Competency-Based Teacher Education in Gender and Inclusive Practices

Soumen Ghosh^{1*} and C. Siva Sankar²

¹Research Scholar, Department of Education, Rajiv Gandhi University, India ²Professor, Department of Education, Rajiv Gandhi University, India

*Corresponding Author: Soumen Ghosh

Received: 26-07-2024	Revised: 13-08-2024	Accepted: 01-09-2024
----------------------	---------------------	----------------------

ABSTRACT

The transition to inclusive education has led to a pedagogical shift, enabling teachers to develop the confidence and competencies needed to create an inclusive environment. The paper relies on the literature on Competency-Based Teacher Education (CBTE) and gender inclusion. The study showed that CBTE programs can prepare future teachers to create inclusive classrooms that respect and value gender diversity. This comprehensive approach addresses all students' educational needs and promotes a more inclusive society. This comprehensive approach emphasizes mastery of competencies related to gender inclusivity and ensures that teacher educators are well-prepared to address the needs of all trainees by developing their all domains. Also, the competency-based approach caters diverse needs of trainees for their personal and professional endeavours and respects gender inclusion in its curriculum implementation. In the 21st century scenario, the upliftment of gender diversity is the concern of utmost priority by addressing both academic and non-academic fields of practice, and the competency-based program makes it possible by fostering all such essential approaches in the field of teacher education. This study identifies CBTE in gender and inclusive practices equipping trainees with the necessary skills, knowledge and attitudes to create inclusive classrooms that respect and celebrate gender diversity in Teacher Education Institutions (TEIs).

Keywords: cbte, curriculum implementation, gender inclusion

I. INTRODUCTION

Teachers play an important role in this 21st century teaching and learning process, where students are expected to transmit gendered values, knowledge and skills most responsibly and appropriately. Gender mainstreaming in the right to education is highly relevant and characterized by scientific novelty and the main goal of gender mainstreaming in the right to education was presented as a process of creating an inclusive, fair and equal education system where all participants can express their potential and develop their capacities without external marginal pressure (Prodan, 2023). Integrating gender-responsive pedagogy into the teacher training curriculum is well-designed in national and international frameworks. Kreitz-Sandberg, (2016) noted that the core concept of gender perspectives can be systematically integrated into teacher education programs. According to Njeri Muasya (2021), in this era of globalization and the introduction of competency-based curricula, there is a need to critically re-evaluate the in-service and pre-service training programs of teachers to ensure proper gender-related inclusion subjects, courses or units, are a means of facilitating gender equality and equity. Because this not only benefits trainees of all gender identities but also fosters a more equitable and inclusive society. Although, globally, gender equality and equity are crucial issues in teacher education (Kreitz-Sandberg, 2016).

Competency-Based Teacher Education: CBTE is an approach to teacher preparation that emphasizes the mastery of specific skills and competencies necessary for effective teaching. Natarajan, (1983) defined it as a revolutionary concept with the potential to create a completely new and effective teacher education program. this model focuses on outcomes and the demonstration of teaching abilities rather than time spent in a program. Some key components are discussed below in the following manner:

Key Components of CBTE

- **a.** Competency Framework: A well-defined framework outlining the specific competencies that teacher candidates must achieve. This framework is often developed in collaboration with education stakeholders, including teachers, administrators and policymakers.
- **b. Personalized Learning Plans**: Individualized learning plans for each candidate, based on prior knowledge, experiences and learning needs. These plans guide their progress through the program.

- **c. Modular Curriculum**: The curriculum is divided into modules, each focusing on a specific set of competencies. Candidates can move through these modules at their own pace, mastering each one before progressing to the next.
- **d.** Authentic Assessments: Assessments are designed to be authentic and performance-based, reflecting real teaching tasks and scenarios. Examples include teaching demonstrations, lesson planning, classroom management exercises and reflective practices.
- e. Mentorship and Support: Continuous support and guidance from experienced mentors and instructors who provide feedback and help candidates refine their skills.

