

Culturally Responsive Teaching in Contemporary Classrooms: Principles, Practices, and Implications

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ABSTRACT:

Culturally Responsive Teaching (CRT) is an inclusive pedagogical approach that positions students' cultural identities, lived experiences, and linguistic backgrounds at the centre of classroom practice. Grounded in the theoretical foundations of culturally responsive pedagogy, this article examines the conceptual thoughts, core principles, and practical strategies of CRT in contemporary classrooms. Drawing on an extensive review of literature, the paper highlights how recognizing and valuing students' cultural capital enhances academic achievement, identity affirmation, and critical consciousness. Special attention is given to culturally responsive science education, indigenous knowledge integration, mother tongue inclusion, and inclusive curriculum design. The article further distinguishes CRT from culturally responsive pedagogy by clarifying its role as pedagogy-in-action. While emphasizing its transformative potential for equity and inclusion, the discussion also addresses key challenges such as teacher preparedness, curriculum rigidity, linguistic bias, and policy limitations. The study concludes that sustained professional development, reflective practice, and institutional support are essential for embedding culturally responsive teaching as a foundational practice in diverse educational settings.

Key Words: Culturally Responsive Teaching; Cultural Competence; Inclusive Curriculum; Indigenous Knowledge Systems

INTRODUCTION

Culturally Responsive Pedagogy is an educational approach that recognizes the diverse backgrounds and experiences of learners and seeks to create inclusive and engaging learning environments. This approach goes beyond "good teaching" and emphasizes the need for educators to incorporate students' cultural identities and perspectives into the teaching and learning processes (Ladson-Billings, 1995). By doing so, culturally responsive pedagogy aims to improve academic achievement, promote positive self-identity, and foster critical thinking among learners (Gay, 2018; Villegas & Lucas, 2007).

Educators have recognized the significance of preparing teachers to effectively implement culturally responsive pedagogy in their classrooms (Irvine, 2003). This preparation involves developing a deep understanding of students' cultural backgrounds, experiences, and diverse

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learning needs. Nieto (2009) highlights the socio-political context of multicultural education and emphasizes the importance of affirming diversity in schools. Banks (2016) further argues that cultural diversity should be acknowledged and integrated into curriculum and teaching practices to create inclusive learning environments that empower all students.

Central to culturally responsive pedagogy is the notion of critical reflection by teachers on their own cultural biases and assumptions (Howard, 2006). Teachers must engage in ongoing self-reflection to examine how their own identities and experiences shape their teaching practices. Ladson-Billings (2014) emphasizes the need for a continuous process of growth and adaptation, referring to this as "culturally relevant pedagogy 2.0." Paris (2012) calls for a shift in stance, terminology, and practice, advocating for culturally sustaining pedagogy that sustains and nurtures students' cultural identities.

To effectively implement culturally responsive pedagogy, teachers must also possess the knowledge and skills to address the specific needs of culturally diverse students in their classrooms. Emdin (2016) emphasizes the importance of understanding the realities of urban education and provides a framework for reality pedagogy. Sleeter (2011) highlights the need for teacher preparation programs to address the overwhelming presence of whiteness and provide teachers with the necessary tools to navigate culturally diverse schools.

CRP recognizes the diverse cultural backgrounds of students and seeks to create inclusive and engaging learning environments. This approach requires ongoing teacher reflection and self-awareness, as well as the development of knowledge and skills to effectively address the needs of culturally diverse students. By embracing culturally responsive pedagogy, educators can create classrooms that empower students, promote academic success, and foster a sense of belonging and respect for all (Villegas & Lucas, 2007; Hammond, 2014; Milner, 2021).

