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## Systematic Review of Culturally Responsive Teaching and Multilingual Support Programs for Advancing Student Success in U.S. Higher Education

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### Abstract

This systematic review examines the effectiveness of culturally responsive teaching (CRT) and multilingual support programs in advancing student success in U.S. higher education. As the student population becomes increasingly diverse, institutions face the challenge of providing inclusive educational experiences that accommodate students from varied cultural and linguistic backgrounds. CRT, which emphasizes inclusive pedagogy, cultural competence, and critical consciousness, has been shown to improve student engagement, retention, and academic performance. Similarly, multilingual support programs, including English as a Second Language (ESL) programs, language assistance services, and translation support, play a critical role in ensuring equitable access to academic resources for non-native English speakers. The review synthesizes studies from diverse sources, focusing on the impact of CRT and multilingual support on academic achievement, student retention, and overall educational outcomes. Key challenges in implementing these programs are discussed, including resource constraints, faculty preparedness, and institutional support. Additionally, the review highlights the intersectionality of CRT and multilingual support, underscoring the potential for integrated approaches that can better address the needs of culturally and linguistically diverse students. By analyzing existing best practices, the review provides evidence-based recommendations for educators, administrators, and policymakers on strategies to enhance the effectiveness of these programs. It also identifies areas for future research, particularly in understanding the long-term impact of CRT and multilingual support on student success, and the role of technology in advancing these initiatives. The findings emphasize the importance of systemic changes within higher education institutions to create an inclusive environment that fosters the success of all students, regardless of their cultural or linguistic backgrounds.

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### 1. Introduction

The growing diversity within U.S. higher education presents both a significant opportunity and a challenge. As the student body becomes more diverse, encompassing a wide range of cultural, ethnic, and linguistic backgrounds, it is increasingly crucial for higher education institutions to provide inclusive environments that support the success of all students (Ajayi, 2023; Bristol-Alagbariya *et al.*, 2023). The U.S. has seen a marked increase in international students, as well as students from historically underrepresented groups, such as those from low-income backgrounds, ethnic minorities, and first-generation college students

(Lawal *et al.*, 2023; Hanson and Sanusi, 2023). As this diversity grows, so does the recognition of the need for culturally responsive teaching (CRT) and multilingual support programs that can effectively address the needs of these students.

Culturally responsive teaching, an approach that emphasizes recognizing and leveraging students' cultural backgrounds to enhance learning, is gaining traction in U.S. higher education. CRT advocates for a shift away from a one-size-fits-all model of instruction towards a more personalized, student-centered approach that incorporates students' cultural experiences, histories, and ways of knowing. By recognizing students' cultural contexts, CRT aims to improve academic engagement, achievement, and retention, thereby fostering an inclusive and supportive learning environment (Onoja and Ajala, 2022; Bristol-Alagbariya *et al.*, 2022).

In parallel, multilingual support programs are integral in accommodating the increasing number of students for whom English is not the first language. These programs, including English as a Second Language (ESL) courses, translation services, and language assistance, are essential in ensuring equitable access to academic resources and opportunities (Ezeafulukwe *et al.*, 2022; Bristol-Alagbariya *et al.*, 2023). Without such support, students from non-English speaking backgrounds may face significant barriers to academic success, including language proficiency challenges, communication difficulties, and a sense of cultural isolation (Apata *et al.*, 2023; Egbuhuzor *et al.*, 2023).

The challenges faced by students from culturally and linguistically diverse backgrounds are multifaceted. These students often encounter obstacles such as cultural misunderstandings, academic disengagement, and difficulties in navigating the social and educational norms of higher education institutions (Fanijo *et al.*, 2023; Hanson, 2023). For non-native English speakers, language barriers can exacerbate these challenges, making it more difficult to participate fully in the academic experience, understand course content, and communicate with peers and instructors. As a result, students from diverse backgrounds are at higher risk of poor academic performance, lower retention rates, and higher dropout rates (Adekuajo *et al.*, 2023; Onukwulu *et al.*, 2023).

The purpose of this systematic review is to evaluate the effectiveness of culturally responsive teaching and multilingual support programs in promoting student success in U.S. higher education. By examining a wide range of studies, the review aims to assess how these initiatives contribute to student engagement, retention, and academic achievement. In addition, it seeks to identify best practices in the implementation of CRT and multilingual programs, with a focus on strategies that have been shown to be most effective in supporting the success of culturally and linguistically diverse students. Furthermore, the review will explore key challenges that institutions face when implementing these programs, including resource constraints, faculty preparedness, and institutional support. Finally, the review will discuss future directions for research and practice, particularly regarding the intersectionality of CRT and multilingual support, the role of technology in enhancing these programs, and the long-term impact of these initiatives on student success.

Through this systematic review, the aim is to provide a comprehensive understanding of the role of culturally responsive teaching and multilingual support programs in

advancing student success and fostering an inclusive educational environment. The findings from this review will inform educators, administrators, and policymakers about effective strategies and policies that can enhance educational outcomes for all students in U.S. higher education.

