that foster not only critical thinking but also collaboration (Naqvi et al., 2023). Despite its importance, soft skills are neither systematically covered, nor recognised in the grading system. They are often treated as being second to academic learning. This leaves teachers unable to effectively incorporate soft skills into already content-heavy teaching schedules, resulting in inconsistent implementation which varies from classroom to classroom and from school to school (Afandi et al., 2022).

In many countries, the focus is on traditional hierarchical examinations, and students are evaluated on their ability to recall information as opposed to solving real life problems relevant to the students. Focus on covering examination syllabus content and revision of the given content hampers secondary teachers' attempts to incorporate discussions, debates, decision-making exercises, or independent group work, based on real-life applications of soft skills (Susilawati et al., 2020). Furthermore, the absence of well-defined assessment criteria for soft skills makes teachers uncertain in tracking students' progress (Afandi et al., 2022). Since there is no systematic inclusion or recognition of soft skills in the grading system, they are considered subordinate to academic learning. Hence, teachers are left with very little time and input, on how to incorporate the development of soft skills into their curriculum and assessment planning.

3.1.2. Lack of Teacher Training and Professional Development

A major barrier to engage teachers in soft skills education is absence of informal support, coaching, and absence of continuous professional training, specifically designed for novice and experienced teachers. According to Nguyen and Yousuf (2021), many educators are unprepared to incorporate teamwork, leadership, and communication skills into their teaching practices when they enter the profession. Although soft skills are becoming more critical for student success, pre-service teacher education programs focus on content and pedagogical knowledge and skills and do not offer explicit strategies for teaching soft skills. As a result, many novice teachers fall back on traditional methods familiar to them from their own school days and thus fail to incorporate essential soft skills into their lessons (Nguyen et al., 2015). Moreover, research indicates that teachers who are trained in soft skills frameworks and delivery methods not only create conducive environments but also foster effective collaboration among students (Biseth et al., 2022; Jalaludin et al., 2024).

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An additional barrier to effectively integrate soft skills is the insufficient training, teachers receive to use technology for teaching. Even where digital resources are available, many teachers are ill-prepared to incorporate virtual tools, simulations, or ICT-based collaboration techniques into the learning environment. This problem is particularly acute in low-income and underserved schools where teachers work under difficult conditions and have little opportunity or access to model effective technological integration (Okada et al., 2024). While technology can never replace skilled teachers' expertise, professional development must equip teachers to integrate digital tools effectively into their daily practices (Esquicha-Tejada et al., 2024; Szabo et al., 2020).

3.1.3. Professional Development Programs Rarely Address Soft Skills

As school dynamics, curriculum expectations, assessment techniques, and school demographics change over time, it is essential for teachers to keep up with innovative techniques to address soft-skills development. However, professional development opportunities that focus on soft skills are still limited. Many training programs focus on academic subject training, classroom management, meeting individual needs, assessment techniques and integration of technology but they do not explicitly train teachers in soft skills integration such as, combining creative work within subject teaching, collaborative project work, critical thinking, and emotional intelligence (Chandran et al., 2022; Nguyen et al., 2015). Additionally, in-service training is usually not accompanied by well-defined mentorship arrangements to assist novice teachers in dealing with the difficulties of integrating soft skills into the learning process whilst coping with increasing burdens of core curriculum implementation, assessment, and demographic changes (Paula & Grinfelde, 2018; Mahofa & Adendorff, 2022).