CBTE represents a significant shift towards more personalized, practical and outcome-focused teacher preparation. By emphasizing mastery of specific competencies and addressing gender diversity and inclusive classroom environment.

Our society is currently undergoing a major paradigm shift in terms of gender-wide inclusion (Hooper, 2024). Gender inclusion depends on the perspectives and participation of key actors, such as teacher educators (Kreitz-Sandberg, 2013). Wahengbam and Wahengbam, (2024) stated that a collaborative culture of inclusiveness and equity sensitizes all stakeholders to the needs of all students and builds an inclusive practice support team in TEIs. The importance of educational institutions integrating content into their plans, programs and activities (both curricular and extracurricular) that promote inclusion, sexual and gender diversity and engaging teaching strategies to reinforce this perspective (Suárez Brito et al., 2024). TEIs are improving the education of the future to increase the representation of women and contribute to a prosperous and equitable society (Chans et al., 2024). Alansaari and Essary, (2024) highlighted the presence of hidden gender stereotypes that can potentially affect the development of pedagogical relationships in higher education. In this pedagogical approach, teachers play a crucial role in enhancing inclusion in higher education (Korthals Altes et al., 2024). Lahelma, (2006) stated that gender equality was seen as an essential trait of a good teacher, without specific reference to what teachers should learn. According to Kreitz-Sandberg (2013), 'gender inclusion' describes a new approach to promoting gender equality in teacher education. In addition, Naskali and Kari, (2020) emphasise that gender equality policies have primarily focused on equality between men and women, rather than addressing the multiple dimensions or intersections of gender and sexual diversity. So it is necessary to train teachers and school administrators to handle conflict, misunderstandings and miscommunication related to gender issues (Stromquist & Fischman, 2009).

Teacher education programs in various countries still lack sustainable strategies for advancing gender equality in education, hence, teacher education is unique in higher education because teachers influence the next generation to either perpetuate or alter gender patterns in society (Kreitz-Sandberg & Lahelma, 2021). Teacher education is a mechanism for preparing future teachers, who intend to carry all competencies to cater diverse needs of students and include all the existing abilities and potentialities in the classroom. Therefore, CBTE ensures that future educators are well-equipped to meet the diverse needs of trainees concerning their diversity of gender and inclusion to succeed in dynamic classroom environments.

II. REVIEW OF RELATED LITERATURE

There is no comprehensive study in the existing body of literature that focuses on gender and inclusive practices in CBTE. Therefore, it shows a dire need to do a study on this emerging area. Here are some findings from various literature that are discussed in below:

Njeri Muasya, (2021) found that gender integration educational discourse in teacher training programs facilitates the achievement of gender equality and equity. Hooper, (2024) revealed that without the foundation of education on gender and sexually diverse experiences that do not frame this diversity practitioners will be less likely in the future to implement culturally competent practices that may be taught to them in or during medical school in-service training due to prevailing socio-cultural biases. Wahengbam and Wahengbam, (2024) revealed that the evaluation will focus on how these aspects contribute to increasing inclusion in educational places in Manipur. Lembuka, (2023) reports that online education offers the opportunity to study without the constraints of time and space, female students were more reflective in their learning, felt less hesitant to engage in the online environment, and felt they had more control over their learning. Suárez Brito et al., (2024) revealed the challenges faced by TEIs to acquire thinking skills for complexity. This paper proposes deploying a humanoid robot as a pedagogical innovation tool in training initiatives that promote issues of sexuality and gender diversity. Durdukoca, (2021) highlighted that participating teachers' professional competence in inclusive education is high, professional competence varies by gender and seniority and does not differ by level of teachers' professional competence in inclusive education. Dalamitrou et al., (2024) revealed that the larger discourse on inclusive education serves as a reference for future research and policy-making in culturally and educationally diverse settings. Ibarra-Vazquez et al., (2024) found that machine learning models can effectively predict gender based on a student's perception of knowledge, skills and attitudes or values related to the effectiveness of liberal education. Alansaari and Essary, (2024) revealed that students, educators and administrators can reduce gender-related bias in faculty evaluations. Prodan, (2023) stresses that 'Gender inclusion' is understood as an active practice and policy that aims to ensure equal opportunities, rights and participation of women, men and persons with other gender

