

Problem Solving Soft Skill - A Critical Need for Future Teachers

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Abstract: *Problem-solving skills are vital in personal, professional, and academic life, encompassing adaptability, critical thinking, creativity, conflict resolution, decision-making, career growth, and personal development. Teachers especially need these skills to run classes effectively and foster students' soft skills. In today's education, prospective teachers face many challenges that require more than subject knowledge. Problem-solving is a key soft skill crucial for classroom management, instructional adaptability, student engagement, and decision-making. It helps teachers respond to behavioural issues, diverse needs, curriculum limits, and technology integration. The article emphasises incorporating problem-solving training through case-based learning, reflection, and mentorship into teacher education. Improving this skill enhances teaching and builds a resilient education system. As Robles (2012) states, soft skills like problem-solving are vital for workplace and teaching success in 21st-century classrooms. The article argues that developing problem-solving abilities during teacher prep is essential for a competent, future-ready workforce. The study aimed to assess problem-solving skills among 100 B.Ed trainees at Calicut University, using a survey and the Scale of Problem-solving Skill. Results showed a significant difference between male and female trainees, but not between rural and urban students. The conclusion suggests that problem-solving skills can be improved through tailored teaching methods and context.*

Keywords: Soft skill, problem solving, prospective teachers

1. Introduction

Soft skills are essential to the sustainable life of every person. They are defined as a set of psychological competencies and interpersonal skills that help people make informed decisions, solve problems, think critically and creatively, communicate effectively, build healthy relationships, empathise with others, and cope with and manage their lives in a healthy and productive manner. Similarly, soft skills are important in one's career. Soft skills are as important as content competencies for teachers today. Teachers also have the responsibility to increase children's knowledge and develop other skills that affect life. Problem-solving skills are an important soft skill that teachers should have.

Quality Education is the need of the modern era. People around the world face many challenging situations that can be avoided through education by embracing problem-solving skills as a key component of quality education. Problem-solving is fundamental to education because educators are interested in improving students' ability to solve problems, which are a part of our lives. Every problem has a solution; one just has to find it (Mamta Mandale 2019). The World Economic Forum has also recognized problem-solving skills as one of the essential 21st-century skills. A focus on problem-solving during the school years helps students become more resourceful and confident in finding constructive and unique solutions to the problems of the current times. Parents and teachers need to focus on this skill for their child's overall development. In order to develop problem-solving skills in students, teachers must have a clear understanding of these skills and be proficient in applying them.

Objective

- To find out the extent of problem-solving soft skills in prospective teachers.

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- To understand problem-solving skills as a soft skill and the relevance of problem-solving skills for prospective teachers.
- To suggest suitable techniques for fostering problem-solving skills.

Hypothesis

- There exists a satisfactory level of problem-solving skill in prospective teachers.
- There exists no significant difference in problem-solving soft skills among prospective teachers for the subsample gender.
- There exists no significant difference in problem-solving soft skills among prospective teachers for the subsample locale.

2. Method

Sample

The study was carried out on a representative sample of 100 prospective teachers from a training college under Calicut University. Sample selection was done using a stratified sampling technique, giving due representation to gender and locality.

Instrument

The tool used for data collection is the problem-solving scale (Ranjitha & Afeef, 2025). The scale consists of five components of problem-solving skill (identify problem, define problem, generate alternatives, implement, and follow the solution). There are 30 statements in the scale. Subjects have to decide how far each statement in the scale is true to their case. For positive statements, the responses are completely agree, partially agree, and disagree, with scores of

3, 2, and 1, respectively. The scoring scheme is reversed for negative statements.

3. Procedure

To determine the extent of problem-solving skills, the mean was calculated. The differences in the extent of problem-solving skills between the relevant subsample were calculated using the test of significance of the difference between the means.

4. Result

The extent of problem-solving skills among B.Ed. trainees was established by calculating the mean score. The mean score is 181.79, indicating that student teachers (B.Ed trainees) have a satisfactory level of problem-solving skills.

The mean and standard deviation of problem-solving skills in the sample were calculated separately, and significance was tested using a test for the difference between means. The result of the test is presented in Table 1.

