



Exploring 30 Years of Culturally Responsive Teaching in Higher Education: A Bibliometric Analysis

Ratna Sari¹, Agung Purwanto¹, Muktiningsih Nurjayadi¹, Irwanto¹

¹Universitas Negeri Jakarta, Indonesia

✉ ratna.ummuasiyah@gmail.com*

Article Information:

Received August 5, 2026

Revised September 10, 2026

Accepted October 10, 2026

Keywords: *Culturally responsive teaching, higher education, inclusive pedagogy, research trends*

Abstract

Culturally Responsive Teaching has become an essential pedagogical framework in higher education, affirming cultural diversity and fostering inclusive learning environments. Despite its growing relevance, the global intellectual structure and research patterns of Culturally Responsive Teaching remain underexplored. This study presents a bibliometric analysis of 726 Scopus-indexed documents published between 1995 and 2025. Microsoft Excel and Bibliometrix were used for performance indicators, while VOSviewer supported network visualization. Results indicate consistent growth in publications, with an average annual increase of 18.83%, reflecting sustained academic engagement. The United States leads in publication output and citation impact, followed by Australia and Canada, while developing regions remain underrepresented. The University of California is the most active institution, contributing 71 publications. Curriculum Inquiry emerges as a leading journal, publishing two highly cited articles with 520 citations. Geneva Gay's seminal work is the most cited, receiving 514 citations, while Lorri J. Santamaria from the University of Auckland authored three papers with an h-index of 3. Keyword analysis highlights dominant themes such as "higher education," "students," "cultural competence," and "cultural sustainability." The implications of this study emphasize strengthening scholarship in underrepresented regions and fostering global collaboration, while offering practical insights for integrating Culturally Responsive Teaching into inclusive higher education reforms.

INTRODUCTION

In the face of intensifying global interconnectedness, rapid migration, and persistent structural inequalities, higher education systems worldwide are grappling with the imperative to create inclusive, equitable learning environments. CRT has emerged as a pedagogical response to these challenges, aiming to acknowledge and incorporate students' diverse cultural experiences into teaching practices. This approach fosters not only academic success but also

How to cite:

Sari, R., Purwanto, A., Nurjayadi, M., Irwanto, I. (2026). Exploring 30 Years of Culturally Responsive Teaching in Higher Education: A Bibliometric Analysis. *International Journal of Multidisciplinary of Higher Education (IJMURHICA)*, 9(4). 1198-1237.

E-ISSN:

2622-741x

Published by:

Islamic Studies and Development Center Universitas Negeri Padang

deeper engagement by affirming students' cultural identities within the learning process (Gay, 2018). As Banks, (2016) argued, education must be restructured to reflect the multicultural realities of society, ensuring that all students, regardless of cultural background, have equitable access to meaningful learning. The growing urgency for culturally grounded pedagogy is echoed in numerous educational contexts, particularly where historically marginalized populations continue to face systemic barriers (Khunou & Ojo, 2024). Within this global landscape, CRT has gained prominence as a transformative teaching framework that aligns with the broader goal of social justice in education and supports the mandates of Sustainable Development Goal 4: ensuring inclusive and quality education for all.

In the era of globalization, higher education has become increasingly characterized by cultural, ethnic, linguistic, and socioeconomic diversity. As argued by (Mao, 2021), classrooms are becoming more diversified due to rapid internationalization and the accelerating flow of global academic mobility. According to the UN Chronicle (Jelinek & Fomerand, 2013), global tertiary enrollment is projected to double by 2025, bringing together students from markedly different cultural and educational backgrounds. Complementary data from UNESCO, (2025) indicate that global higher education enrollment has already surpassed 264 million students, while international student mobility has tripled from 2.1 million in 2000 to nearly 6.9 million in 2022 (ICEF Monitor, 2025). Global policy frameworks and public discourse increasingly emphasize inclusion and social justice, positioning culturally responsive pedagogies as essential to ensuring equitable learning environments. Nevertheless, recent studies reveal that despite internationalization policies, minority students still report feeling underrepresented in learning environments (Brito et al., 2025), signaling an urgent need to affirm and legitimize minority cultural identities through CRT frameworks (Gay, 2018; Ladson-Billings, 2021).