identities in all spheres of society. Haitembu, (2023) suggested the measures and guidelines for managing gender and sexuality diversity in national educational frameworks. Abtahi and Planas, (2024) show a framework for awareness and practice of equity, diversity and inclusion in mathematics education and mathematics teacher education research.

III. MATERIALS AND METHODS

According to Kreitz-Sandberg and Lahelma, (2021), understanding both practical and theoretical approaches to gender equality in teacher education can aid in developing effective strategies. This study was based on using secondary sources and carried out a comprehensive review of the literature using various databases (SCOPUS, Science Direct, ERIC, Academia, Google Scholar etc.) on gender and inclusive practices in CBTE. This theoretical analysis of the study has provided a deeper outlook on this emerging theme by covering nuances in teacher education scenarios.

IV. OBJECTIVES OF THE STUDY

- a. To identify the challenges of incorporating Gender and Inclusive Practices in CBTE.
- b. To determine the strategies for incorporating Gender and Inclusive Practices in CBTE.
- c. To study the implementation of Gender-Inclusive curriculum through CBTE.

4.1 Challenges of Incorporating Gender and Inclusive Practices in CBTE

Chans et al., (2024) report that understanding the challenges facing female students in education and providing practical solutions to promote gender equity within the learning environment. Incorporating gender and inclusive practices into CBTE can present several challenges. Here are some key challenges:

a. Curriculum Design and Integration

- **i.** Lack of Inclusive Content: Traditional teacher education curricula may lack sufficient content on gender and inclusivity, making it challenging to integrate these topics effectively.
- **ii. Balancing Core Competencies with Inclusion:** Ensuring gender and inclusive practices are embedded within the core competencies without overshadowing other essential skills can be difficult.

b. Faculty Training and Awareness

- **i. Inadequate Faculty Preparation:** Educators may lack training in gender and inclusive practices, leading to insufficient guidance for student teachers.
- **ii. Resistance to Change:** Faculty members may resist changes to the curriculum or teaching methods, especially if they are unfamiliar with or sceptical of inclusive practices.

c. Assessment and Evaluation

- i. Measuring Competency in Inclusion: It can be challenging to develop reliable and valid assessment methods to measure competencies related to gender and inclusive practices.
- **ii. Subjectivity in Evaluation:** Assessing gender sensitivity and inclusivity can be subjective, making consistent evaluation difficult.

d. Resource Constraints

- **i.** Limited Resources and Support: Implementing inclusive practices often requires additional resources, such as specialized training, materials and support services, which may not be readily available.
- **ii. Funding Challenges:** Securing funding for initiatives focused on gender and inclusion can be challenging, especially in resource-limited educational institutions.

e. Cultural and Societal Barriers

- **i.** Cultural Norms and Biases: Prevailing cultural norms and biases regarding gender roles can hinder the adoption of inclusive practices in teacher education.
- **ii.** Stigmatization and Stereotyping: Students and teachers may face stigmatization or stereotyping, which can discourage open discussion and exploration of gender and inclusion topics.

f. Student Preparedness and Engagement

- i. Varied Student Backgrounds: Students in teacher education programs come from diverse backgrounds and may have varying levels of awareness and acceptance of gender and inclusive practices.
- **ii.** Engaging Reluctant Students: Students may be reluctant to engage with topics of gender and inclusion, especially if they conflict with their personal beliefs or cultural values.

g. Policy and Institutional Support

i. Lack of Clear Policies: Without clear institutional policies or mandates, it can be difficult to prioritize and implement gender and inclusive practices in teacher education programs.