## 2. Methodology

The systematic review of culturally responsive teaching (CRT) and multilingual support programs in U.S. higher education follows a rigorous PRISMA methodology to ensure a comprehensive and unbiased evaluation of the relevant literature. The review process begins with the formulation of clear research questions, which aim to assess the effectiveness of CRT and multilingual support programs in promoting student success, identify best practices, and understand the challenges and future directions for these initiatives.

To begin, a comprehensive literature search was conducted across multiple databases including JSTOR, ERIC, Google Scholar, and Education Research Complete. The search strategy employed a combination of keywords related to CRT, multilingual support programs, student success, and higher education in the U.S. These keywords were refined through iterative searches to ensure that all relevant studies were captured. The inclusion criteria for the review were studies published in peer-reviewed journals, dissertations, and reports published within the last 20 years. Studies that focused on culturally and linguistically diverse students in higher education settings, particularly in the U.S., were prioritized.

Exclusion criteria involved studies that were not related to higher education, not focused on CRT or multilingual support, or did not provide empirical data. Additionally, studies that were not in English or lacked adequate methodology were excluded from the review. A total of 35 articles were deemed eligible after an initial screening, and full-text assessments were conducted to ensure relevance and quality.

The data extraction process involved systematically coding each study for key variables, such as the type of CRT or multilingual support program evaluated, the student populations served, the outcomes measured (e.g., academic achievement, retention, engagement), and the methods used. Data were extracted by two independent reviewers, and discrepancies were resolved through discussion and consensus.

To assess the quality of the included studies, a risk-of-bias assessment was conducted, evaluating the methodology, sample size, and outcomes reporting of each study. Studies were also categorized based on their research designs (qualitative, quantitative, or mixed-methods) and the strength of their evidence. A synthesis of the findings was performed to identify overarching trends and patterns across studies, with particular attention paid to the effectiveness of CRT and multilingual programs in supporting student success.

Finally, the systematic review was conducted in accordance with the PRISMA guidelines, which emphasize transparency and reproducibility in the review process. The results are reported following the PRISMA flow diagram, providing a clear outline of the study selection process, including reasons for exclusions and the number of studies included at each stage. The findings of this review will contribute valuable insights into the efficacy of culturally responsive and multilingual support programs in U.S. higher education and

provide guidance for future research and policy development.

## 2.1 Culturally Responsive Teaching (CRT) in Higher Education

Culturally Responsive Teaching (CRT) is an educational approach that emphasizes the importance of recognizing, respecting, and integrating students' cultural backgrounds into the teaching and learning process (ADIKWU *et al.*, 2023; Ozobu *et al.*, 2023). Rooted in the understanding that student identities influence their learning experiences, CRT advocates for creating inclusive, diverse, and equitable learning environments that cater to the needs of all students, particularly those from historically marginalized groups. CRT is designed to address the diverse cultural, linguistic, and social needs of students by incorporating culturally relevant materials, instructional strategies, and pedagogical frameworks that promote student success.

Culturally Responsive Teaching is grounded in several core principles that guide educators in making their teaching practices more inclusive and sensitive to cultural diversity. The first principle, *cultural competence*, involves educators' ability to understand, appreciate, and effectively teach students from a wide range of cultural backgrounds. This includes recognizing the various cultural norms, values, and learning styles that students bring into the classroom. Cultural competence also encourages educators to create a classroom environment where students feel valued, respected, and included, fostering positive relationships among peers and with the instructor.

*Inclusive pedagogy* is another key principle of CRT, which focuses on adapting teaching methods and content to ensure that students of all cultural backgrounds have equal access to learning opportunities (Iwe *et al.*, 2023; Agho *et al.*, 2023). This includes using diverse teaching materials, incorporating diverse perspectives, and modifying instruction to meet the needs of students with different learning styles and preferences. Inclusivity in pedagogy also entails recognizing the unique challenges faced by students from marginalized communities and actively working to reduce barriers to participation and achievement.

Lastly, *critical consciousness* is a principle that encourages students to critically examine societal structures and inequities. In a CRT context, this involves promoting awareness of social justice issues and empowering students to question and challenge power dynamics in education and society. Critical consciousness also involves creating opportunities for students to engage in discussions about race, identity, privilege, and inequality, fostering a deeper understanding of their roles in both academic and social contexts.

The implementation of Culturally Responsive Teaching has been shown to have a significant positive impact on student success. CRT creates a learning environment that is more engaging and supportive for students, particularly those from historically underrepresented backgrounds (Ajayi, 2023; Ugbaja *et al.*, 2023). By recognizing and validating the cultural experiences and identities of students, CRT fosters a sense of belonging, which is critical for academic success. Students who feel valued and included are more likely to engage in class discussions, participate in extracurricular activities, and remain motivated to succeed academically.

Several studies have highlighted the positive effects of CRT on student outcomes such as academic achievement, retention, and engagement. For instance, research has shown

that when instructors incorporate culturally relevant content and teaching methods, students report higher levels of satisfaction with their learning experience and demonstrate better academic performance. In addition, CRT contributes to higher retention rates by helping students build a strong connection to their academic community, reducing feelings of isolation and alienation that can negatively impact persistence. Engaged students are also more likely to be involved in campus life, which further strengthens their sense of belonging and enhances their overall academic success.