CRT is grounded in multicultural education theory and aims to bridge cultural gaps in the classroom by validating and affirming students' identities through pedagogical practices. Emerging from the foundational work of Geneva Gay, CRT emphasizes the importance of aligning instruction with the cultural knowledge, prior experiences, and performance styles of ethnically diverse students (Gay, 2002). Central to this approach is the belief that learning is most effective when it is situated within the cultural contexts of learners, thereby promoting educational equity and relevance. CRT encourages educators to design curricula and learning experiences that are not only academically rigorous but also reflective of the cultural narratives and assets students bring into the classroom. By doing so, it empowers learners to see their identities reflected in the educational process, which in turn fosters a sense of belonging, critical engagement, and academic success (Ladson-Billings, 1995; Morrison et al., 2008).

While CRT originated within K–12 contexts, its relevance has expanded significantly into higher education, where increasing student diversity necessitates pedagogical approaches that acknowledge and value cultural difference. Universities are responding to demographic shifts, marked by rising numbers of international, immigrant, and first-generation college students, by embedding culturally responsive frameworks into curriculum design, faculty development, and inclusive learning strategies (Gay, 2018; Ladson-Billings, 2021). CRT in higher education seeks to dismantle structural inequities and promote academic belonging by integrating students' cultural experiences into course content and classroom dialogue (Howard, 2019). Collaborative learning, social justice-oriented curricula, and inclusive assessment practices

reflect a broader transformation within universities aimed at preparing students for diverse global societies. According to [UNESCO, \(2025\)](#), the number of higher education students worldwide has reached a record 250 million, with more learners crossing borders to pursue academic qualifications, underscoring the global demand for inclusive and culturally responsive pedagogical approaches.

Several conceptual and empirical limitations hinder the field. Many studies focus on theoretical constructs or classroom-level practices, while systemic applications at the institutional level remain underexplored. For instance, fewer than 15% of CRT studies address institutional leadership or cultural policy integration ([Ruan et al., 2024](#)). Furthermore, terms such as "culturally relevant pedagogy," "culturally sustaining pedagogy," and "culturally responsive pedagogy" are inconsistently defined, complicating cross-study comparison ([Yoon, 2023](#)). Bibliometric and network analyses remain rare, with less than 7% of Scopus-indexed CRT studies utilizing these methods ([Patras et al., 2024](#)), limiting understanding of the field's macro-structural dynamics.

The urgency to overcome these gaps is high. Institutions aiming to embed CRT principles systemically must understand not only individual studies, but also broader scholarly patterns, from authorship trends to thematic shifts and collaborative networks ([van Eck & Waltman, 2010](#)). Without such macro-level insights, CRT risks remaining confined to localized teaching strategies rather than informing institutional transformation ([Ladson-Billings, 2014](#)). Bibliometric mapping can address this by guiding evidence-based reforms and inter-institutional collaboration ([Nolan & Xenofontos, 2023](#)).

Recent studies have made strides toward advancing CRT discourse in higher education. [Karagöl, \(2025\)](#) identified over 250 Scopus-indexed publications emphasizing teacher identity and inclusive practices. [Khanom et al., \(2025\)](#) highlighted dominant themes of cultural competence and curriculum equity. Additionally, CRT's integration with digital pedagogy has gained attention, especially as online learning expands. [Makda, \(2025\)](#) argues that virtual classrooms require heightened cultural responsiveness, reinforcing CRT's relevance in technology-enhanced education.