ii. Inconsistent Implementation: Even with policies in place, there can be inconsistencies in how gender and inclusive practices are implemented across different institutions or programs.

h. Intersectionality and Diversity

- **i. Complexity of Intersectionality**: Addressing the multiple and intersecting identities of gender, race, disability and socio-economic status in CBTE can be complex. It requires nuanced understanding and approaches to ensure all aspects of diversity are considered.
- **ii. Inclusive Representation**: Ensuring that diverse voices and experiences are represented in the curriculum can be challenging, particularly in areas with homogeneous populations.

i. Bias in Educational Materials

- **i. Stereotypical Content**: Educational materials and resources may contain gender stereotypes or lack diverse perspectives, which can reinforce biases rather than challenge them.
- **ii. Updating Resources**: Revising and updating educational materials to include gender-inclusive content can be a time-consuming and resource-intensive process.

j. Resistance from Stakeholders

- **i. Parental and Community Opposition**: In some communities, there may be resistance from parents or community members who disagree with gender-inclusive education practices, creating tension and pushback against implementation.
- **ii. Policy and Leadership Challenges**: Educational leaders and policymakers may not prioritize or support gender and inclusive practices, leading to a lack of institutional commitment.

k. Technological Barriers

- i. **Digital Divide**: Access to technology can vary significantly and lack of access can prevent equitable participation in digital learning tools designed to support gender and inclusivity training.
- **ii.** Lack of Inclusive Digital Content: There may be a lack of digital resources that adequately cover gender and inclusivity, limiting opportunities for self-directed learning.

Addressing these challenges involves not only strategic planning and resource allocation but also a commitment to fostering a culture of inclusivity and equity within TEIs. This requires collaboration among educators, administrators, policymakers and the community. Addressing these challenges requires a comprehensive and collaborative approach, involving curriculum developers, faculty, students, policymakers and the broader educational community.

4.2 Strategies for Incorporating Gender and Inclusive Practices in CBTE

According to Kreitz-Sandberg and Lahelma, (2021), gender equality cannot be achieved instantly, it requires the continual negotiation of appropriate strategies within specific national and institutional contexts at universities and TEIs. Incorporating gender and inclusive practices in CBTE involves intentional strategies that address curriculum, pedagogy, policy and institutional culture. Here are some effective strategies:

a. Curriculum Development and Integration

- **i. Inclusive Curriculum Design**: Develop curricula that integrate gender and inclusivity topics across all subjects, ensuring that these themes are not isolated but woven into the broader educational content.
- **ii. Diverse Learning Materials**: Use textbooks, case studies and other educational resources that represent diverse gender identities and experiences. Ensure materials are free from stereotypes and biases.

b. Faculty Training and Professional Development

- i. Comprehensive Faculty Training: Offer training and workshops for faculty on gender sensitivity, inclusivity and culturally responsive teaching. This should include understanding gender identity, sexual orientation and intersectionality.
- **ii. Hiring Diverse Faculty**: Strive to recruit and retain faculty members from diverse backgrounds who can provide varied perspectives and serve as role models.

c. Student Engagement and Empowerment

- **i. Inclusive Pedagogical Approaches**: Implement teaching methods that encourage all students to participate and share their perspectives. This includes using collaborative and student-centered learning techniques.
- **ii. Support Student Organizations**: Support the formation and activities of student groups focused on gender and inclusion, providing a platform for advocacy and peer learning.

d. Assessment and Evaluation

- i. Inclusive Assessment Practices: Develop assessment methods that are fair and equitable, taking into account diverse learning styles and backgrounds. Include criteria for evaluating understanding and application of gender and inclusive practices.
- **ii. Feedback Mechanisms**: Create channels for feedback from students and faculty on the effectiveness of gender and inclusive practices in the curriculum and pedagogy.