3.1.4. Resource and Infrastructure Constraints

The main challenge educators encounter stems from the shortage of resources available to them such as lack of availability of skilled mentors, trainers and coaches in soft skills development, limited availability of ICT tools and simulation technologies, lack of funding and know how, to access online international research and training. Research and time constraints become an additional barrier specially for female teachers, to develop and modify existing plans of work. The absence of two-way sharing systems between lead institutions and their partners restricts interdisciplinary teaching opportunities according to Sadirbekova et al., (2024) and Szabo et al., (2020). Teachers in resource-constrained schools face challenges to implement collaborative and creative teaching methods because they lack digital tools, insufficient physical space, and role models in leadership, which makes creativity and critical thinking exist only as theoretical concepts rather than functional approaches. The difference between educational theory and classroom practice requires adaptable frameworks which unite academic standards with real-world implementation. Educational technology policies need to establish affordable scalable solutions which provide teachers with necessary tools, training, and time allocation to bridge the ongoing implementation gap in collaborative, creative, and reflective classroom practice (Esquicha-Tejada et al., 2024; Miço & Cungu, 2022).

3.1.5. Cultural and Institutional Barriers

Cultural and institutional barriers in the form of examination results, as gatekeepers to universities and workplaces, have limited the integration of soft skills in education, prompting most school systems to retain conventional, teacher-centred approaches that prioritise information transfer over fostering students' abilities to think critically and creatively, communicate effectively, and collaborate in groups. In these conditions, teachers are required to cover substantial amounts of academic content, which does not allow for much flexibility, for student-centred, learning approaches that foster the development of soft skills. The teacher-centred way of teaching often limits the students' active participation, preventing them from

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acquiring the soft skills that are essential for solving real-life problems, working in groups, or engaging in reflection (Ragusa & Crampton, 2022).

Furthermore, existing institutional gaps in policy and curriculum development lead to inconsistent integration of soft skills education across the systems. Some education systems have no policy or guidelines that recommend or enforce integration of soft skills, thus varying from one system to another (Foster et al., 2022).

Without a clear framework, the integration of soft skills is left to the discretion of individual schools or teachers, resulting in a fragmented and inconsistent approach to skill development. Although many educators understand the need to develop students' interpersonal and cognitive skills, there is often no institutional support or training on how to incorporate these effectively. Thus, the absence of systemic policies, together with rigid instructional norms, maintains a knowledge-heavy education system that fails to appreciate the importance of soft skills. Policy reforms, professional development programs and institutional support mechanisms that encourage interactive learning approaches and provide teachers with structured guidelines for soft skills instruction are thus required to address this gap.

3.1.6. Lack of National Policies Supporting Soft Skills Integration

Another major issue is the absence of well-defined national policies that support integration of soft skills in education. Currently, in most situations, curricula are still traditional, inflexible, and based on subject matter, with limited or no integration of adaptability, creativity, teamwork, and leadership among key skills (Foster et al., 2022).

Policy level support, guidance and training are lacking, resulting in the uneven integration of soft skills education across schools. Novice and inexperienced teachers can struggle to incorporate soft skills effectively resorting to an ad hoc approach, rather than with a comprehensive and coherent system-wide approach. In addition, teachers may lack the incentive to teach soft skills, as student performance is still determined by traditional measures of examination and academic achievement (Subba Dewan, Bashir, & Teh, 2022).

3.1.7. Resistance and Misalignment

Moving from direct, lecture-based instruction to student-centred teaching methods that develop interpersonal skills requires a shift in educators' mindsets and institutional expectations. Many teachers resist implementing methods such as flipped classrooms and collaborative learning due to inadequate training and insufficient institutional support (Okada et al., 2024; Kormos, 2022). Altogether, teacher reluctance, misaligned curricula, lack of parental and community initiative, present major obstacles to integrating soft skills into classroom practice.

One main reason for this resistance is the insufficient experience with student-centred methodologies. Haji et al., (2017) found that teachers often feel unprepared and unsupported when attempting to adopt active learning techniques. They then revert to traditional methods, such as lecture. Teacher support, in terms of both professional development and day-to-day assistance, is crucial for the successful adoption of active learning and for the sustainability of innovative teaching (Okada et al., 2024; Kormos, 2022). If teachers feel unsupported and unprepared, they will adopt a teacher centred approach and struggle to balance soft skills instructions with the academic content.

