



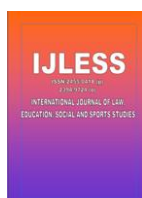
Evaluating Life Skills and 21st-Century Competencies in B.Ed. Students: Tools and Techniques

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Abstract

The most high-level teachers for the future with life and 21st century skills combining to be taught within a context of complex globalization, class changes and information technology innovation. The study provides the importance of critical thinking, creativity, higher order info-technological skill, and collaborations integrated with such soft skills as emotional intelligence and agility in the educational guides used in teacher training resources. Assessment of life skills varied from reflective journals and rubrics, to new technologies with simulations and peer assessment. Frameworks for the alignment of life skills assessment to promoter for educators, evaluation frameworks P21 and transversal skills identify gaps in soft skill evaluation while proposing strong measures for authentic assessment for which will provides thought for ensuring future educators develop their competencies in teacher education.

Keywords: 21st century skills; critical thinking; collaboration; creativity; digital literacy; life skills.

1. Introduction

The rapidly changing educational landscape means that educators need both a thorough understanding of their area of study, as well as a wide range of competencies and life skills associated with the 21st century. These competencies are critical to building inclusive, flexible, and active learning environments to support the rapid change that is occurring in society and technology [1]. Furthermore, as schools become more diverse and technocentric, the expectation on educators to demonstrate more than the basics of academic competence- with their capability to also include emotional competence, collaborative competence, and critical thinking.

Life skills, as defined by the World Health Organization (1999), are "abilities for adaptive and positive behaviour that help people deal well with the demands and challenges of everyday life." Similarly, 21st-century skills, as defined by organizations such as the Partnership for 21st Century Skills (P21) and UNESCO's transversal skills, comprise a combination of thinking and social skills such as creativity, problem-solving, computer literacy, and global awareness. The National Curriculum Framework for

Teacher Education (NCERT, 2020) emphasizes the significance of teacher education in developing thinking, feeling, and caring persons into reflective, caring, and socially responsible teachers. Hence, it is of paramount importance to evaluate these life skills while pursuing B.Ed. so that the teachers are not only efficient in schools but also able to cope with the emerging challenges of the teaching profession [2].

B.Ed. education plays a very significant role in developing these skills. But traditional testing procedures do not show the depth and width of these skills [3]. There is an urgent need for better and genuine methods of testing students. This is especially required to make sure that future teachers are not just informed but also able to perform well in complicated educational settings. This article reflects on how 21st-century skills and life skills are tested in teacher education programs and reflects on ways of improving these test procedures for better teacher training.

2. Conceptual framework

Life skills and 21st-century competencies are complementary skill sets that are critical for the overall performance of B.Ed. students. Life skills, according to the World Health Organization (1999), include psychosocial skills, which people use to cope with the everyday pressures of life: communication skills, emotional skills, social skills, and coping and coping with stress among a host of other things. Life skills, then, include necessary skills to deal with the emotionally charged realities and multi-layered social spaces of classrooms.

21st-century competencies are classified/organized instead into three broad categories: learning and innovation skills (e.g., critical thinking, creativity); digital literacy skills (e.g., information literacy, ICT literacy) and life and career skills (e.g., collaboration, flexibility, initiative). Further unpacked by UNESCO (2016), "transversal competencies" included things like global citizenship, interpersonal skills and media and information literacy - skills which exist beyond subject disciplines and are critical for any job in the future and active citizenship [4].