Table 1: Results of the test of significance of the difference between means of Problem-Solving skill among B.Ed. Trainees with respect to Gender and Locale

Variable	Sub sample	Category	N	M	SD	t-value	level of significance
Problem-solving skill	Gender	Male	30	197.16	19.52	3.64	0.05
		Female	70	175.20	16.79		
	Locale	Rural	68	181.73	26.96	0.35	NS
		Urban	32	184.6	38.15		

The analysis of the above data shows that there is a significant difference in the extent of problem-solving skills among B.Ed. trainees with respect to gender. Even though urban student teachers show higher problem-solving skills, the difference between the two subgroups was not statistically significant. Based on this analysis, it can be said that there is variation in problem-solving skills among B.Ed. trainees, and therefore, it is necessary to bring changes in the teacher preparation programs that will improve problem-solving skills.

In the ever-evolving educational landscape, the role of the teacher extends far beyond knowledge transmission. Today's classrooms demand educators who can adapt, respond, and innovate. One of the most crucial competencies in this regard is problem-solving, a soft skill essential for effective teaching and student engagement. For prospective teachers, those in training or entering the profession, developing problem-solving skills is not just beneficial but necessary to navigate a classroom complexity, curriculum demands, and diverse student needs.

Understanding Problem Solving as A Soft Skill

Problem-solving is a soft skill, the ability to identify challenges, analyse situations, devise potential solutions, and implement effective strategies. Unlike technical or hard skills, problem-solving is more cognitive and interpersonal. It encompasses critical thinking, creativity, decision-making, and adaptability (Robles, 2012). In education, this involves responding to behavioural issues, adapting to curriculum changes, dealing with limited resources, or managing interpersonal conflict.

Relevance of Problem-Solving Skills for Teachers

- **For classroom management:** - Effective classroom management requires immediate and appropriate responses to unexpected student behaviour or disruptions. Prospective teachers must learn to assess situations rapidly and choose strategies that maintain and foster a conducive learning environment.
- **For adapting to diverse learning needs:** - Modern classrooms are diverse, with students from various linguistic and cultural backgrounds. Prospective teachers

face challenges in differentiating instruction and accommodating individual learning needs.

- **For adapting to curriculum change:** - Teachers frequently face curriculum-related issues, including time constraints, resource limitations and changing educational policies. Problem-solving enables them to adapt lesson plans and teaching methods effectively.
- **For integrating technology:** - As education becomes increasingly digital, problem-solving helps prospective teachers troubleshoot technical issues, select appropriate digital tools, and maintain student engagement in virtual or blended settings.
- **For professional growth and collaboration:** - Teachers often work in teams, requiring collaboration and negotiation. Problem-solving skills enhance teamwork, conflict resolution, and professional decision-making (Sezer 2020).
- **Developing Problems Solving Skill in Teacher Education**
- Teacher education programs must embed soft skills training into their curricula. Problems solving can be fostered through
- **Case-based learning and simulation:** - *Engaging in real-life scenarios helps* student teachers apply theory to practice.
- **Reflective practices:** - Encouraging reflection on classroom experiences promotes deeper understanding and adaptive strategies.
- **Collaborative projects:** - Group tasks stimulate workplace dynamics and help improve their personal problem-solving abilities.
- **Mentorship and internships:** - Hands-on teaching under an experienced mentor provides insight into practical classroom problem-solving.

5. Conclusion

The study shows that B.Ed. trainees have some problem-solving skills, but teachers will face more problematic situations in the coming period. Therefore, they need greater strength and capacity to manage students. Teacher educators should try to foster this ability among them. To that end, we adopt a range of teaching methods and co-curricular activities

to develop problem-solving skills. Practical teaching methods should be included in the curriculum of the teacher training course, and teachers should be trained properly in those methods during pre-service training. Workshops, jigsaw sessions, and brainstorming should be conducted properly under the supervision of appropriate persons to realise values in present-day life. Personality development and soft-skill development programs may be conducted. A course on problem-solving skills and human relations should be included in the curriculum for teacher trainees to prepare them to solve problems in the classroom and in school administration.

Problem-solving is a foundational soft skill that prospective teachers must develop to thrive in today's dynamic educational environment. By cultivating this ability, they not only become more effective teachers but also better prepared to support their students' holistic development. Teacher education programs, therefore, prioritise the integration of soft skills, particularly problem-solving, to ensure the creation of a resilient and resourceful teaching workforce.

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