Miliou et al., (2024) emphasise that the integration of soft skills is further hampered by misalignment of motivations and expectations. Most curricula remain theory-driven rather than practice-based, resulting in limited student exposure to real-world applications of soft skills such as problem-solving and teamwork.

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3.2 Innovative Strategies to Overcome Challenges of Introducing Soft Skills into Classroom Practice

Several research studies propose strategies that can serve as models for the integration of soft skill instruction into teacher education and classroom teaching. These studies provide new insights and make recommendations regarding the soft skill teaching and learning process. They emphasise active learning, using technology, and professional collaboration as ways to make soft skill education much more effective.

3.2.1. Inquiry-based and Problem-based Learning

Inquiry-driven education fosters critical thinking skills and teamwork while also supporting the goals of SDG target 4.4 which focuses on increasing the number of youth and adults with relevant skills for employment, decent jobs, and entrepreneurship. In South Asia and in other developing country contexts, it is important to introduce inquiry-based collaborative, Science, Technology, Engineering and Mathematics (STEM) initiatives to develop global competencies and meet local job market requirements, effectively blending international standards with local needs (Miliou et al., 2024; Esquicha Tajeda et al., 2024). Involving students in hands-on problem-solving tasks and project-oriented exercises in the real-world setting through inquiry-based education not only boosts their understanding of specific subjects but also nurtures qualities such, as leadership skills, adaptability, and teamwork as highlighted by Okada et al., (2024), and Haji et al., (2017).

Several studies have shown the impact of using inquiry-based and problem-based learning methods to cultivate important soft skills in students. According to Chew et al., (2021), integrating practical STEM tasks into inquiry-based learning has been proven to improve students' problem solving and teamwork skills. Similarly, the study by Hawari et al., (2023) revealed that project-based learning plays a role in fostering collaboration and leadership among students by engaging them in meaningful projects that require critical thinking and decision-making abilities. Combining STEM subjects with art and design projects enable for development of creativity and innovative thinking. These strategies support the development of learning environments where students participate actively in their educational experience by applying knowledge and soft skills to address practical and future challenges (Chew et al., 2020; Hawari & Noor 2020).

The importance of these approaches in transforming classrooms into interactive learning environments that promote skill growth is emphasised in literature findings. However, Chew et.al., (2020) caution that the success of such strategies greatly depends upon teacher readiness and the adequacy of resources, particularly in schools, with limited financial means. Although the benefits are well known, further research is needed to explore how these methods can be applied in educational settings and integrated into standardised assessment protocols.

3.2.2. Gamification and Digital Tools

While gamification and digital tools can be game changers in learning, they are less frequently used in low-income communities (Szabo et al., 2020; Noor, 2020). So, widening access to these tools can help build more equitable learning opportunities, contributing directly to SDG Target 4.3 (Inclusive Access to Quality Training). Cost- and scale-effective digital resources enable students to nurture adaptability and collaboration skills in line with global targets for inclusive education. Not only do these methods enhance motivation and engagement, but they also contribute to ensuring that learning is interactive and relevant to the needs of the 21st century (Chew et al., 2020; Noor, 2020).

Research highlights that Artificial Intelligence (AI) based gamification platforms such as Explain Everything, (digital white board app) could be used to analyse student engagement. Explain Everything, for example, produces an immersive environment for collaboration and problem-solving (Ahmed et al., 2021). Simulations aid students in developing empathy and teamwork in real life settings (Silva et al.,

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2020). These platforms make learning more fun and allow students to practice soft skills in real-life situations.

Gamification can benefit from the integration of AI-driven tools or interactive platforms into lesson plans. Digital simulations can allow students to cultivate decision-making and teamwork skills in a risk-free, controlled environment. This shows that teacher education programs must include seminars and workshops to guide teaching staff on the proper usage of these technologies, ensuring that they enhance learning. Additional studies are needed to determine how gamified learning can be made more widely available in resource-poor schools and the longer-term effects on skill development (Ahmed et al., 2021; Silva et al., 2020).