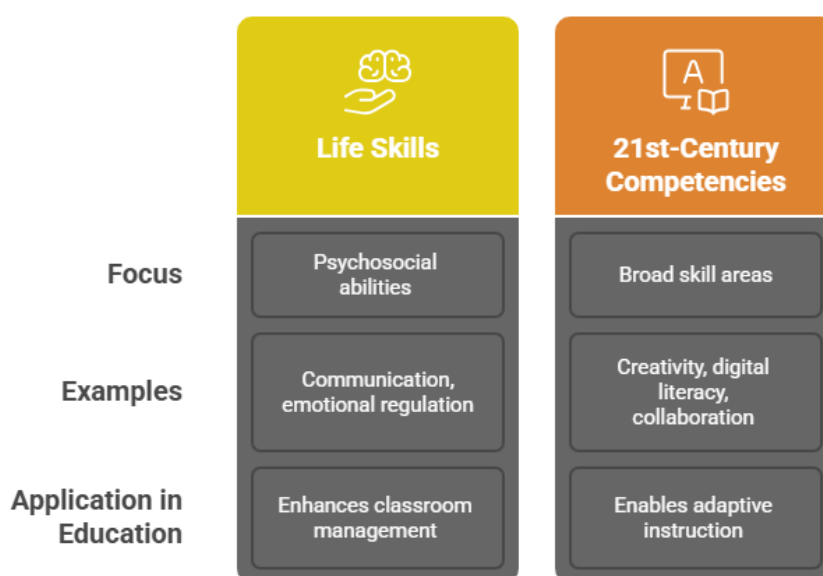


Figure 1: Life skills vs 21st century competencies

These domains come together to create a framework for teacher education that can prepare teachers to engage with changing educational demands. Emotional intelligence commissions classroom management, critical thinking promotes flexible instructional methods that allow for diversity across

students, and digital literacy enables teachers to use technology imaginatively throughout their teaching [5].

Integrating frameworks into a B.Ed. programme, expands the capacity for teaching effectiveness and ensures that teachers become reflective practitioners, collaborative colleagues, and life-long learners. This conceptual framework validates the need for a set of assessments that consider both traditional capabilities and possibilities for new contexts.

3. Core competencies to be evaluated

B.Ed. education must be devoted to the deliberate development and evaluation of both life skills and 21st century competencies in order to produce educators who are pedagogically very competent but also socially and technically competent as well, the following are key competencies that must be evaluated.



Figure 2: Core competencies for B.Ed. students

- **Communication Skills:** The ability to communicate clearly and effectively, both verbally and non-verbally, plays a key role in classroom management, instructions and student engagement. Teacher clarity greatly impacts student success. Moreover, active listening, non-violent communication, and feedback are core sub-skills that help create respectful and inclusive learning experiences [6].
- **Critical Thinking and Problem Solving:** B.Ed. students must be able to critically analyse educational dilemmas and adopt context-specific responses. This capacity is required for reflective teaching and evidence-based decision-making. Critical thinking also leads to ethical judgment and educational leadership [7].
- **Collaboration:** Teaching today is more collaborative, including co-teaching, professional learning communities and shared stakeholder collaborations. In the collaborative, teaching model, teachers are all working together, sharing teaching responsibilities, and co-developing learning experiences. Vygotsky's social constructivist theory emphasizes social interaction as the basis for cognitive development and aligns with why collaborative practice is emphasized [8].
- **Creativity:** Creative labour in education increases student involvement and enhances imaginative thinking. Teachers must be creative professionals that design engaging productive

and flexible learning atmospheres. When evaluating creativity, we look at lesson planning, instructional flexibility and resourcefulness [9].

- Emotional Intelligence: Emotional intelligence as an essential determinant of successful leadership and interpersonal effectiveness. B.Ed. students with high emotional intelligence are more likely to manage classroom interactions effectively, handle conflict, and establish trusting relationships with students [10].
- Digital Literacy: Teachers must be proficient with digital tools as a method of instruction and assessment, yet also for ongoing professional development. Digital literacy consists of knowledge of online safety, evaluation of media, and incorporation of educational technologies. The European Commission's Digital Competence Framework for Educators identifies digital competence as a key teaching competency of the 21st century [11].

4. Assessment Tools and Techniques

A range of traditional and modern tools are used to evaluate life skills and 21st-century competencies in B.Ed. students [12]:



Figure 3: Assessment tools for B.Ed. students

- Reflective Journals and Portfolios: These will allow students to search their souls and record their learning journey. The activity of reflective writing is also said to boost metacognition and support professional development.
- Structured Observation Rubrics: Used during the teaching practicum, these rubrics evaluate performance in real-time on parameters such as collaboration, interaction with the classroom, or the use of technology.
- Simulations and Role-Plays: These scenarios replicate actual classroom challenges, helping to develop skills like problem-solving, empathy, and decision-making.
- Peer Assessment and Group Projects: These practices encourage mutual learning, accountability, and constructive feedback. Peer evaluation helps develop critical reflection and communication skills.

- Digital Tools: Platforms such as Padlet, Google Workspace, and e-Portfolios make it easy to integrate multimedia and work together on assessments. Research indicates that these digital platforms boost engagement and showcase learning in a variety of formats.

