

Transforming Initial Teacher Education for 21st Century Classrooms

Fekede Tuli, Adula Bekele, Eyuel Abate, Ephrem Tekle, Getachew Baye, Yifiru Waktole, Silesh Abate,
Mistre Yifiru, Fufa Beyene, Tediros Fentahun, Belayineh Bogal

Kotebe University of Education

Executive Summary

This policy brief addresses the issues facing the Initial Teacher Education (ITE) system in Ethiopia, whose failure to prepare teachers adequately for 21st century classroom realities has drawn increasing concern. The brief highlights the need for a shift away from a theoretically heavy curriculum to one that balances theoretical knowledge with practice focusing on core skills: collaboration, creativity, and digital literacy. It points out the weaknesses of teacher training: not putting enough focus on technology integration and real teaching practices that results in graduates being not sufficiently prepared to deal with diverse learning environments and challenges. The brief also identifies several systemic issues, such as ineffective recruitment processes, unsatisfactory partnerships between schools and universities, and insufficient teacher development. These issues are all contributing factors to high dropout rates and a general lack of qualified teachers. Furthermore, the lack of retention strategies for teachers and the sporadic use of ICT act to exacerbate these issues impacting learning outcomes and educational success. Hence, the brief proposes a series of reforms that involve the integration of evidence-informed practices, enhancing curriculum applicability to practical teaching needs and stronger collaborations among learning institutions, policymakers, and communities to address the challenges. Ultimately, the policy brief calls for a holistic strategy to reform the ITE system in Ethiopia with a focus on improving resources, teacher competencies, and alignment of teacher education programs with the skills required in modern classrooms. This includes incorporating technology into the curriculum, promoting innovative pedagogy, and rendering research-based teacher training and responsive to the evolving needs of the education system. Ethiopia can build a more capable and adaptable teaching force while improving educational performance and country development in the long-term by working towards the realization of the policy options forwarded.

1. Introduction

The 21st century presents challenges and opportunities for education, particularly in developing countries like Ethiopia (Fullan & Hargreaves, 2017). Quality education requires core 21st century skills: learning (collaboration, communication, creativity, critical thinking), literacy (information analysis, digital competence), and life skills (self-awareness, resilience, empathy) (Pardede, 2010). Initial Teacher Education (ITE) is crucial for preparing educators but often emphasizes theory over practice, making it inadequate for modern demands (Ingersoll & Smith, 2003). Effective ITE should integrate global perspectives, inclusive teaching strategies, and research-based practices (Banks, 2008; Mishra & Koehler, 2006).

Continuous teacher learning enhances reflective practice, collaboration, and student outcomes (Timperley et al., 2007). Mentorships, action research, and Technological Pedagogical Content Knowledge (TPACK) ensure digital tool integration (Backfisch et al., 2024). Developing teacher dispositions like empathy and cultural responsiveness fosters inclusive learning (Darling-Hammond, 2010). Addressing teacher recruitment and retention through better working conditions and leadership opportunities is also vital (Ingersoll & Strong, 2011).

Ethiopia's ITE system has expanded significantly, from a single pre-primary training institution in 1982 to 38 colleges by 2024 (MoE, 2024). Reforms, such as the 2003 Teacher Education System Overhaul (TESO) and the Postgraduate Diploma in Teaching (PGDT), have shifted the focus from content-heavy curricula to pedagogy (Semela, 2014). However, the 21st century skills remain underemphasized. A research-driven ITE system should integrate pedagogical content knowledge, prioritize teacher learning, and address recruitment challenges to cultivate skilled educators. This policy brief outlined effective ITE strategies, propose restructuring to enhance competencies, and recommend collaboration between universities, schools, and the Ministry of Education to improve teacher preparation.

2. Policy problem

Current Initial Teacher Education (ITE) programs seem incapable of adequately training educators for the demands of the 21st century classrooms (European Commission, 2013; Ingersoll, 2019; Korthagen et al., 2006). They frequently prioritize these teachers' theoretical knowledge over practical work, which is fundamental for teaching (Darling-Hammond et al., 2017; Grossman et al., 2009; Ingersoll, 2019). In addition, many ITE program syllabuses pay scant attention to the inclusion of technology, which results new teachers being unable to use various digital devices in their teaching (European Commission, 2013; Johnson et al., 2016). A further worrying issue is the inadequate faculty collaboration among ITE programs, schools, and communities, which restricts the possibilities of experiential learning and practice (Darling-Hammond et al., 2017; Korthagen et al., 2006).