e. Institutional Policies and Leadership

- **a.** Clear Policies and Guidelines: Establish clear policies that mandate the inclusion of gender and inclusivity in the curriculum. This should include anti-discrimination policies and support for gender diversity.
- **b.** Leadership Commitment: Ensure that institutional leaders publicly commit to gender equity and inclusion and provide the necessary resources and support for initiatives.

f. Creating a Supportive Environment

- i. Safe and Inclusive Spaces: Designate safe spaces for discussions about gender and inclusion, where students and staff can engage openly without fear of judgment or discrimination.
- **ii. Counselling and Support Services**: Provide access to counselling and support services for students dealing with gender-related issues and ensure these services are confidential and culturally competent.

g. Community and Parental Engagement

- **i. Community Outreach Programs**: Engage with the broader community to build support for gender and inclusive education. This can include workshops, public talks and collaborations with community organizations.
- **ii. Parental Involvement**: Educate and involve parents in discussions about the importance of gender and inclusive practices, addressing any concerns or misconceptions they may have.

h. Use of Technology and Digital Tools

- i. Digital Resources and Platforms: Utilize online platforms and digital resources that promote gender and inclusivity, including e-learning modules, webinars and virtual discussions.
- **ii.** Accessibility: Ensure all digital content is accessible to students with disabilities, including providing alternative formats and assistive technologies.

i. Ongoing Research and Development

- **i. Research Initiatives**: Encourage and support research on gender and inclusive practices within education. This research can inform curriculum development and teaching methods.
- **ii. Continuous Improvement**: Continuously review and update the curriculum, teaching practices and policies based on the latest research and feedback from the educational community.

j. Monitoring and Accountability

- **i. Regular Audits and Evaluations**: Conduct regular audits and evaluations of the implementation of gender and inclusive practices. This should involve a review of curricula, teaching methods and institutional policies.
- **ii. Public Reporting**: Report publicly on progress and outcomes related to gender and inclusive initiatives, holding the institution accountable for its commitments.

Through implementing these strategies, institutions can create a more inclusive and equitable environment for all students, better preparing future teachers to foster inclusive classrooms.

4.3 Implementation of Gender-Inclusive Curriculum through CBTE

Implementing a gender-inclusive curriculum through CBTE involves a comprehensive approach that integrates gender awareness, sensitivity and inclusivity into the core competencies required of future educators. This ensures that graduates are prepared to foster equitable and inclusive learning environments. Here are some steps to effectively implementing a gender-inclusive curriculum in CBTE:

a. Setting Clear Objectives and Competencies

- **i. Define Gender-Inclusive Competencies**: Clearly articulate the competencies related to gender inclusivity that students must achieve. These competencies should cover understanding gender diversity, challenging stereotypes, creating inclusive classroom environments and applying inclusive teaching practices.
- **ii.** Establish Learning Outcomes: Develop specific learning outcomes for each competency. For example, a learning outcome could be, students will demonstrate the ability to design and implement lesson plans that are inclusive of diverse gender identities and expressions.
- **b.** Integration Across Disciplines: Embed gender-inclusive content and perspectives across all courses and subjects. This includes incorporating gender studies in subjects like psychology, sociology, education theory and subject-specific teaching methods.

c. Pedagogical Approaches and Instructional Strategies

- i. Active and Reflective Learning: Use active learning strategies, such as group discussions, case studies, roleplaying and simulations, to engage students in exploring gender issues. Encourage reflective practices through journaling, reflective essays and peer discussions.
- **ii. Inclusive Teaching Methods**: Train future teachers to use inclusive teaching methods, such as differentiating instruction to accommodate diverse learners, using gender-neutral language and fostering a classroom environment that values diversity.