3.2.3. Mentorship and Cross-disciplinary Projects

Combining mentorship or apprenticeship with interdisciplinary exposure also allows students to master skills that will serve them throughout their studies and careers, such as leadership, teamwork, and problem-solving. These mentorship programs help achieve SDG Target 4.7 by using practical community-based learning methods to teach education for sustainable development and global citizenship, and civic engagement. Approaches such as CARE-KNOW-DO, and dilemma-based pedagogy offer avenues for integrating soft skills into classroom practice (Okada et al., 2024). These approaches provide opportunities for adaptability and civic engagement when they relate to tangible projects (Fernández-Sanz et al., 2017).

Community-oriented mentorship initiatives cultivate leadership and social responsibility. Projects addressing environmental conservation or public health, for instance, are aligned with SDG Target 4.7 (Education for Sustainable Development) to help students put their school learning to address an external real-world challenge (Afandi et al., 2019). These practices both encourage deeper problem solving as well as sustainable development and active citizenship through civic engagement and teamwork.

Research has shown that mentorship can increase leadership and creativity. For example, robotics mentorship programs have been demonstrated to engage students in hands-on, collaborative projects, thereby enhancing students' problem-solving and adaptability skills (Susilawati et al., 2020). These programs offer a structured approach while allowing students to take initiative, think critically, and innovate. Afandi et al. (2019) and Miritello et al. (2022) outline the importance of projects that address local challenges, such as environmental conservation or public health awareness, in helping students develop key soft skills while making meaningful contributions to society.

Schools' ought to partner with industry professionals and community organisations to set up these initiatives. Quantitative specialists in robotics, for example, can be called in to inform the design of the organisation, to create mentorship programs that tap into motivation, creativity, and technical expertise; while local partners can inform effective design of team-based collaborative activities that foster teamwork and leadership. Pre-prepared apprenticeship modules should also focus on mentoring and interdisciplinary learning to coach students in soft-skills development. These movements resonate with UNESCO's focus on experiential and community-based learning for a more holistic skillset for generations to come. Afandi et al. (2022) emphasises the importance of structured frameworks to provide equitable access to mentorship opportunities. Future studies should investigate the long-term effects and ways to address scalability and sustainability of cross-disciplinary mentorships and apprenticeship-based projects within low-resource environments (Susilawati et al., 2020).

3.2.4. Soft Skills Development Focused Pre-service Teacher Education Curricula

Teacher education is the foundation for the development of soft skills in students. The most effective teacher preparation programs incorporate hands-on learning and case-based discussions, along with mentorship, allowing new teachers to cultivate soft skills through modelling practices and co-teaching

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(Vitharana, 2024). Teacher education programs, both for new and existing teacher educators, need to incorporate advanced communication skills, emotional intelligence, and leadership into their curricula in anticipation of increasingly multicultural and technology-enhanced classrooms (Roberts et al., 2020).

The Work-Integrated Learning (WIL) model in teacher training blends theory with practical training, equipping teachers for real -world classroom challenges. WIL has positively impacted on the teachers' leadership, conflict resolution, and adaptive thinking skills (Bisschoff & Massyn, 2020). These experiential approaches are necessary for preparing educators for the unexpected challenges of the classroom (Khair Niaz, 2020).

Notably, resilience-building modules are included in teacher education programs in Bangladesh and Sri Lanka, which prepare teachers to respond to changing realities, particularly post-COVID-19 (UNICEF, 2021). Bangladesh's teacher training model, which integrates disaster management and resilience modules, shows implementation of skill-based learning practices is possible with very few resources (Ahmed et al., 2023).

Mobile-phone accessible learning (PBL) platforms and low-cost simulations are viable solutions to making tech-enabled learning more accessible to teachers from remote areas (Esquicha-Tejada et al., 2024; Miço Cungu, 2022). Another solution would be for community-driven initiatives to share digital access between schools so that resources such as technology that are limited can be shared across a wide range of schools (Nguyen & Yousuf, 2021).