To address the conceptual and methodological gaps identified in previous research, this study undertakes a comprehensive bibliometric analysis of CRT in higher education, spanning thirty years from 1995 to 2025. By utilizing authoritative international databases such as Scopus, the study systematically maps global trends in publication growth, co-authorship collaboration, and the thematic development of CRT-related scholarship. Bibliometric analysis, as emphasized by ([Donthu et al., 2021](#); [Moral-Muñoz et al., 2020](#)), provides a robust and replicable methodological framework for capturing the structural dynamics and intellectual foundations of a research domain. In contrast to narrative or conceptual reviews, this quantitative, data-driven approach allows for the identification of influential authors, institutions, countries, and emergent research clusters, offering a panoramic view of the evolution and diffusion of CRT scholarship.

Building on this methodological foundation, the primary aim of the study is encapsulated in the title: *"Exploring 30 Years of Culturally Responsive Teaching in Higher Education: A Bibliometric Analysis."* The research seeks to generate an empirically grounded understanding of the trajectory, distribution, and collaborative networks of CRT research in higher education, with implications for both academic inquiry and institutional practice. Through this lens, the study offers strategic insights that can inform inclusive policy development, curricular innovation, and faculty professional development

initiatives grounded in cultural responsiveness (Banks & Banks, 2020). In doing so, it contributes not only to the academic literature on CRT but also to broader efforts aimed at embedding equity and diversity within the fabric of global higher education systems. Accordingly, the following research questions guide the inquiry:

- 1) How has the volume and growth trend of CRT-related publications in higher education evolved globally from the mid-1990s to early 2025?
- 2) Which countries, institutions, and journals have contributed most significantly to CRT research in higher education over this period?
- 3) Who are the most influential authors, works, and intellectual collaboration networks in global CRT scholarship in higher education?
- 4) Which themes or keywords dominate CRT research in higher education, and how have they shifted over time from foundational theoretical concepts toward institutional, curricular, and inclusion-oriented frameworks?

METHODS

Study design

To expand the understanding of CRT in higher education, this study employed a bibliometric analysis to explore long-term trends, recent developments, and emerging themes over the past three decades (1995–2025). By adopting a broad temporal scope, the study offers a comprehensive overview of the historical development of CRT research and highlights how the scholarly focus has evolved. Bibliometric analysis was selected for its ability to conduct objective and statistical examinations of large datasets, enabling the systematic mapping of the scientific knowledge base, the identification of conceptual structures, and the detection of research frontiers (Anidar et al., 2026; Aryasutha et al., 2025; Efendi et al., 2026; Engkizar et al., 2026; Moral-Muñoz et al., 2020). Data for this study were drawn exclusively from peer-reviewed journal articles compiled from a filtered database, which were then analyzed using Biblioshiny for R and VOSviewer. This approach allowed the identification of scholarly contributions, collaboration networks, keyword co-occurrences, and thematic structures, thereby ensuring a more accurate assessment of the overall trends and impact of CRT research in higher education (Aria & Cuccurullo, 2017; Engkizar et al., 2025; Gumus et al., 2018; Kandeel et al., 2023; Okenova et al., 2025; van Eck & Waltman, 2010).

Data Collection

The data collection process for this study was carried out using the Scopus database, accessed on September 13, 2025, to retrieve articles related to CRT in higher education up to 2025. Scopus was chosen as the primary data source due to its broad coverage of academic literature across disciplines, including education, making it more representative compared to other databases such as Web of Science. Scopus is recognized as one of the world's largest bibliographic databases, indexing more than 26,000 peer-reviewed journals, 1,100 book series, and over 11.7 million conference papers (Elsevier, 2014). Furthermore, Scopus is considered highly suitable for bibliometric studies because it minimizes the risk of bias and omissions that may arise from the limited coverage of journals (Pizzi et al., 2020). Donthu et al., (2021) also emphasize that the availability of large-scale databases such as Scopus has simplified the acquisition of bibliometric data, thereby facilitating systematic analysis and fostering greater academic interest in bibliometric research. Therefore, this study relied on Scopus as the primary source for data collection.