Furthermore, studies have demonstrated that CRT fosters greater student engagement by encouraging active participation in discussions, group work, and projects that reflect students' cultural perspectives and lived experiences. When students see their cultures reflected in the curriculum and teaching practices, they are more likely to be motivated to contribute to the learning process and take ownership of their education (Lawal *et al.*, 2023; Ugbaja *et al.*, 2023).

Despite its proven benefits, the implementation of Culturally Responsive Teaching in higher education faces several challenges. One of the primary barriers is *faculty preparedness*. Many instructors lack the necessary training, knowledge, and skills to effectively integrate CRT into their teaching practices. Faculty members may not have been adequately exposed to the concept of CRT during their professional development or academic training, and as a result, they may feel unprepared or unsure about how to incorporate cultural diversity into their classrooms. This lack of preparedness can lead to resistance or inconsistency in implementing CRT principles.

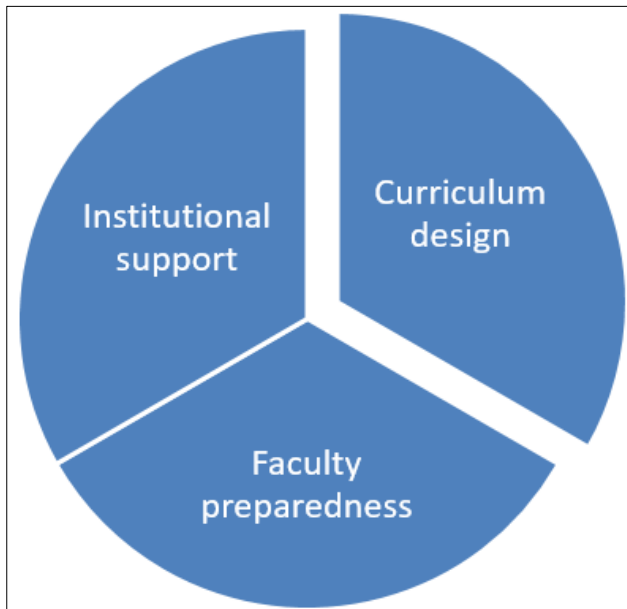
*Institutional support* is another significant challenge. While many institutions express a commitment to diversity and inclusion, there may be insufficient resources, policies, or incentives to support CRT initiatives on a larger scale. Without institutional backing, individual faculty members may struggle to implement CRT effectively, particularly if they face time constraints, limited access to professional development opportunities, or resistance from colleagues who may not fully understand or value the importance of CRT (Onukwulu *et al.*, 2023; Kokogho *et al.*, 2023).

Additionally, *curriculum design* presents a challenge for implementing CRT. In many higher education institutions, curricula are often standardized, leaving little room for flexibility in incorporating culturally responsive materials or adjusting teaching methods to meet the diverse needs of students. This lack of curricular flexibility can limit the extent to which CRT can be meaningfully integrated into classrooms.

However, there are several successful case studies that demonstrate the effectiveness of CRT in higher education. For example, some universities have implemented faculty development programs focused on CRT, providing instructors with training on cultural competence, inclusive pedagogy, and critical consciousness (Ozobu *et al.*, 2023; Akintobi *et al.*, 2023). These programs have resulted in improved student engagement, satisfaction, and academic achievement. Additionally, some institutions have developed culturally responsive curriculum frameworks that allow instructors to tailor course content and teaching strategies to the diverse needs of their students, fostering a more inclusive and equitable learning environment.

Culturally Responsive Teaching is a powerful tool for promoting student success in higher education. By recognizing the cultural identities of students, adapting

teaching methods to be more inclusive, and encouraging critical consciousness, CRT creates a learning environment where all students can thrive. While there are challenges in implementing CRT, including faculty preparedness, institutional support, and curriculum design, the positive impact of CRT on student achievement, retention, and engagement underscores its importance in fostering a more equitable and inclusive academic experience as shown in figure 1. As higher education continues to diversify, CRT will play an increasingly essential role in ensuring that all students have the opportunity to succeed.



**Fig 1:** Barriers to effective implementation

## 2.2 Multilingual Support Programs in Higher Education

In the context of higher education, multilingual support programs are designed to provide students with the necessary resources and assistance to succeed academically in an environment where English may not be their first language. These programs play a crucial role in ensuring that multilingual and English as a Second Language (ESL) students can fully engage with academic content, develop their language skills, and achieve their academic goals (Awoyemi *et al.*, 2023; Akintobi *et al.*, 2023). As U.S. colleges and universities continue to attract a diverse student body from around the world, multilingual support has become an essential part of fostering an inclusive and equitable educational experience.