Teacher training programs must also include approaches for how to best use what is available so that educators can still create effective lessons even in low-tech settings, with inclusion of teamwork across different sectors by creating inter-disciplinary work projects within teacher training programs (Okada et al., 2024). These programs can improve interdisciplinary teaching and provide underserved youth with similar opportunities to build competencies that are critical for soft skills development to that found in students in better-funded schools (Szabo et al., 2020). Moreover, long-term studies on the effect of resource investments through inter-disciplinary collaborative work, on teacher effectiveness and student learning outcomes in underserved areas are also warranted (Okada et al., 2024).

The programs and innovations need adjustments to match the specific school environment to address difficulties in implementing extensive educational innovation. For example, Ahmed et al., (2023) highlights that the Maldives' geographical layout demands innovative teacher development approaches since remote island locations make inter-school and inter-disciplinary physical collaboration costly and time consuming while online collaboration requires broad internet bandwidth and access, which is often limited. In such remote, isolated small schools, teachers are also expected to take on multiple roles, taking on multiple subjects and extracurricular activities, both within the school and within the community. However, this kind of close-knit community settings can provide skilled teachers with unique opportunities for soft skills development among the students.

3.2.5. Comparison of Challenges and Strategies in Soft Skills Implementation

Teachers across numerous studies noted that rigid curricula and heavy reliance on standardised testing often made it difficult to include activities that build soft skills like teamwork or problem-solving (Afandi et al., 2022; García-García et al., 2024). To work around these constraints, many schools have introduced project-based learning and competency-based approaches, which give more space for students to collaborate and think critically during lessons (Chew et al., 2020; Susilawati et al., 2020).

Another widespread issue was that many novice teachers do not feel adequately prepared to teach soft skills. Mentorship and reflective practice were identified as useful ways to support them (Biseth et al., 2022; Nguyen & Yousuf, 2021). Still, the success of these strategies depends a lot on whether schools have enough resources or support, which is not always the case especially in less privileged settings (Szabo et

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al., 2020). Even though the strategies are aligned with the problems, their real-world impact often comes down to things like funding, policies, whether teachers feel confident and supported enough to try them.

Table 2 below summarises how schools and teachers have used various strategies to overcome challenges and barriers to soft skills teaching, highlighting issues which need to be addressed. The next section highlights different frameworks and models which have been adopted across nations to implement soft skills curricula nationally.

Table 2. Alignment of Educational Challenges, Strategies, and Implementation Barriers

Challenge	Proposed Strategy	Effectiveness	Limitations to be addressed
Rigid curricula & assessment systems	Project-based Learning (PBL); Competency-based models	Encourages collaboration, critical thinking, and creativity	Needs development of soft skill grading frameworks, assessment rubrics, and integration into formal assessment
Lack of soft skills training in preservice teacher education	Coaching and Mentorship programs; Utilisation of reflective teaching practices	Supports novice teachers in effective classroom practice and to model soft skills	Needs training of lead teachers to implement and make scalable in low-resource settings
Insufficient ICT infrastructure	Gamification; Digital tools (e.g., simulations)	Enhances engagement, collaboration, and problem-solving	Enabling of interdisciplinary, intercommunity sharing of skills and resources among schools
Cultural & institutional resistance	Active learning & inquiry-based methods	Fosters student autonomy and teamwork	Development of a national/regional framework and a model to prepare teachers and to sustain them within the school, with support and mentorship models

3.3 Frameworks and Models to Integrate Soft Skills into Curricula

The “Four Cs” of the P21 Framework developed in the United States include Critical Thinking, Communication, Collaboration, and Creativity as essential skills for 21st-century learners (Partnership for 21st Century Skills, 2019). The model has emerged as a benchmark for soft skill inclusion in worldwide educational frameworks. The flexibility of this generic method has helped its spread in shaping contemporary pedagogical methods in diverse educational systems (Chew et al., 2020).