Fekede and Temesgen (2020) also cite additional teacher preparation challenges in Ethiopia, where ITE programs are struggling to recruit highly qualified candidates and deliver high-quality training. Unstable school-university relationships, disproportionate focus of teacher education

compared to other areas of study, and mismatches between policy environments and classroom realities also undermine program quality. Moreover, the absence of teacher retention strategies and infrequent application of information and communication technology (ICT) exacerbate these shortages. ITE graduates thus often have problems with classroom management, generating student motivation, and addressing diverse learning needs (Ingersoll, 2019; Johnson et al., 2016). These shortages negatively impact student learning, undermining academic achievement and future opportunities.

ITE programs must undergo significant reforms by integrating more practical experiences, improving technology use, and fostering stronger collaborations with schools and communities to enhance teacher preparation (Darling-Hammond et al., 2017; European Commission, 2013). A comprehensive approach that balances theory and practice will better prepare future educators with the skills, knowledge, and adaptability needed for today's dynamic classrooms. Addressing these gaps is essential to ensure that educators can meet the evolving demands of modern education and effectively support student learning and development. Given the pressing nature of these challenges, reforming ITE programs is both urgent and imperative.

3. Analysis of the Issue

The study draws attention to a serious problem with initial teacher education programs, which results in low enrollment and student dropout rates because of things like incentive packages and a lack of professional focus. This discrepancy is especially noticeable in Sub-Saharan Africa, where students frequently pursue jobs right away rather than having a sincere interest in the subject. The results run counter to the teacher education system's emphasis on interpersonal skills, commitment, and a positive outlook (Taylor & Robinson, 2019).

Besides, critics revealed that the initial teacher education program's curriculum lacks emphasis on pedagogical and subject matter knowledge, a gap between universities and materials, and disregards socio-emotional learning and emergency education skills. They suggest revising the curriculum to address these issues, using a better selection system, addressing content and pedagogical competencies, and incorporating professional development and lifelong learning concepts (Ravitch & Hargreaves, 2021).

Furthermore, studies argue that pedagogical practices lack real-world experiences, leading to theory-heavy courses and difficulty for graduates. Teacher trainers often mimic their teachers' methods, causing a pedagogical gap that hinders students' learning needs and workforce readiness. The initial teacher education program's practicum-focused approach is criticized for its shortcomings in terms of materials, curriculum presentation, and resources. Students' real-world experiences are impacted, and social justice and equity are hampered (Timperley et al., 2007). In this regard, the research report also urges policy, perception, and practice changes to close quality gaps and boost enrollment. They further contend that opportunities for skill transfer are limited by a lack of coordination between training facilities and educational institutions.

In general, Ethiopia's education system lacks a focus on 21st century skills in its curriculum and pedagogical practices, which results in low enrollment rates and a severe teacher shortage. This crisis poses a serious threat to the education sector and has an impact on the nation's peace, employment prospects, and literacy rates. A multifaceted strategy is needed to address the shortcomings in teacher education, including enhancing resources, curriculum, teacher trainer competency, and student admission (Taylor & Robinson, 2019). Better curriculum review, lifelong learning, and professional development principles are all part of this.

4. Policy Options

S.N.	Policy Options	Key Activities	Pros	Cons
1	Implement stringent selection criteria for prospective teachers	Raising the bar for entry into teacher education programs can attract top-performing students with a genuine passion for teaching. Competitive entrance exams, interviews, and assessments	• Attracts highly qualified and motivated individuals • Enhances the quality of the teaching workforce	• Requires time and resources to change the public attitude towards the profession • Getting enough number of students with the current criteria is difficult let alone with stringent criteria • Requires significant resources for implementation
2	Revise and align the ITE curriculum	Integrate theoretical knowledge with practical applications, focus on essential skills and competencies	• Ensures relevance and practicality • Prepares teachers for diverse and dynamic environments	• Requires collaboration among various stakeholders • May face resistance to change
3	Embed research-based practices into teacher education programs	Incorporate action research and evidence-based methodologies	• Enhances effectiveness of teacher training • Fosters a culture of continuous improvement	• May require additional training for educators • Can be resource-intensive
4	Promote innovative and engaging teaching methods	Train in diverse pedagogical approaches, use of digital tools and resources	• Enhance student engagement and learning outcomes • Prepares educators for technological advancements	• Requires ongoing professional development • May face resistance from traditional educators
5	Establish mentoring and induction programs	Provide continuous support through mentoring and induction programs	• Supports new teachers in their transition • Improves teaching	• Requires experienced mentors • May be challenging to implement in

			practices and retention	remote areas
6	Foster collaboration between universities, schools, NGOs, and policymakers	Create structured partnerships and clear communication channels	• Enhances quality and relevance of teacher education • Leads to improved educational outcomes	• Requires coordination among multiple stakeholders • May face bureaucratic challenges
7	Increase funding and resources for ITE programs	Allocate adequate funding for modern facilities and teaching materials	• Improves quality of education • Creates conducive learning environments	• Requires significant financial investment • May face budgetary constraints