5. Case examples / best practices

Global and regional best practices highlight how different institutions evaluate life skills and 21st-century competencies among B.Ed. students:

- Finland: Finnish teacher education programs now utilize simulated classroom settings and video microteaching to assess emotional intelligence capacity and decision-making under pressure. By providing four formative digital assessments, the students received peer feedback and feedback from the mentor action, based on the formative assessments provided to the students who then had to incorporate it into their own individual development plans [13].
- India: The Tata Institute of Social Sciences (TISS) educates life skills in a series of community engagement projects, and reflective journaling. B.Ed. students participate in field visits where they examine their communication, empathy, and problem-solving skills. Reflections are evaluated using structured rubrics, created by faculty [14].
- United States: Stanford University's teacher education program includes the edTPA (Teacher Performance Assessment), which consists of video analysis, lesson plans, and a reflective commentary. The edTPA focuses on communication, student engagement, and differentiation strategies – key components of 21st-century competencies and life skills [15].
- Singapore: The National Institute of Education (NIE) has focused on collaborative learning through inter-disciplinary teaching labs. These labs promote the use of peer-assessment, digital storytelling and design thinking (learning) projects to measure student learning and include creativity, collaboration and ICT capabilities. To assess B.Ed. students, a common form has been to assess B.Ed. students based on their ability to co-plan, co-teach and critically reflect on their innovative lessons [16].
- Australia: Universities such as Deakin University incorporate life skills through practicum experiences using "Teaching Performance Assessments" (TPAs) which measure student empathy, classroom management, and adaptability. Students are required to provide evidence of professional dispositions and engagement with inclusive pedagogies [17].
- South Africa: Ubuntu is part of the curriculum design of the B.Ed. program offered by the University of Pretoria, which highlights human dignity, compassion, and concern for social justice. Evaluation of interpersonal competencies, especially in multicultural settings, is conducted through peer-led workshop and group reflective discussions [18].

These examples reflect a growing global consensus on the need for authentic, contextualized, and multi-modal approaches to evaluating teacher readiness beyond academic knowledge.

6. Challenges and limitations

While the evaluation of life skills and 21st-century competencies is essential for preparing well-rounded B.Ed. students, several challenges and limitations hinder the effective implementation of these assessments in teacher education programs:

- Subjectivity in Assessment: Because many life skills are subjective, like empathy and collaboration and creativity, etc., they are hard to quantify with standardized instruments. Furthermore, the lack of an accepted universal rubric means the evaluations could be inconsistent and biased by the educator.

- **Faculty Preparedness and Training Gaps:** Teacher educators frequently do not have formal training related to assessing non-cognitive and affective domains. However, without explicit professional development, evaluators are likely to use intuition instead of evidence-based criteria, resulting in unreliable outcomes.
- **Time Constraints and Curriculum Overload:** Utilizing life skills and 21st-century competencies takes additional teaching time, and this will likely not fit into an already packed B.Ed. curriculum. It often results in integration, but not in-depth teaching and assessment of these skills.
- **Lack of Infrastructure and Resources:** Authentic assessment methods, like digital portfolios, simulations, and video analyses, require a proper technological foundation and support structures. Realistically, many institutions, especially in lower resource settings/contexts do not have these crucial platforms.
- **Cultural and Institutional Resistance:** In many educational contexts, there is some resistance to formally assessing soft skills. This resistance is often due to the institutional traditions in higher education that have an exclusive focus on cognitive based academic achievements. It doesn't help that change is typically slow in education systems generally.
- **Difficulty in Capturing Longitudinal Development:** Life skills and the competencies required to be successful in the 21st century are consistently evolving over time, and in order to accurately assess them it's important to assess them over time. Short assessments at the end of the semester, or even at the end of a practicum, do not take the larger picture into account when assessing these growth processes.
- **Student Resistance and Anxiety:** Some B.Ed. students may be somewhat confused or even apprehensive related to alternative assessments such as peer assessment or self-reflection. This confusion can sometimes compromise the authenticity of their responses and, thus, the validity and reliability of their assessment results.