The CARE (Do We Care) model operates in multiple countries including the UK, Brazil, Greece, Spain, Romania, and Indonesia. The model's adaptable framework enables the achievement of different educational objectives including scientific citizenship, transversal skills, and student-centred learning in multiple educational settings. It also thrives on empathy, developing problem-solving capability, and fostering reflective practices leading to sustainable learning (Okada et al., 2024). According to the model, the best way to apply knowledge is through project-based learning. This framework can be modified and integrated into a teacher training program to improve the development of critical thinking and student-centred learning (Susilawati et al., 2020).

UNESCO standards focus on competencies for lifelong learning, adaptability, conflict resolution, and digital literacy (UNESCO, 2019). These guidelines capture an aspirational framework for teacher education systems around the world, particularly in settings with limited resources.

3.3.1 Mentorship-based Teacher Training Frameworks

Mentorship frameworks give teachers the essential tools they need to help their students develop the kinds of soft skills that are necessary for success in life. These frameworks provide scaffolding at the onset of a teacher's career. The mentorship frameworks help achieve SDG Target 4.3 by providing quality teacher training, and SDG Target 4.c by developing qualified teachers through practical training and professional assistance and ongoing feedback. Mentors offer hands-on training, professional support, and continuous

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feedback that allow pre-service and novice teachers to refine their skills in teaching (Nguyen & Yousuf, 2021).

Essential components of these frameworks include:

- Structured Mentorship Programs: Experienced mentors guide pre-service and novice teachers in embedding soft skills instruction within their teaching methodologies.
- Reflective Teaching Models: The teaching cohort engages in structured reflection that helps them refine soft skills integration into lesson plans and the overall teaching methodology.
- Collaborative Learning Communities and Professional Learning Communities (PLCs) allow the teaching cohort to share best practices, co-develop lessons with and without peer mentors, and offer constructive feedback to one another.

Consistent research shows that frameworks based on mentorship enhance not only the teachers' confidence but also their competence when it comes to fostering the essential skills that we in the education community now call soft skills.

These are the skills that help a person be an effective collaborator, problem-solver, and innovative thinker. Additionally, schools need to organise and implement support mechanisms to equip novice teachers to integrate and strengthen soft skills they learned in pre-service training programs.

3.3.2 Pedagogical Frameworks

The literature reviewed identifies the need for more experiential training and work-based learning models for teachers. Future studies should explore scalable frameworks of teacher education where there is a balance between theory and practice. Also, enabling policies for continuous professional development and mentorship may help to close implementation gaps. The research conducted by Ahmed et al., (2023) and Foster et al., (2022) within South Asia reveals that public education systems struggle because their strict hierarchies and limited teacher freedom, block innovative teaching approaches and student-centred methods, including problem-based learning, and soft skills development.

In the paper by Afandi et al. (2022), the authors explored the benefits of engaging in projects that involve the community and multiple disciplines as this foster oneness and partnership between individuals from different fields and disciplines. As for the positive effects, the reviewed articles revealed that problem-solving initiatives such as environmental protection or the quality of life of society generate civic engagement and, at the same time, multiple soft skills. To implement these plans effectively, preservice training institutions and schools will have to collaborate with professionals from other industries and community organisations. For instance, robotics experts, and skilled craftspeople can offer practical guidance in mentorship activities that aim at nurturing creativity and critical thinking abilities; while community leaders can help to identify and implement community projects that can help in the development of teamwork and leadership skills.

Teacher training programmes should also have modules and mentorship opportunities to help new teachers to be able to support students effectively. These endeavours are in harmony with the UNESCO's focus on community-based learning which enhances the attainment of adequate skill set.