REVIEW OF RELATED LITERATURE

This comprehensive review of major studies is discussed under the following themes:

- **Recognising and Valuing Students' Cultural Backgrounds**

One of the central aspects of culturally responsive pedagogy (CRP) is the recognition and validation of students' cultural identities. Ladson-Billings (1995, 2014) emphasizes that meaningful learning occurs when educators draw upon students' lived experiences and cultural assets as instructional resources. Research has consistently shown that when teachers acknowledge students' cultural backgrounds, learners experience greater affirmation, belonging, and motivation (Gay, 2009, 2018). Such validation enhances academic outcomes, as students actively connect their prior knowledge with the school curriculum (Villegas & Lucas, 2007). Moreover, by valuing students' cultural perspectives, educators can nurture self-worth and strengthen students' sense of belonging in the classroom (Alameddine, 2021; Allen et al., 2017).

- **Culturally Responsive Science Pedagogy**

In the context of science education, culturally responsive pedagogy bridges disciplinary knowledge with students' sociocultural realities. Studies highlight the importance of

recognizing cultural capital in science classrooms and adopting equitable teaching practices (Lane et al., 2012; Jia et al., 2019; Gaddis, 2013). Innovative approaches such as the use of hip-hop and reality pedagogy in STEM (Emdin et al., 2021) and creative tools like craft kits in visual arts (Maaruf et al., 2021) demonstrate how CRP can engage learners by connecting science content with cultural expression. Scholars argue that responsive science pedagogy not only enhances participation but also ensures that diverse learners view science as meaningful and accessible (Pradhan, 2015; Willsher et al., 2020; Strey-Wells, 2019).

- **Indigenous Experiences and multicultural Education**

Another significant dimension of CRP is the integration of indigenous knowledge and experiences into science education. Scholars stress that culturally sustaining practices are essential for preserving minority languages, epistemologies, and community wisdom (Tan & Barton, 2010; Upadhyaya et al., 2017). Research highlights how incorporating indigenous knowledge systems enriches learning in subjects like physics and environmental studies while also promoting cultural diversity (Govender et al., 2021; Handayani et al., 2019; Regmi et al., 2012; Rich, 2012). Case studies from tribal and rural regions further illustrate how integrating indigenous worldviews supports inclusivity and identity affirmation (Vislavath, 2019; Velusamy et al., 2021; Pinto-López et al., 2020). In India, initiatives like Ashram schools demonstrate that blending indigenous knowledge with formal science instruction can strengthen holistic education and student engagement (Ballantyne, 2006; Hiwase et al., 2013).

- **Professional Development and Implementation Challenges of CRP**

While CRP offers transformative potential, teachers often face barriers in implementing it effectively. Research identifies challenges such as issues of race, justice, and systemic inequities (Jacob et al., 2021; Legette et al., 2021). Scholars recommend critical pedagogy, respectful collaboration with communities, and epistemological frameworks for developing cultural competence in science education (Gregorčič, 2009; Zinyeka et al., 2016; Friesen, 2021; Cross et al., 2021). Teacher preparation and continuous professional development are crucial for equipping educators with the knowledge, skills, and reflective capacities required for CRP (Gist, 2017; Zeichner, 2003; Durante, 2022). Sustained support systems, mentoring, and communities of practice enable teachers to address classroom complexities and sustain culturally responsive teaching (Hollins & Guzman, 2009; Lieberman & Miller, 2008; Darling-Hammond et al., 2017). Moreover, fostering lifelong learning ensures that teachers remain adaptive to evolving student needs and pedagogical innovations (Villegas & Lucas, 2007; Zeichner & Hoelt, 2003).

UNDERSTANDING CULTURALLY RESPONSIVE TEACHING

Culturally Responsive Teaching is an inclusive pedagogical approach that recognizes and values student's cultural identities as integral to the teaching and learning process. It encourages educators to embrace diversity and use student's cultural knowledge, prior experiences, and worldviews to shape instruction in meaningful ways.

Geneva Gay (2018) defines Culturally Responsive Teaching as a teaching method that makes learning more relevant and effective by weaving in students cultural backgrounds.

The concept of culturally relevant pedagogy, first proposed by Gloria Ladson-Billings (1995), advocates for teaching practices that prioritize cultural awareness, academic achievement, and reflective thinking.