Data for this study were collected by following a systematic protocol based on the PRISMA guidelines (*Preferred Reporting Items for Systematic Reviews*

and *Meta-Analyses*) to ensure the quality and consistency of the article selection process (Moher et al., 2009). The literature search was conducted using the Scopus database on September 13, 2025, which is widely recognized for its comprehensive coverage of peer-reviewed publications across disciplines, including higher education. The inclusion criteria were limited to journal articles explicitly addressing CRT in higher education, published between 1995 and 2025, and written in English. Conference proceedings, editorials, and review papers were excluded. To maintain academic relevance, the titles, abstracts, and keywords of each article were manually reviewed to ensure alignment with the research focus. This approach ensured that only relevant and high-quality articles were included in the final dataset (Donthu et al., 2021; Moher et al., 2009).

The earliest study identified within the dataset was published in 1996. As shown in figure 1, the article selection process is visually summarized, highlighting the stages used to narrow and refine the dataset according to the defined criteria.

Table 1. The search string for the study

Topic	Search string
Culturally responsive	“Culture education” OR “Cultural sustainability” OR “Culturally Responsive” OR “Sustaining Education” OR “Culture-based teaching” OR “Culturally responsive teaching”
Higher education	“higher education” OR “university” OR “college”
Teaching	“student” OR “teacher” OR “teach” OR “Education”

Table 2. Inclusion and exclusion criteria

Criterion	Inclusion	Exclusion
Publication year	Documents published from January 1996 to September 2025	Documents published after September 2025
Publication type	Articles	Conference papers, books, reviews, book chapters, editorials, short surveys, etc
Source type	Journal	Conference proceedings, book series, books, trade journals, etc
Language	English	Other languages (Chinese, Korean, Japanese, Turkish, etc.)
Setting	Studies focused on culturally responsive teaching in Higher Education	Studies not related to culturally responsive teaching in higher education (e.g., secondary education)

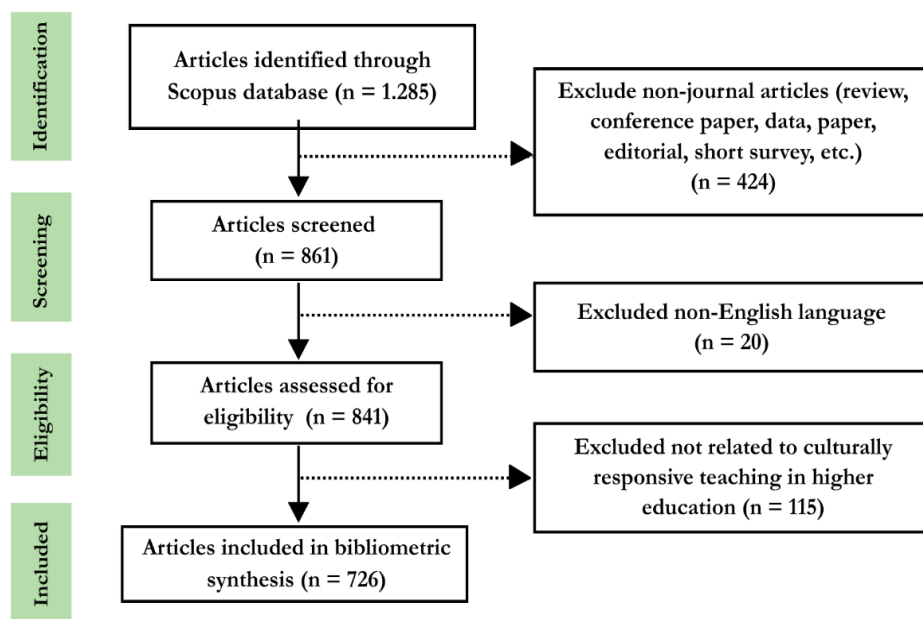


Fig 1. PRISMA flowchart

Inclusion and exclusion criteria

The inclusion and exclusion criteria applied in this study are summarized in figure 1. The inclusion criteria focused on journal articles published between January 1995 and September 2025 that explicitly examined CRT in the context of higher education. The search was conducted without restrictions on publication year to ensure that both early contributions and recent developments were captured comprehensively. The decision to include studies starting from 1995 was based on the fact that this year marked the earliest publication identified in our dataset related to CRT in higher education. This temporal scope provides a logical foundation for tracing the chronological development, thematic evolution, and research patterns on CRT over the past three decades.