- **iii.** Critical Pedagogy: Incorporate critical pedagogy approaches that encourage students to question and challenge traditional norms and power structures related to gender.
- **d.** Competency-Based Assessment: Develop assessment methods that evaluate students' competencies in gender inclusivity. This could include practical assignments, such as designing inclusive lesson plans, conducting classroom observations and creating inclusive educational materials.

e. Practical Experience and Fieldwork

- **i. Inclusive Teaching Practicum**: Ensure that student teaching experiences include opportunities to practice gender-inclusive teaching. Encourage placements in diverse educational settings where students can observe and implement inclusive strategies.
- **ii.** Mentorship and Supervision: Pair student teachers with mentors who are experienced in gender-inclusive education. Provide regular feedback focused on developing their competencies in this area.
- **f.** Building a Culture of Inclusion: Promote a culture that values diversity and inclusion throughout the institution. This includes celebrating diversity, recognizing inclusive teaching practices and encouraging ongoing dialogue about gender inclusivity.
- **g.** Develop Institutional Policies: Establish clear institutional policies that support gender inclusivity, such as antidiscrimination policies, gender-neutral facilities and inclusive language guidelines.

h. Addressing Systemic Barriers and Biases

- i. Identifying and Addressing Bias: Train educators and students to recognize and address implicit biases in teaching practices, curriculum content and institutional policies. This involves a critical examination of how gender biases manifest in education and taking steps to mitigate them.
- **ii. Structural Changes:** Advocate for structural changes within the institution that support gender inclusivity, such as gender-neutral bathrooms, non-discriminatory dress codes and inclusive language policies.

i. Fostering a Holistic Approach to Inclusion

- **i. Holistic Education**: Promote a holistic approach to education that integrates academic learning with socialemotional learning, ethics and values. This includes teaching empathy, respect and the importance of diversity and inclusion.
- **ii.** Well-being and Mental Health: Address the mental health and well-being of students and educators, recognize the impact of gender-related issues on mental health and provide resources and support for those affected.

j. Global Perspectives and Comparative Education

- **i. Global Case Studies**: Include global perspectives in the curriculum by studying gender-inclusive education practices from different countries. This provides a comparative view and helps students understand the global context of gender issues.
- **ii. International Collaboration**: Encourage international collaborations and exchanges that allow students and faculty to learn from gender-inclusive practices around the world.

Therefore, CBTE programs can create a comprehensive and deeply embedded gender-inclusive curriculum that prepares future educators to address gender diversity in all its complexity. This holistic approach not only benefits students by promoting equity and inclusion but also enriches the educational experience for all members of the academic community.

V. DISCUSSION AND CONCLUSION

According to Prodan, (2023), With a stable position in the international arena and the adoption of relevant laws, gender inclusion is gaining popularity and there is a need for research. (Kreitz-Sandberg, 2016) highlighted gender inclusion in higher education has the potential to foster the systematic acquisition of values, knowledge and skills among pre-service teachers, which is essential for enhancing sustainable pedagogical practices. In higher education, gender inclusion is not the ultimate goal but rather a means to encourage students to integrate gender discussions into their pedagogical work in practical settings (Kreitz-Sandberg, 2016). Teachers at all levels of higher education require knowledge and experience in gender-sensitive teaching to prevent all forms of discrimination and promote student interaction on gender-equal terms (Endepohls-Ulpe & Ostrouch-Kaminska, 2019). While most teacher education institutions did not offer courses or materials on gender, nor did they incorporate insights from gender studies or equality projects (Lahelma & Hynninen, 2012). Hence, understanding shapes the practices of higher education teachers, determining their goals when discussing 'inclusive' practices or the characteristics of 'inclusive' learning environments (Korthals Altes et al., 2024). Heikkinen et al., (2012) stated that the promotion of gender equality is advocated as a way to create a positive working environment, improve staff capabilities and enhance the quality, success, productivity and competitiveness of the university. Although, encouraging positive attitudes in pre-service teachers can be crucial for implementing effective inclusive teaching practices (Soeharto et al., 2024). Pov et al., (2024) report there is a need to enhance pre-service teachers' knowledge and practical skills necessary for working in inclusive

classroom settings. Because, educators have a lack of knowledge about trainees, the skills needed for inclusive teaching and the expectations or requirements from their TEIs make it challenging for higher education teachers to adjust their teaching to foster more inclusive learning environments (Korthals Altes et al., 2024).