DISTINGUISHING CULTURALLY RESPONSIVE PEDAGOGY AND CULTURALLY RESPONSIVE TEACHING

Culturally Responsive Pedagogy (CRP) and Culturally Responsive Teaching (CRT) are closely related yet conceptually distinct. CRP refers to a broader theoretical and philosophical framework that integrates students' cultural identities, lived experiences, and sociopolitical contexts into the aims, content, and structures of education. It emphasizes academic success, cultural competence, and critical consciousness (Gloria Ladson-Billings, 1995). In contrast, CRT focuses more specifically on classroom practices and instructional strategies that teachers employ to make learning meaningful and equitable for diverse learners (Geneva Gay, 2010). While CRP operates at the level of ideology and curriculum transformation, CRT functions at the level of pedagogy-in-action through methods, interactions, and assessment. Thus, CRP provides the conceptual foundation, whereas CRT represents its practical enactment in daily teaching. Together, they promote equity, inclusion, and culturally grounded educational experiences.

PRINCIPLES OF CULTURALLY RESPONSIVE TEACHING:

The core principles of culturally responsive teaching include:

1. Developing cultural competence requires educators to acknowledge and incorporate learner's cultural experiences within classroom content and interactions.
2. Believing in every student's potential and providing the support they need to succeed academically.
3. Critical consciousness refers to the ability to recognize and question societal inequalities, empowering students to become socially aware and active participants in their communities.

These principles help create a responsive and empowering learning environment where all students feel valued and capable.

PEDAGOGICAL STRATEGIES FOR IMPLEMENTING CULTURALLY RESPONSIVE TEACHING

To effectively implement culturally responsive teaching, educators need practical strategies which will address learner's diverse cultural, linguistic, and social backgrounds. Let's discuss some approaches that promotes inclusion, equity, and meaningful engagement in multicultural classrooms:

1. Creating an Inclusive Curriculum that Reflects Learner's Cultural Backgrounds:

An inclusive curriculum integrates the cultural experiences, histories, and perspectives of different student groups. It moves beyond Traditional teaching learning process and allows students from marginalized communities to see themselves in the content they study. Designing

such a curriculum involves selecting themes, examples, and learning materials that correlates with learner's identity, thereby enhancing engagement and relevance in the classroom.

2. Using Multicultural and Indigenous Literature to Foster Empathy and Understanding:

Involving literature from various cultures, including indigenous texts, helps students develop empathy, broaden their worldview, and appreciate diversity. These narratives serve as mirrors to reflect student's own experiences and windows to view the lives of others. Exposure to various cultures, nurtures respect for cultural differences and promotes a shared sense of humanity.

3. Encouraging Storytelling Across Cultures:

Creating space for storytelling allows students to express their cultural identities and learn from one another. This approach values oral traditions and past experiences, fostering mutual respect and intercultural understanding.

4. Language Learning Through Mother Tongue Inclusion:

Supporting learner's mother tongue in the classroom validates their linguistic identities and aids in concept development. Using student's mother tongues as scaffolding tools can bridge gaps in understanding and facilitate deeper learning. Bilingual resources, translation activities can be strategically used to support academic achievement while nurturing linguistic diversity.

5. Adapting Classroom Assessments and Instructional Methods to Reflect Cultural Contexts:

Assessments should consider the cultural norms, communication styles, and learning preferences of students. Alternative assessments like portfolios, presentations, or group projects allow for varied expressions of understanding. Instructional methods should also be adapted to honour student's prior knowledge and Local learning practices.

6. Cultivating Cultural Competence and Awareness:

Teachers must develop cultural self-awareness, reflect on their own biases, and continuously seek to learn about their student's backgrounds. Professional development programs focusing on diversity, equity, and inclusion can empower teachers to be more responsive and effective in multicultural classrooms.

7. Nurturing Supportive and Respectful Teacher-Student Connections:

Meaningful connections grounded in respect, empathy, and mutual understanding are essential to culturally responsive teaching. When learners feel recognized and supported, their participation both academic and emotional, tends to increase significantly. Teachers who take time to know their student's cultural stories create inclusive, nurturing environments where all learners Flourish.