Although it has been proven that mentorship and interdisciplinary projects are good for mentees and mentors as reported by Susilawati et al. (2020), Afandi et al. (2022), it is generally acknowledged that it is crucial to have organised systems in place that enable everyone involved to access mentorship programs equally. The authors recommend that future studies should identify the mechanisms which can increase the availability of these initiatives and evaluate their impact on skill development across different educational levels overall.

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3.4 Evaluation of Frameworks' Effectiveness in the South Asian and in Small Island Developing State Contexts

The typical frameworks for developing soft skills, including competency-based models, and experiential learning along with mentorship-based approaches demonstrate solid potential. The frameworks need adjustments to suit the educational environment of South Asia and small island developing states such as the Maldives, and Sri Lanka. According to Ahmed et al., (2023) and Nguyen & Yousuf (2021), archipelagic nations require localised solutions due to their unique infrastructural and transportation limitations. The effectiveness of mentorship frameworks depends on institutional support because they provide real-time guidance and skill modelling. The South Asian region faces challenges because of the lack of established mentorship policies which leads to disorganised support systems that often fail to provide consistent or accessible help. The inconsistent nature of mentorship programs restricts their ability to function as a large-scale solution for new teacher development. Biseth et al., (2022) emphasise that sustainable mentorship programs need to become a part of national teacher development policies to achieve both equal access and enduring success.

The success of these frameworks to improve soft skills in the South Asian region and in small island developing states depends on initiative to implement flexible curricula, school autonomy, improved teacher preparation on soft skills implementation as well as consistent institutional support. As they begin introducing soft skills, focus can be on the development of a data driven set of soft skills based on public gathering of students, parents, employers, teachers, higher education faculty members, industrialists, and the community at local scale of cities and councils. Higher education institutions can lead training school heads, ministry of education policy makers and others on importance of these skills as well as strategies for implementation. The skills which have received the most attention in policy and research developments, highlight the connection between intra- and inter-personal abilities with socio-emotional skills including adaptability, critical thinking, creativity, communication, collaboration, and problem solving with meta-cognition, perseverance, conscientiousness, motivation, and self-efficacy, (Cavanagh, Leeds & Peters, 2019; Garcia-Chitiva, & Correa, 2024).

3.5 Considering Multiple Perspectives and Opposing Findings

The research about soft skill integration through project-based learning and mentorship shows promising results, but scholars disagree on their widespread effectiveness. The effectiveness of mentorship as a teacher development tool remains uncertain because some research shows that standard protocols and institutional support are needed to prevent mentorship from becoming inconsistent or ineffective (Mahofa & Adendorff, 2022). Research conducted in the Netherlands demonstrates that teachers have the freedom to teach creativity and collaboration (Kamp et al., 2022), but South Asian studies indicate that strict organisational structures, together with minimal employee autonomy, block innovation (Ahmed et al., 2023).

The academic community praises gamification for boosting student engagement yet experts warn that excessive use of digital tools can create distractions from meaningful learning unless educators establish specific educational objectives (Silva et al., 2020). Okada et al., (2024) revealed that active learning strategies implemented in resource-limited settings might raise teacher workloads and deepen educational inequalities when adequate support structures are absent.

The above research findings demonstrate that strategies need to be tailored to specific locations because no single approach can work across all contexts. Research-based solutions for soft skills education need to consider the range of national policies, and political willingness as well cultural and institutional environments as they affect the teaching of soft skills to both teachers and school children.

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4. CONCLUSION

This review describes the challenges teachers face, and innovative strategies teachers and institutions use to promote development of soft skills in students. Main challenges include limitations in integrating soft skills across pre-service teacher training programs, inflexible curricula within schools, a lack of resources and knowledge, unavailability of continuous support for innovation, and resistance to new pedagogical methods. However, recent strategies to soft skills development, including inquiry-based learning, gamification, mentorship programs, and developing inter-disciplinary teaching frameworks, provide promising innovative solutions to these issues.