Multilingual support programs encompass a variety of services that cater to students whose primary language is not English. These programs can include language assistance services, translation support, and specialized ESL (English as a Second Language) programs. Language assistance services are often available in the form of tutoring, conversation partners, or writing assistance, providing one-on-one or small-group support to help students improve their language proficiency. Translation support, on the other hand, assists students with navigating administrative documents, course materials, and communications in English, ensuring that language barriers do not hinder students' understanding of essential academic information.

ESL programs, which are particularly widespread in U.S. higher education institutions, are specifically designed to

teach students the necessary English language skills required for academic success (Onyeke *et al.*, 2023; Fiemotongha *et al.*, 2023). These programs typically include courses in reading, writing, listening, and speaking, and often involve tailored curricula to address the specific needs of multilingual students. ESL programs may also include cultural orientation to help students better understand U.S. academic expectations, social norms, and communication styles. In addition to these traditional forms of support, newer approaches, such as online language platforms and mobile language learning apps, are increasingly becoming integrated into institutional support systems.

The impact of multilingual support programs on student success is profound. These programs provide students with the language skills and confidence needed to navigate the complexities of academic coursework and communicate effectively in a primarily English-speaking academic environment. Research has consistently shown that effective multilingual support is closely linked to improved academic performance, higher retention rates, and greater student satisfaction.

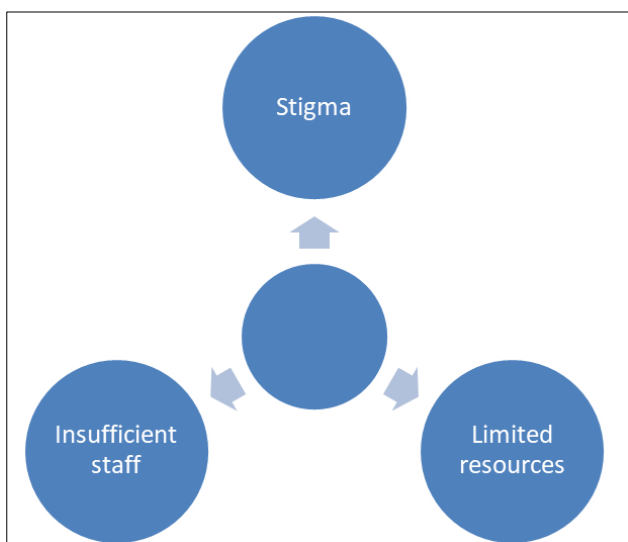
For multilingual students, the ability to fully engage in classroom discussions, understand lecture content, and complete assignments in a second language can be daunting. Without sufficient language support, these students may struggle academically, feel isolated, or even withdraw from their studies. Multilingual support programs help alleviate these challenges by offering students the resources to improve their language skills and gain confidence in their academic abilities (Agho *et al.*, 2023; Fiemotongha *et al.*, 2023). This, in turn, contributes to higher retention rates, as students are more likely to persist in their studies when they feel supported and capable of succeeding.

Effective multilingual support models vary, but commonly include tutoring, language labs, and peer mentoring programs. Tutoring provides targeted academic support, with tutors helping students work through specific language challenges related to their coursework. Language labs, often equipped with language learning software, interactive exercises, and multimedia resources, offer students a space to practice language skills independently or in groups. Peer mentoring programs also play a significant role in supporting multilingual students by providing opportunities for interaction with native English-speaking students. Peer mentors can assist with language practice, offer advice on academic strategies, and help students adjust to the academic culture of U.S. higher education.

Despite the proven benefits of multilingual support programs, several challenges can hinder their effectiveness. One of the most common barriers is the *limited resources* available to support these programs. Many institutions struggle to provide adequate staffing, tutoring services, and materials for multilingual students, particularly in the face of increasing student enrollment and limited budgets (Onukwulu *et al.*, 2023; Ajayi and Akerele, 2022). This lack of resources often results in long wait times for language support services, a lack of individualized attention for students, and limited access to key resources like language labs or tutoring sessions.

Another significant challenge is the *insufficient staff* trained to provide multilingual support. Language assistance and ESL programs require instructors who are not only skilled in language teaching but also culturally competent in understanding the unique challenges faced by multilingual students. In many cases, faculty may not be adequately

trained to support students' linguistic and cultural needs, which can lead to ineffective or inconsistent support. Additionally, *stigma* surrounding multilingual support services can present a barrier. Multilingual students may feel embarrassed or reluctant to seek out language assistance due to a fear of being perceived as less capable or inferior (Akintobi *et al.*, 2022; Adewoyin, 2022). This stigma can hinder students from utilizing available support, further exacerbating feelings of isolation and academic difficulty. Despite these challenges, many institutions have developed successful multilingual support programs. This program has demonstrated high levels of success in improving student retention and academic achievement. Similarly, the University of Michigan offers an innovative language mentoring program that pairs multilingual students with trained peer mentors who provide guidance on language development, cultural adaptation, and academic success. These programs have proven to be effective in creating a more inclusive and supportive environment for multilingual students, contributing to their overall success (Ozobu *et al.*, 2022; Friday *et al.*, 2022).