CHALLENGES IN IMPLEMENTATION OF CULTURALLY RESPONSIVE TEACHING

Although culturally responsive teaching (CRT) holds great potential for promoting inclusive education, its implementation in practice often faces several systemic and classroom-based obstacles. Understanding these barriers is very important for educators to create more equitable teaching learning process:

- **Teacher Preparedness:**

Many teachers enter classrooms without sufficient training in culturally responsive practices. This lack of professional development makes it difficult for them to recognize and integrate student's cultural experiences into their teaching. As a result, they may lack to implement culturally responsive teaching successfully.

- **Curriculum Rigidity:**

School curriculum is often centralized and standardized, leaving little flexibility for cultural adaptation. Such inflexibility limits teacher's ability to integrate varied perspectives, narratives, and learning approaches that align with student's cultural backgrounds and prior experiences.

- **Linguistic Bias:**

The dominance of standard or official languages in teaching learning process often excludes students who speak regional, indigenous, or home languages. This bias not only hinders comprehension and participation but also affects learner's confidence and identity.

- **Policy Limitations:**

Our education system lacks clear policies that promote or support culturally responsive teaching. Without institutional support, teachers may struggle to access resources, training, or time to develop inclusive strategies. The absence of supportive policies undermines the effective implementation of culturally responsive teaching throughout educational institutions and systems.

CONCLUSION

Culturally Responsive Teaching (CRT) emerges as a transformative approach that moves beyond mere acknowledgement of diversity to actively merging culture within classroom practice. Drawing upon the theoretical foundations of culturally responsive pedagogy, CRT translates principles of equity, cultural competence, and critical consciousness into actionable instructional strategies. The review of literature highlights that when students' cultural identities, indigenous knowledge systems, and linguistic backgrounds are validated, learning becomes meaningful, empowering, and academically enriching. Particularly in science education and multicultural contexts, culturally responsive approaches foster engagement, identity affirmation, and inclusive participation.

However, effective implementation requires sustained teacher preparation, reflective practice, curriculum flexibility, and supportive policy frameworks. Addressing systemic barriers such as linguistic bias and limited professional development is essential for meaningful change. Ultimately, culturally responsive teaching is not an optional pedagogical add-on but a moral

and professional imperative for educators committed to justice, inclusion, and holistic learner development in contemporary classrooms.

REFERENCES

- Aikenhead, G. S. (1996). Science education: Border crossing into the subculture of science. *Studies in Science Education*, 27(1), 1–52. <https://doi.org/10.1080/03057269608560077>
- Aikenhead, G. S., & Jegede, O. J. (1999). Cross-cultural science education: A cognitive explanation of a cultural phenomenon. *Journal of Research in Science Teaching*, 36(3), 269–287. [https://doi.org/10.1002/\(SICI\)1098-2736\(199903\)36:3](https://doi.org/10.1002/(SICI)1098-2736(199903)36:3)
- Alameddine, M. (2021). Culturally responsive pedagogy: A framework for equitable teaching practices. *International Journal of Education Research*, 105, 101–115. <https://doi.org/10.1016/j.ijer.2021.101715>
- Allen, Q., Hancock, S. D., Lewis, C. W., & Starker, T. V. (2017). Counter-narratives and the cultural relevance of Hip-Hop in urban teacher education. *Urban Education*, 52(1), 170–196. <https://doi.org/10.1177/0042085915570271>
- Ballantyne, R. (2006). Enhancing environmental education through Indigenous knowledge. *Australian Journal of Environmental Education*, 22(1), 47–58. <https://doi.org/10.1017/S0814062600001028>
- Cross, F., Hong, J., & Williams, A. (2021). Toward culturally responsive science education: Challenges and strategies. *Science Education Review*, 20(2), 55–67.
- Darling-Hammond, L., Hyster, M. E., & Gardner, M. (2017). *Effective teacher professional development*. Learning Policy Institute.
- Delgado, R., & Stefancic, J. (2017). *Critical race theory: An introduction* (3rd ed.). New York University Press.
- Durante, K. (2022). Preparing teacher educators for culturally responsive pedagogy: Insights and challenges. *Journal of Teacher Education*, 73(3), 334–348. <https://doi.org/10.1177/00224871221077657>
- Emdin, C., Adjapong, E., & Levy, I. (2021). Hip-hop based cultural teaching and reality pedagogy in STEM education. *Journal of Science Education and Technology*, 30(5), 629–641. <https://doi.org/10.1007/s10956-021-09920-4>
- Friesen, J. (2021). Engaging Indigenous communities in science education: Toward respectful partnerships. *Cultural Studies of Science Education*, 16(2), 359–374. <https://doi.org/10.1007/s11422-020-10035-2>
- Gaddis, S. M. (2013). Culturally responsive pedagogy in higher education: Implications for equity. *Review of Educational Research*, 83(4), 535–570. <https://doi.org/10.3102/0034654313483908>