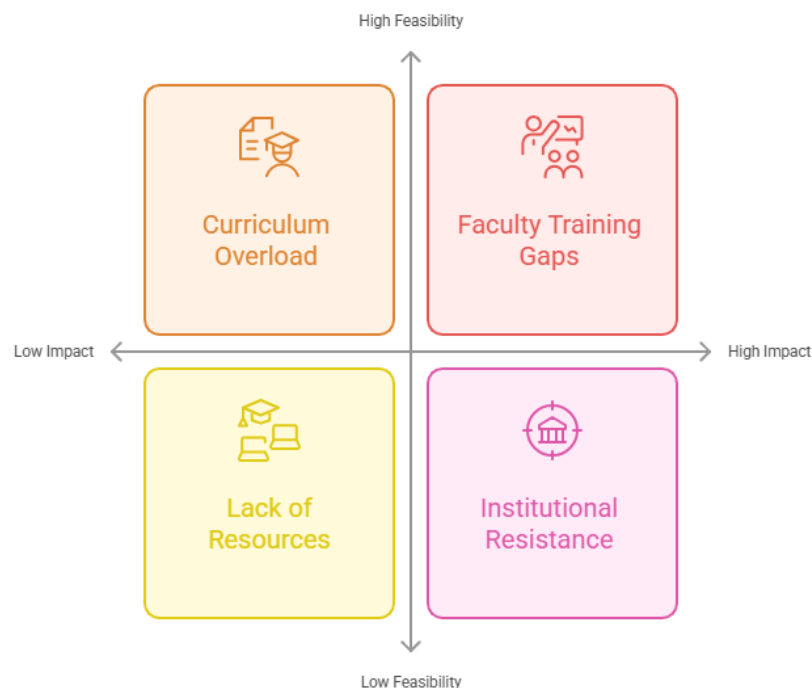


Figure 4: Challenges in holistic assessment implementation

Addressing these challenges requires a concerted effort at multiple levels—from policy reforms and faculty development to technological investment and curriculum redesign. Emphasis must also be placed on building institutional cultures that value holistic education and lifelong learning.

7. Recommendations

To enhance the effective evaluation of life skills and 21st century competencies among B.Ed. students, the following recommendations are proposed:

- **Develop Contextualized Rubrics:** Institutions ought to collaborate with faculty, students, and industry stakeholders to develop assessment rubrics that are relevant, reliable, and contextually appropriate. These rubrics should clearly outline performance descriptors for essential skills such as critical thinking, emotional intelligence, and adaptability.
- **Integrate Technology-Enhanced Assessment:** Take advantage of utilizing digital platforms for e-portfolios, simulations, and feedback. The possible uses of Padlet, Flipgrid, and other digital storytelling applications can improve your reflective and collaborative skills and tracking assessments.
- **Capacity Building for Faculty:** It is vital that teacher educators engage in continuous professional development with a focus on developing and implementing authentic assessments. It will be beneficial to embed workshops related to formative assessment strategies, peer-assessment, and socio-emotional learning (SEL) assessment within their training modality.
- **Embed Life Skills in Curriculum:** Life skills and the competencies needed for the 21st century shouldn't just be thought of as an adjunct and should be integrated into lesson plans, experiential learning opportunities and assessments. Interdisciplinary modules and project-based learning are two excellent possibilities for integration.
- **Implement Reflective Practice Frameworks:** Encourage B.Ed. students to maintain and utilize reflective journals, teaching diaries and learning portfolios. By taking the time to engage in reflection, they build metacognition, improve self-awareness and foster personal growth—all of which are critical to developing essential skills for life.
- **Foster Peer and Self-Assessment Culture:** Foster a supportive classroom environment for B.Ed. students to engage in structured peer feedback and self-assessment. By creating a coherent environment for peer feedback and self-assessment, students are empowered to take responsibility for their learning and engage more fully with the assessment criteria.
- **Policy Support and Accreditation Alignment:** National and institutional policies must require that teacher education programs offer life skills and competencies for 21st century education. The new criteria developed by accreditation organizations, such as NCTE and NAAC, should also evaluate how to assess comprehensive skills development.
- **Conduct Longitudinal Tracking and Research:** Universities should follow the long-term fate of their graduates to see how those skills transfer to real situations in classroom practice. Evidence of those transfers would be particularly useful in shaping curricular and pedagogical decisions.

By implementing these measures, teacher education institutions can ensure that B.Ed. students are not only proficient in their content but also possess soft skills and adaptability to flourish in the learning environment of today.

8. Conclusion

Assessing life skills and 21st-century competencies in B.Ed. students is an important practice towards developing flexible, creative and caring educators. The 21st-century educational landscape is constantly evolving and needs us to reimagine teacher education, preparation, and assessment. Even though we will be assessed for student learning, teacher education programs can assume a proactive stance using comprehensive, reflective and empowered assessments to ensure their graduates are not only academically strong, but equipped the necessary skills to thrive in today's classrooms.

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