**Fig 2:** Common challenges in providing multilingual support

Multilingual support programs are essential to fostering academic success and retention among students in U.S. higher education, particularly those from linguistically diverse backgrounds. These programs provide students with the tools they need to overcome language barriers, build confidence, and achieve their academic goals. While challenges such as limited resources, insufficient staffing, and stigma remain, institutions that invest in comprehensive and culturally responsive multilingual support services can help ensure that all students, regardless of their linguistic background, have an equal opportunity to succeed as shown in figure 2. By addressing these challenges and continuing to innovate, higher education institutions can create more inclusive, supportive, and equitable learning environments for multilingual and ESL students.

### 2.3 Intersection of CRT and Multilingual Support Programs

As the student population in U.S. higher education becomes increasingly diverse, institutions are faced with the challenge of creating inclusive environments that address the needs of all students, especially those from culturally and

linguistically diverse backgrounds (Bristol-Alagbariya *et al.*, 2022; Ajayi and Akerele, 2022). One of the key ways institutions are working to meet this challenge is through the integration of Culturally Responsive Teaching (CRT) and multilingual support programs. These two approaches, while distinct, share common goals of enhancing student success, improving academic achievement, and fostering inclusivity. The intersection of CRT and multilingual support can create a powerful, synergistic approach to addressing the needs of diverse students, facilitating their academic success in a culturally and linguistically complex educational landscape. Culturally Responsive Teaching (CRT) is an educational framework that emphasizes the importance of recognizing and respecting students' cultural backgrounds, integrating diverse perspectives into the curriculum, and creating an inclusive classroom environment (Popo-Olanian *et al.*, 2022; Bristol-Alagbariya *et al.*, 2022). CRT encourages educators to develop cultural competence, adapt teaching strategies to meet the needs of culturally diverse students, and promote critical consciousness. Multilingual support programs, on the other hand, provide linguistic assistance to students whose first language is not English. These programs include services such as language assistance, ESL (English as a Second Language) programs, and academic tutoring, all of which are designed to help students overcome language barriers and succeed in their studies.

The synergy between CRT and multilingual support lies in their shared focus on inclusivity and recognition of diversity. By integrating multilingual support into CRT, educational institutions can create a comprehensive, responsive approach that acknowledges both the linguistic and cultural dimensions of students' identities. For example, a faculty member trained in CRT can employ teaching methods that are culturally relevant while also providing multilingual students with the language support they need to comprehend course material. This integration ensures that students are not only supported linguistically but also empowered to contribute their unique perspectives and experiences in the classroom.

Examples of integrated approaches include programs that combine CRT-informed pedagogy with multilingual support services. These programs aim to foster an environment where students can engage deeply with the content while simultaneously developing their language proficiency in a way that is culturally affirming. Another example is peer mentoring programs that pair students from diverse linguistic and cultural backgrounds with trained mentors who are familiar with both the academic and cultural challenges they may face (Ajiga *et al.*, 2022; Ajayi *et al.*, 2022). These mentoring programs are designed to provide support on both a linguistic and cultural level, reinforcing the intersectionality of language and culture in academic success.

While the integration of CRT and multilingual support programs presents significant benefits for student success, there are several challenges that institutions must overcome in order to coordinate and optimize these efforts. One of the main challenges is the *lack of collaboration* between faculty, multilingual support services, and student affairs departments. In many cases, these entities operate in silos, each working independently rather than collaboratively. This fragmentation can lead to inconsistent support for multilingual students and hinder the creation of an integrated, holistic approach to their academic success.

Another challenge lies in the *coordination of efforts* to ensure that CRT and multilingual support are effectively

incorporated into the curriculum. While CRT emphasizes culturally relevant pedagogy, faculty may not always have the training or resources to implement these strategies in a way that effectively supports multilingual students (Popo-Olaniyan *et al.*, 2022; Bristol-Alagbariya *et al.*, 2022). Similarly, multilingual support programs may not always be designed to integrate cultural responsiveness into their services. Without proper coordination between these efforts, students may experience gaps in support, which can negatively impact their academic performance and retention. Furthermore, there is the issue of *faculty preparedness* to effectively engage with culturally and linguistically diverse students. Many instructors are not trained in both CRT and multilingual support strategies, which may hinder their ability to create inclusive, culturally relevant learning environments for students with language needs. Faculty may need ongoing professional development in both areas, ensuring they understand how cultural and linguistic differences influence student learning and how best to address these differences in the classroom.