- Gay, G. (2009). *Culturally responsive teaching: Theory, research, and practice* (2nd ed.). Teachers College Press.
- Gist, C. D. (2017). Culturally responsive pedagogy and teacher professional development: Addressing the needs of diverse classrooms. *Urban Education*, 52(3), 341–364. <https://doi.org/10.1177/0042085915570272>
- Govender, N., Reddy, V., & Naidoo, S. (2021). Integrating Indigenous knowledge into science classrooms: Teachers' perspectives. *South African Journal of Education*, 41(2), 1–12. <https://doi.org/10.15700/saje.v41n2a1905>
- Gregorčič, M. (2009). Critical pedagogy and Indigenous teaching methods: Shifting educational paradigms. *Intercultural Education*, 20(1), 1–11. <https://doi.org/10.1080/14675980802700620>
- Hammond, Z. (2014). *Culturally responsive teaching and the brain: Promoting authentic engagement and rigor among culturally and linguistically diverse students*. Corwin.
- Handayani, H., Susilo, H., & Herawati, E. (2019). Integrating Indigenous knowledge in physics teaching to improve students' scientific literacy. *Journal of Physics: Conference Series*, 1233(1), 012031. <https://doi.org/10.1088/1742-6596/1233/1/012031>
- Hiwase, A., Khandagale, A., & Pawar, P. (2013). Integrating Indigenous knowledge in Ashram schools: A case study from India. *International Journal of Innovative Research & Development*, 2(5), 114–119.
- Irvine, J. J. (2003). *Educating teachers for diversity: Seeing with a cultural eye*. Teachers College Press.
- Jacob, J., Bindu, M., & Singh, P. (2021). Barriers to implementing culturally responsive pedagogy in science classrooms. *International Journal of Science Education*, 43(12), 2011–2027. <https://doi.org/10.1080/09500693.2021.1949367>
- Jia, Y., Way, N., Ling, G., Yoshikawa, H., Chen, X., Hughes, D., Ke, X., & Lu, Z. (2019). The influence of culturally responsive teaching on student engagement. *Developmental Psychology*, 55(12), 2638–2652. <https://doi.org/10.1037/dev0000821>
- Ladson-Billings, G. (1995). Toward a theory of culturally relevant pedagogy. *American Educational Research Journal*, 32(3), 465–491. <https://doi.org/10.3102/00028312032003465>
- Ladson-Billings, G. (2014). Culturally relevant pedagogy 2.0: Aka the remix. *Harvard Educational Review*, 84(1), 74–84. <https://doi.org/10.17763/haer.84.1.p2rj131485484751>
- Lane, J. F., Lacefield, W. E., & Lee, J. (2012). Exploring culturally responsive pedagogy in science education. *Cultural Studies of Science Education*, 7(1), 23–44. <https://doi.org/10.1007/s11422-011-9355-6>