To ensure the rigor and reliability of the dataset, the bibliometric analysis was limited to peer-reviewed journal articles written in English, as these are widely recognized as credible sources of scientific knowledge. English-language publications were prioritized because of their dominant role in international academic communication. The exclusion criteria involved eliminating non-journal publications such as reviews, conference papers, editorials, and short surveys ($n = 424$), articles not written in English ($n = 20$), and publications not directly addressing CRT in higher education ($n = 115$). This methodological approach ensured that the final dataset, consisting of 726 articles, was both scientifically validated and highly relevant, thereby providing a robust basis for analyzing publication trends and thematic directions of CRT research in higher education.

Data analysis

The dataset obtained from Scopus was converted into CSV format and processed using the Bibliometrix package in RStudio (Aria & Cuccurullo, 2017) and VOSviewer (van Eck & Waltman, 2010) to generate in-depth bibliometric insights. Several analytical parameters were established, including publication trends, the growth of citation performance, the distribution of authors, institutions, and countries, as well as the identification of highly cited works in the field of CRT in higher education. This approach allowed for both quantitative and qualitative exploration of the scientific landscape, thereby providing a systematic overview of the development of CRT over the past three decades (Donthu et al., 2021).

The bibliometric analysis employed two complementary methods: performance analysis and science mapping. Performance analysis involved descriptive metrics such as the annual number of publications, most productive authors, contributing journals, and institutional affiliations. Meanwhile, science mapping was performed using VOSviewer to visualize intellectual structures through co-authorship networks, co-citation linkages, and keyword co-occurrence patterns. Co-authorship analysis was used to examine patterns of collaboration among researchers and institutions, while co-word analysis facilitated the identification of thematic clusters and emerging trends within CRT literature (Irwanto, 2025).

To strengthen the rigor of the analysis, key bibliometric indicators such as the total link strength (TLS) and frequency of keyword co-occurrence were employed. TLS captured the intensity of collaboration or conceptual linkages between items, whereas co-word analysis enabled the identification of dominant and emerging concepts in CRT. This methodological design ensured that the findings not only mapped the structural knowledge base of CRT but also revealed its conceptual dynamics and long-term evolution in higher education research (Martínez-López et al., 2018).

Table 3. Overview of the main information

Documents and citations	Results	Authors and collaboration	Results
Timespan	1996-2025	Authors	2113
Sources	476	Author's keywords	3032
Documents	726	Authors of single-authored documents	174
Annual growth rate %	18.83	Single-authored documents	183
Document average age	5.36	Co-authors per document	3.06
Average citations per document	11.42	International co-authorships %	10.19