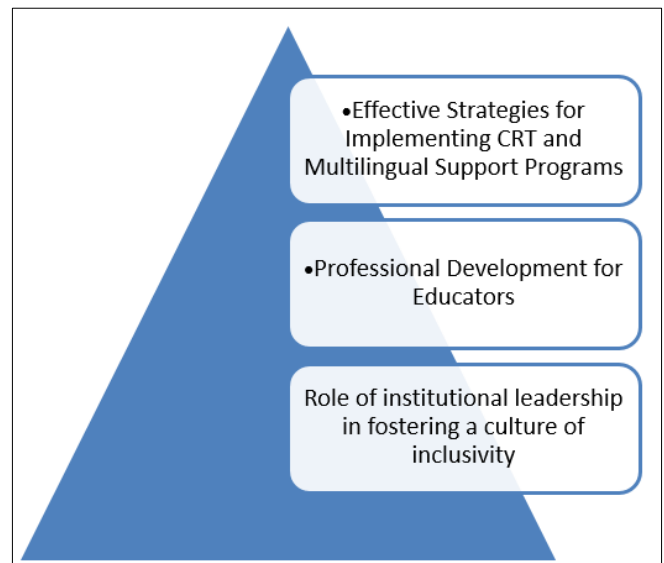
Despite these challenges, there are numerous opportunities for improving the integration of CRT and multilingual support programs. One such opportunity is the development of *collaborative professional development programs* that bring together faculty, multilingual support staff, and student affairs personnel to discuss strategies for integrating CRT and multilingual support. These programs could include workshops on culturally relevant pedagogy, language development strategies, and best practices for supporting multilingual students. Additionally, *cross-departmental collaboration* can help create a more cohesive approach to student support, ensuring that all resources are leveraged to meet the needs of diverse student populations (Popo-Olaniyan *et al.*, 2022; Adeniji *et al.*, 2022).

Another opportunity lies in the expansion of *student-centered learning models* that emphasize the importance of personalized support. By tailoring support to individual students' cultural and linguistic needs, institutions can create more inclusive and responsive learning environments. For example, leveraging technology such as online language tools, virtual tutoring services, and digital resources can enhance the delivery of multilingual support, making it more accessible and flexible for students. Furthermore, *data-driven decision-making* can play a role in optimizing support services, allowing institutions to track the effectiveness of CRT and multilingual support efforts and make data-informed adjustments as needed.

The intersection of Culturally Responsive Teaching (CRT) and multilingual support programs offers a promising avenue for advancing student success in U.S. higher education. By integrating these two approaches, institutions can create an inclusive learning environment that recognizes and supports the cultural and linguistic diversity of their student body. However, challenges such as a lack of collaboration, faculty preparedness, and coordinated efforts must be addressed in order to fully realize the potential of this integrated approach. By seizing opportunities for greater collaboration, training, and the use of technology, higher education institutions can foster an academic environment that better supports multilingual and culturally diverse students, ultimately enhancing their success and retention (Odio *et al.*, 2022; Akintobi *et al.*, 2022).

## 2.4 Best Practices and Recommendations

The implementation of Culturally Responsive Teaching (CRT) and multilingual support programs in higher education plays a crucial role in advancing student success, particularly for students from diverse cultural and linguistic backgrounds. These approaches help foster an inclusive learning environment where all students feel valued, supported, and empowered to succeed academically (Oyedokun, 2019; Ajayi and Akerele, 2021). This highlights best practices and recommendations for effectively implementing these strategies, offering insights for faculty, administrators, and policymakers to create more inclusive, culturally responsive, and linguistically supportive academic settings as shown in figure 3.



**Fig 3:** Best Practices and Recommendations

Key strategies for the successful integration of CRT and multilingual support programs must be thoughtful, comprehensive, and coordinated across various levels of the institution. At the core, it is essential that faculty and staff recognize and address the cultural and linguistic needs of students from the outset. One critical strategy is to *incorporate inclusive and culturally relevant pedagogy* into the curriculum. Faculty members should not only integrate diverse perspectives, historical contexts, and cultural experiences into their lessons but also be aware of different communication styles and approaches to learning. This includes recognizing the varying levels of language proficiency among students and adjusting instructional methods to accommodate these differences, ensuring that all students have equal opportunities to thrive academically.

Another effective strategy is to *embed multilingual support* throughout the student experience. While language assistance programs like ESL services are important, it is equally essential to create a campus-wide culture of linguistic inclusion. This can involve offering tutoring services, peer mentoring, and language labs, as well as ensuring that written materials and resources are available in multiple languages (Tula *et al.*, 2004; Agho *et al.*, 2021). In addition, multilingual support programs should be integrated into the academic advising and registration processes, so that students are fully aware of the support available to them from the beginning of their academic journey.

For faculty and administrators, it is essential to prioritize *collaborative efforts* between CRT and multilingual support teams. Encouraging close cooperation between faculty, language support specialists, and academic advisors can ensure that strategies and resources are effectively coordinated, creating a more cohesive and seamless experience for students. Regular faculty meetings, joint training sessions, and cross-departmental working groups can help foster collaboration, identify areas for improvement, and share best practices.

Ongoing professional development is crucial to the successful implementation of both CRT and multilingual support programs. Faculty and staff must be equipped with the skills and knowledge to effectively engage with students from diverse backgrounds. *Training on cultural competence*, which helps educators understand their own cultural biases and learn to respect and engage with students' cultural differences, is fundamental. Equally important is *language sensitivity training* that addresses the complexities of working with multilingual students, including recognizing challenges related to language acquisition and proficiency (Egbuhuzor *et al.*, 2021; Odio *et al.*, 2021).