CBTE programs can foster an inclusive and supportive educational environment that prepares the future teacher to respect and embrace gender diversity in their classrooms. This approach ensures that teachers are well-equipped to meet the diverse needs of their students and foster inclusive learning environments. Implementing CBTE in gender inclusivity requires careful planning, robust support systems and a commitment to continuous improvement. Still, the benefits for teachers and the education system can be substantial. Therefore, this innovative approach is crucial for developing an inclusive pathway to global contributions that includes all competent individuals without any gender biases or discrimination and provides opportunities according to their competencies.

REFERENCES

- 1. Abtahi, Y., & Planas, N. (2024). Mathematics teaching and teacher education against marginalisation, or towards equity, diversity and inclusion. *ZDM Mathematics Education*, *56*(3), 307–318. https://doi.org/10.1007/s11858-024-01602-x.
- 2. Alansaari, H., & Essary, J. (2024). Gender equity in evaluating higher education faculty competency in Dubai: Views from first-year undergraduate students. *Higher Education Evaluation and Development*, *18*. https://doi.org/10.1108/HEED-07-2023-0022.
- 3. Chans, G., Dominguez, A., Caratozzolo, P., Zavala, G., & Camacho-Zuñiga, C. (2024). *Gender equity in STEM: Insights from competency-based engineering education*. https://doi.org/10.13140/RG.2.2.17068.07043.
- 4. Dalamitrou, V., Rojas, C. S., & Requena, B. E. S. (2024). Exploring teacher perceptions and influencing factors in the inclusive education of students with autism: a comprehensive analysis. *Operations Research Forum*, 5(1), 15. https://doi.org/10.1007/s43069-024-00297-w.
- 5. Durdukoca, Ş. (2021). Reviewing of teachers' professional competencies for inclusive education. *International Education Studies*, 14, 1. https://doi.org/10.5539/ies.v14n10p1.
- 6. Endepohls-Ulpe, M., & Ostrouch-Kaminska, J. (2019). *Gender Diversity Intersectionality. (New) Perspectives in adult education*. Waxmann Verlag GmbH. https://doi.org/10.31244/9783830988830.
- 7. Haitembu, R. (2023). Gender and sexual diversity: Inclusion in the Namibian education context. *Cogent Education*, 10. https://doi.org/10.1080/2331186X.2023.2253702.
- 8. Heikkinen, A., Lammela, Johanna, Leena, L., Lätti, J., & Virtanen, Emma. (2012). *Gender mainstreaming: Inclusion or exclusion*. https://doi.org/10.3726/978-3-0351-0337-3.
- 9. Hooper, E. (2024). *Teaching gender: Analyzing and transforming the limitations of the gender binary in pre-medical education*. https://digitalcommons.library.umaine.edu/honors/892.
- Ibarra-Vazquez, G., Ramírez-Montoya, M.-S., & Buenestado-Fernández, M. (2024). Forecasting gender in open education competencies: A machine learning approach. *IEEE Transactions on Learning Technologies*, pp. 1–12. https://doi.org/10.1109/TLT.2023.3336541.
- Korthals Altes, T., Willemse, M., Goei, S. L., & Ehren, M. (2024). Higher education teachers' understandings of and challenges for inclusion and inclusive learning environments: A systematic literature review. *Educational Research Review*, 43, 100605. https://doi.org/10.1016/j.edurev.2024.100605.
- 12. Kreitz-Sandberg, S. (2013). Gender inclusion and horizontal gender segregation: Stakeholders' strategies and dilemmas in Swedish teachers' education. *Gender and Education*, 25(4), 444–465. https://doi.org/10.1080/09540253.2013.772566.
- 13. Kreitz-Sandberg, S. (2016). Improving pedagogical practices through gender inclusion: Examples from university programmes for teachers in preschools and extended education. *IJREE International Journal for Research on Extended Education*, 4(2), 13–14. https://elibrary.utb.de/doi/abs/10.3224/ijree.v4i2.25782.
- 14. Kreitz-Sandberg, S., & Lahelma, E. (2021). Global demands Local practices: Working towards inclusion of gender equality in teacher education in Finland and Sweden. *Nordic Journal of Comparative and International Education (NJCIE)*, 5(1), Article 1. https://doi.org/10.7577/njcie.4052.
- 15. Lahelma, E. (2006). Gender perspective: A challenge for schools and teacher education. in *Research-based Teacher Education in Finland—Reflections by Finnish Teacher Educators*, pp. 203–213. Finnish Educational Research Association.
- 16. Lahelma, E., & Hynninen, P. (2012). Gender equality in Finnish teacher education with reflections on Nordic and European collaboration. in T. Strand & M. Roos, *Education for Social Justice, Equity and Diversity: An Honorary Volume for Professor Anne-Lise Arnesen,* pp. 109–130. Lit Verlag.