Teachers are important in enabling and assisting students in the acquisition of crucial 21st century soft skills. However, they cannot overcome the structural and teaching-related barriers they face, alone. Real change requires a collaborative effort among policymakers, educators, and researchers. Through the implementation of these strategies, schools can find themselves closer to achieving SDG Goal 4: Quality Education. This is to provide every learner with access to inclusive, fair, and lifelong learning opportunities. To do so requires a focus on modification of pre-service training, support and mentoring for novice teachers, on-going professional development, and mentoring for all teachers to include soft skills. These can integrate media literacy and technology skills, intra-and interpersonal non-cognitive skills, development of socio-emotional dispositions, and student engagement as compulsory training for all teachers.

The proposed actions are aligned with specific SDG targets. Recommendations for Teacher Training, Continuing Education and Mentorship Programs, target SDG Target 4.3 (Equal access to quality technical, vocational training and higher education). These actions further support SDG Target 4 by addressing curriculum and resource disparities. Inquiry-based learning, project-based activities, and gamification support teamwork, problem-solving, and leadership skills, which lay the groundwork for industry-ready employment, as highlighted in SDG Target 4.4 (Relevant Skills for Employment and Entrepreneurship), which aims to provide relevant skills for employment and entrepreneurship. In a comparable way, culturally responsive teaching and community-driven projects are directly aligned with SDG Target 4.7 (Education for Sustainable Development and Global Citizenship) by promoting civic engagement, sustainability, and global citizenship.

This review holds a simple approach to enhance teacher education, curriculum design, and the application of resources by linking research finding to practical strategies which can be implemented. These insights are especially important for policymakers and educational leaders who are dedicated to building globally competitive, morally strong, and future oriented students. Therefore, it is relevant to the national and global education reform initiatives in line with SDG Goal 4.

5. RECOMMENDATIONS

Derived from the literature review results, multiple actionable recommendations are suggested in key areas such as policy, curriculum, teacher training, resource allocation, innovation efforts, research, and development. These actions aim to address challenges and facilitate the embedding of soft skills in educational systems. Educational policies need to support both early and ongoing soft skills education through preservice and in-service teacher training programs. The development of official curriculum, assessment and professional development guidelines should serve as a means to support the integration of communication and teamwork and adaptability into school curriculum, instruction, assessment, and teachers' professional development strategies.

Inclusion of project-based learning, real-world simulations and collaborative group tasks which help students develop critical thinking and interpersonal skills, together with structured rubrics for evaluating soft skills including problem-solving and collaboration and creativity, could enable for standardized

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teaching, learning and assessment methods which are aligned to the national curriculum guidelines to develop soft skills among teachers and students, within formal learning environments.

Teacher education programs need to embed soft skills training into their curriculum through practical modules and experiential learning activities. Mentorship programs with structured support should be established to help novice teachers develop their soft skills through practical classroom applications. Educators need ongoing professional development to acquire new methods and approaches for teaching soft skills effectively.

The government along with institutions should allocate funds to enable access to digital platforms which enable interactive learning. The combination of blended learning with AI-assisted teaching tools and gamified environments improves student engagement and helps students develop soft skills especially in areas with limited resources.

Additional empirical studies must be conducted to assess the sustained effects of soft skills implementation in diverse cultural environments and underdeveloped educational settings. The development of flexible soft skills frameworks which adapt to local requirements will be essential for future implementation and scalability.

The recommendations from this review support SDG Targets 4.3, 4.4 and 4.7 by improving teacher training quality and building employability skills through soft skills and community-based learning for responsible citizenship.

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CONFLICT OF INTEREST STATEMENT

The authors confirm that this research was conducted without any self-benefits, commercial or financial conflicts.

AUTHORS' CONTRIBUTIONS

Hidaya Mohamed Zahir contributed to the literature search, screening, data extraction, analysis, and drafting of the manuscript. Faizah Abd Majid supervised the research and provided critical feedback and guidance throughout the research process and manuscript development. All the authors reviewed and approved the final version of the manuscript.

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