*Workshops, seminars, and conferences* dedicated to CRT and multilingual support are essential to keeping educators informed about the latest research, tools, and best practices. These professional development opportunities should focus on practical teaching strategies, such as differentiated instruction, scaffolding, and the use of technology to support multilingual learners. Additionally, training should encourage educators to develop *critical consciousness* by reflecting on how power, privilege, and systemic inequality affect their teaching practices and the experiences of students from diverse cultural and linguistic backgrounds.

Institutions should also prioritize *mentorship and peer learning networks* for faculty members, allowing experienced educators to share their insights and strategies with their less experienced colleagues. Creating spaces for dialogue and reflection within faculty communities helps to build a collective understanding of the challenges faced by multilingual and culturally diverse students and fosters a supportive environment for growth and learning (Nwaozomudoh *et al.*, 2021; Adewoyin *et al.*, 2021).

For CRT and multilingual support programs to be truly effective, strong *institutional support* is necessary. Institutional leaders must be committed to creating a campus culture that values diversity and inclusion, with clear policies and practices that reflect these values. Leaders should prioritize *resources and funding* for both CRT and multilingual support initiatives, ensuring that departments are adequately staffed, trained, and equipped to support all students. This includes hiring multilingual staff, providing professional development opportunities for faculty, and ensuring that language support services are integrated throughout the student experience.

Institutional support should also involve *creating and promoting inclusive policies* that address the specific needs of multilingual and culturally diverse students. This could include adopting flexible language proficiency requirements, revising grading policies to accommodate linguistic diversity, and ensuring that academic resources (e.g., tutoring, library materials) are accessible to students in multiple languages (Dienagha *et al.*, 2021; Oluokun, 2021). Furthermore, institutions should actively engage with students to gather *feedback on their experiences* and

continuously adapt policies and practices to meet their evolving needs.

Policymakers and higher education administrators should advocate for *scaling successful practices* across campuses, ensuring that effective CRT and multilingual support programs are not isolated in specific departments or institutions. A *systemic approach* to implementing these programs across all disciplines and institutions will help create a more equitable educational landscape. One potential avenue for scaling these practices is the development of *national and regional networks* that connect higher education institutions committed to improving diversity and inclusion (Knight, 2017; Leal Filho *et al.*, 2019). These networks can serve as platforms for sharing resources, research, and best practices, fostering collaboration across institutions.

Another important policy recommendation is the need for *data collection and assessment* to measure the effectiveness of CRT and multilingual support programs. By using both qualitative and quantitative data to track student outcomes, institutions can identify areas for improvement and make informed decisions about the allocation of resources. Data-driven decision-making ensures that policies are responsive to the changing needs of students and that institutions are held accountable for their commitment to fostering inclusivity.

The effective integration of Culturally Responsive Teaching (CRT) and multilingual support programs is essential for advancing student success in U.S. higher education. By adopting key strategies, prioritizing professional development, and ensuring robust institutional support, higher education institutions can create environments that are not only inclusive but also empowering for culturally and linguistically diverse students. As educational landscapes continue to evolve, ongoing commitment from faculty, administrators, and policymakers is necessary to ensure that all students have the resources, support, and opportunities to succeed (Buffone, 2021; Williamson *et al.*, 2021).

## 2.5 Future Directions and Research Gaps

As higher education continues to evolve in an increasingly diverse and globalized world, the integration of Culturally Responsive Teaching (CRT) and multilingual support programs becomes crucial for fostering an inclusive and supportive learning environment (Berlian and Huda, 2022; Yeh *et al.*, 2022). However, while significant progress has been made in these areas, several emerging trends and unaddressed research gaps remain. This explores future directions for advancing CRT and multilingual support in higher education and identifies key research gaps that need to be addressed to enhance student success. Additionally, it examines the challenges associated with measuring the effectiveness of these programs.

One of the most promising emerging trends in both CRT and multilingual support is the role of technology, particularly digital platforms and online learning environments. As higher education institutions increasingly adopt online and hybrid learning models, these platforms present new opportunities for culturally responsive and linguistically inclusive pedagogy. Technology offers several benefits, including flexibility, accessibility, and the ability to provide real-time support to multilingual students (Gunder *et al.*, 2021; Karakaya and Bozkurt, 2022).

Moreover, virtual learning environments can be tailored to provide culturally relevant content and multimedia resources, helping students from diverse backgrounds feel more

engaged and represented. Online discussion forums and collaborative tools can also foster greater intercultural exchange, enabling students to share their experiences and perspectives in a safe, supportive space.

Another emerging trend is the increased use of *adaptive learning technologies*, which can cater to students' individual learning needs based on their cultural and linguistic profiles (Kem, 2022; Moltudal *et al.*, 2022). These technologies can adjust the pace, difficulty, and content of lessons to align with the specific needs of diverse students, thus promoting more personalized and effective learning experiences. However, while these technologies hold great potential, they also raise questions about equity and access, particularly for students from low-income or rural areas who may face technological barriers.