- 17. Lembuka, M. (2023). Gender equality in online education in higher education: A literature review. *ISTES Books*, 87–112. https://book.istes.org/index.php/ib/article/view/23.
- 18. Naskali, P., & Kari, S. (2020). Teachers-to-be studying gender and sexual diversity. *Women's Studies International Forum*, 80, 102360. https://doi.org/10.1016/j.wsif.2020.102360.
- 19. Njeri Muasya, J. (2021). Gender responsive pedagogy and early childhood teacher education: A study of pre-primary school teachers in Nairobi County, Kenya. *Teacher Education and Curriculum Studies*, 6(3), 101. https://doi.org/10.11648/j.tecs.20210603.15.
- Pov, S., Kawai, N., & Nov, S. (2024). Preparing pre-service teachers to work in Cambodian inclusive classrooms: Knowledge, experience, and attitudes toward inclusion. *Teaching and Teacher Education*, 137, 104402. https://doi.org/10.1016/j.tate.2023.104402.
- 21. Prodan, V. (2023). The paradigm of gender inclusion in the right to education: Domestic and international experience. *Uzhhorod National University Herald. Series: Law*, *2*, 356–362. https://doi.org/10.24144/2307-3322.2023.79.2.55.
- 22. S, N. (1983). A competency-based programme in teacher education curriculum. Available at: https://shodhganga.inflibnet.ac.in:8443/jspui/handle/10603/191189.
- 23. Soeharto, S., Subasi Singh, S., & Afriyanti, F. (2024). Associations between attitudes toward inclusive education and teaching for creativity for Indonesian pre-service teachers. *Thinking Skills and Creativity*, *51*, 101469. https://doi.org/10.1016/j.tsc.2024.101469.
- 24. Stromquist, N. P., & Fischman, G. E. (2009). Introduction from denouncing gender inequities to undoing gender in education: Practices and programmes toward change in the social relations of gender. *International Review of Education / Internationale Zeitschrift Für Erziehungswissenschaft / Revue Internationale de l'Education*, 55(5/6), 463–482. https://www.jstor.org/stable/40608073.
- 25. Suárez Brito, P., Alonso-Galicia, P., Vázquez Parra, J. C., & Lopez-Caudana, E. (2024). Complex thinking and robotics: A proposal for sexual and gender diversity and inclusion training. *Journal of Applied Research in Higher Education*, *16*. https://doi.org/10.1108/JARHE-10-2023-0475.
- 26. Wahengbam, T., & Wahengbam, C. (2024). *Inclusive education and integration into national education policy 2020: A comprehensive analysis*. https://doi.org/10.48047/intjecse/v13i2.21160.