5. Recommendations

Based on the findings of this study, the following suggestions are drawn: A research-driven ITE system should integrate pedagogical content knowledge, prioritize teacher learning, and address recruitment challenges to cultivate skilled educators. Moreover, multifaceted strategy is needed to address the shortcomings in teacher education, including enhancing resources, curriculum, teacher trainer competency, and student admission. Furthermore, a comprehensive approach that balances theory and practice will better prepare future educators with the skills, knowledge, and adaptability needed for today's dynamic classrooms.

6. Conclusion

In conclusion, the Ethiopian education system faces critical hurdles in preparing teachers for the demands of the 21st century. While expansions and reforms have been implemented, significant gaps remain in practical experience, technology integration, and collaboration between institutions. Addressing these challenges requires a multi-faceted approach, including curriculum revisions, enhanced teacher training, stronger school-university partnerships, and strategic recruitment and retention initiatives. Prioritizing these improvements is essential to cultivate skilled educators who can foster student learning and contribute to Ethiopia's future prosperity and stability.

References

- Backfisch, I., Sibley, L., Lachner, A., Kirchner, K. T., Hische, C., & Scheiter, K. (2024). Enhancing pre-service teachers' technological pedagogical content knowledge (TPACK): Utility-value interventions support knowledge integration. *Teaching and Teacher Education*, 142, 104532.
- Banks, J. A. (2008). Diversity, group identity, and citizenship education in a global age. *Educational researcher*, 37(3), 129-139.
- Darling-Hammond, L. (2017). Teacher education around the world: What can we learn from international practice? *European journal of teacher education*, 40(3), 291-309.
- European Commission. (2013). *Supporting teacher educators for better learning outcomes*. Publications Office of the European Union.
- Fekede, T., & Temesgen, W. (2020). Challenges and prospects of initial teacher education programs in Ethiopia. *African Journal of Teacher Education*, 9(1), 45–67.
- Fullan, M., & Hargreaves, A. (2016). Bringing the profession back in. *Learning Forward*.
- Grossman, P., Hammerness, K., & McDonald, M. (2009). Redefining teacher preparation: Learning from clinical practices. *Teacher Education Quarterly*, 36(2), 31–47.
- Ingersoll, R. M., & Smith, T. M. (2003). The wrong solution to the teacher shortage. *Educational leadership*, 60(8), 30-33.

- Ingersoll, R. M., & Strong, M. (2011). The impact of induction and mentoring programs for beginning teachers: A critical review of the research. *Review of educational research*, 81(2), 201-233.
- Johnson, L., Becker, S. A., Estrada, V., & Freeman, A. (2016). *NMC Horizon Report: 2016 K–12 Edition*. The New Media Consortium.
- Korthagen, F. A. J., Loughran, J., & Russell, T. (2006). Developing fundamental principles for teacher education programs and practices. *Teaching and Teacher Education*, 22(8), 1020–1041.
- Ministry of Education (MoE). (2024). Education sector development program VII (2024-2030). Addis Ababa: MoE.
- Mishra, P., & Koehler, M. J. (2006). Technological pedagogical content knowledge: A framework for teacher knowledge. *Teachers' college record*, 108(6), 1017-1054.
- Pardede, P. (2010). A review on the 21st century skills framework: A focus on English language teaching. *Journal of English Teaching*, 5(1), 1–17.
- Semela, T. (2014). Teacher preparation in Ethiopia: A critical analysis of reforms. *International Journal of Educational Development*, 39, 158–166.
- Ravitch, D., & Hargreaves, A. (2021). *Education and the teacher workforce: Addressing gaps in training and professional development*. Routledge.
- Semela, T. (2014). Teacher preparation in Ethiopia: A critical analysis of reforms. *Cambridge Journal of Education*, 44(1), 113–145.
- Taylor, N., & Robinson, N. (2019). *Teacher education in Sub-Saharan Africa: Challenges and opportunities*. Routledge.
- Timperley, H., Wilson, A., Barrar, H., & Fung, I. (2007). *Teacher Professional Learning and Development*. Best Evidence Synthesis iteration (BES).