Despite significant advances in CRT and multilingual support programs, several critical research gaps remain. One key area that requires further exploration is the *intersectionality of culture and language*. While much of the research in these areas has focused on either cultural responsiveness or language support in isolation, there is a need for a more integrated approach that considers how culture and language intersect to impact student experiences and outcomes. Research that examines how these intersecting factors influence academic success, engagement, and retention is essential to developing more nuanced and effective support strategies (Dillard and Osam, 2021; Trowler *et al.*, 2022).

Furthermore, there is a significant gap in *longitudinal studies* examining the long-term impact of CRT and multilingual support programs on student success. While short-term studies have shown promising outcomes in terms of student engagement and satisfaction, there is limited research that tracks the long-term effects of these programs on academic achievement, graduation rates, and career success. Longitudinal research is necessary to evaluate the sustainability of these programs and identify any evolving challenges that students may face over the course of their academic careers (Wuthrich *et al.*, 2021; Green, 2022).

Additionally, research on the *effectiveness of specific multilingual support models* is still in its infancy. While programs such as ESL classes, peer mentoring, and tutoring have been implemented widely, there is insufficient evidence regarding which models are most effective in different contexts. Research that compares various multilingual support strategies across diverse student populations can help identify best practices and optimize resource allocation. Furthermore, there is a need for studies that explore the integration of multilingual support with other student success initiatives, such as academic advising or career counseling, to better understand how these programs can work synergistically.

One of the significant challenges in evaluating the success of CRT and multilingual support programs is the *lack of standardized metrics* for assessing their effectiveness. Traditional measures of student success, such as GPA or graduation rates, may not fully capture the impact of these programs on student engagement, cultural competence, and social integration (Weatherton and Schussler, 2021; Hasanov *et al.*, 2021). Moreover, the effectiveness of these programs may vary widely depending on the context, including institutional culture, faculty preparedness, and the specific needs of the student population.

Another challenge is the *subjectivity of success*, as student success in CRT and multilingual support programs is often

multi-dimensional and difficult to quantify. For instance, while a student may not immediately achieve high academic performance, they may experience increased cultural self-awareness or greater confidence in using a second language. These outcomes, while valuable, are not always captured by traditional assessment tools. Additionally, the complex nature of cultural and linguistic barriers makes it difficult to isolate the specific contributions of CRT and multilingual support programs to overall student success (Snyder and Fenner, 2021; Ma, 2022).

To address these challenges, future research should explore *alternative assessment methods*, such as qualitative studies, case studies, and surveys, to gain a more comprehensive understanding of student outcomes. Moreover, the development of *institution-specific metrics* for evaluating the effectiveness of these programs, informed by student feedback and institutional goals, would provide a more nuanced approach to measurement.

As higher education continues to diversify, the role of Culturally Responsive Teaching and multilingual support programs in fostering inclusive, supportive environments is more important than ever. Emerging trends in technology and digital platforms offer exciting opportunities to enhance these programs, but critical research gaps remain. The intersectionality of culture and language, the need for longitudinal studies, and a deeper understanding of effective multilingual support models must be addressed to ensure that these programs truly meet the needs of all students. Furthermore, developing more effective and comprehensive methods for measuring the success of CRT and multilingual support programs will be essential for guiding future improvements and ensuring that these programs contribute meaningfully to student success (Kirss *et al.*, 2021; Hu *et al.*, 2021). By addressing these research gaps, higher education institutions can continue to evolve and provide a more inclusive and supportive environment for diverse students.

### 3. Conclusion

This systematic review has explored the effectiveness of Culturally Responsive Teaching (CRT) and multilingual support programs in advancing student success in U.S. higher education. The findings underscore that both CRT and multilingual support are crucial in addressing the diverse needs of students from culturally and linguistically diverse backgrounds. Culturally responsive teaching creates inclusive environments that honor diverse cultural perspectives, while multilingual support programs help overcome language barriers, ensuring students have the necessary resources to succeed academically. The combined impact of these approaches enhances student engagement, retention, and overall success by promoting a more equitable and supportive learning environment.

The implications of these findings for higher education are significant. In practice, educational institutions must prioritize the integration of CRT and multilingual support programs into their curricula and services. Faculty development initiatives should focus on training educators in culturally responsive teaching methods and language assistance strategies to ensure that all students feel valued and supported. Administrators must also commit to resource allocation that supports the implementation and sustainability of these programs, such as providing funding for language services, technology, and professional development opportunities for faculty and staff.

Policy changes are essential to further institutionalize these approaches. Policies that require or incentivize the adoption of CRT and multilingual support programs, especially for institutions serving high populations of multilingual or marginalized students, could ensure these practices become integral to academic success. Research in these areas must also be expanded, focusing on longitudinal studies to measure the long-term impact of CRT and multilingual support, as well as exploring the intersections of cultural and linguistic diversity.

In conclusion, enhancing inclusivity through the combined efforts of culturally responsive teaching and multilingual support is crucial to fostering student success in U.S. higher education. Future research and policy changes should aim to refine and scale these programs, ensuring that all students, regardless of their cultural or linguistic background, can thrive academically.

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