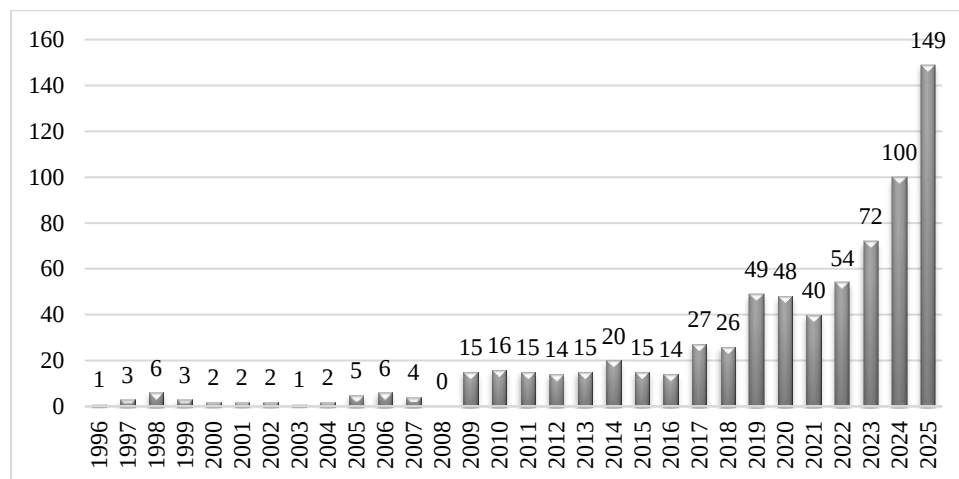


Fig 2. Number of articles published annually in culturally responsive teaching (1996-2025)

RESULT AND DISCUSSION

Table 3 summarizes the key bibliometric indicators of the collected documents on CRT in higher education. Over the period from 1996 to 2025, a total of 726 documents were identified across 476 publication outlets, with an

annual growth rate of 18.83%, indicating robust expansion of the field. The average age of the documents is 5.36 years, showing that much of the scholarship remains relatively recent, while each document has received an average of 11.42 citations, highlighting its academic relevance. The dataset includes 6.154 references, 1.128 Keywords Plus, and 3,032 author keywords, reflecting the thematic breadth and evolving research directions. In terms of authorship, 2.113 scholars contributed to the corpus, with 174 producing single-authored works. Nevertheless, collaboration predominates, as shown by the 179 single-authored documents compared to an average of 3.06 co-authors per paper. However, only 10.19% of the co-authorships involved international collaboration, suggesting that while research partnerships are well established, cross-border collaborations remain limited. The relatively low proportion of cross-border partnerships may be explained by structural and contextual challenges such as disparities in funding, unequal access to academic resources, and institutional barriers, which have been noted as common obstacles to international collaboration in higher education research (Marginson, 2022; Matthews et al., 2020; Moshtari & Safarpour, 2024).

Annual scientific production

Figure 2 provides an overview of the annual scientific output on CRT in higher education across 30 years from 1996 to 2025. During the initial phase, from 1996 to 2008, scholarly production was sparse, with article counts per year ranging from 0 to 6. The lowest point was recorded in 2008 with zero publications, signaling limited engagement with the CRT theme during this early conceptual stage. A gradual but modest increase is observed between 2009 and 2016, during which the annual number of documents fluctuated between 14 and 20. This period reflects the early consolidation phase of the research field, in which scholarly engagement remained relatively limited and scattered across years. This period can be characterized as the field's foundational stage, where research interest emerged gradually but remained scattered across years.

A notable surge began in 2017, initiating a phase of accelerated growth and field expansion. Publications increased from 27 in 2017 to 49 by 2019, nearly doubling within two years. Despite minor fluctuations, such as a dip to 40 publications in 2021, the upward momentum continued, with 54 articles published in 2022 and a steep rise in subsequent years. Between 2023 and 2025, the annual outputs rose dramatically from 72 to 100 and finally to 149, the highest in the three-decade period. This surge likely reflects the increasing global recognition of culturally responsive teaching as a key pedagogical approach in higher education, supported by broader academic and institutional initiatives promoting inclusivity and equity in teaching practices (Karagöl, 2025; Khunou & Ojo, 2024).

The pattern observed in this field aligns with similar findings in other areas of education research. For example, Maral, (2026) reported that global educational research indexed in Scopus has increased consistently throughout 2013–2022, with a growth of about 126% over that period (Maral, 2026). Likewise, a bibliometric analysis by You et al., (2024) demonstrated a significant surge in higher education leadership development publications after 2020. Parallel findings were also reported by (Chávez Santos et al., 2024), who highlighted the intensification of intercultural bilingual education research in recent years. These studies provide external validation that the growth in publications on CRT post-2016 is part of a broader trend of accelerating scholarly activity in education worldwide.

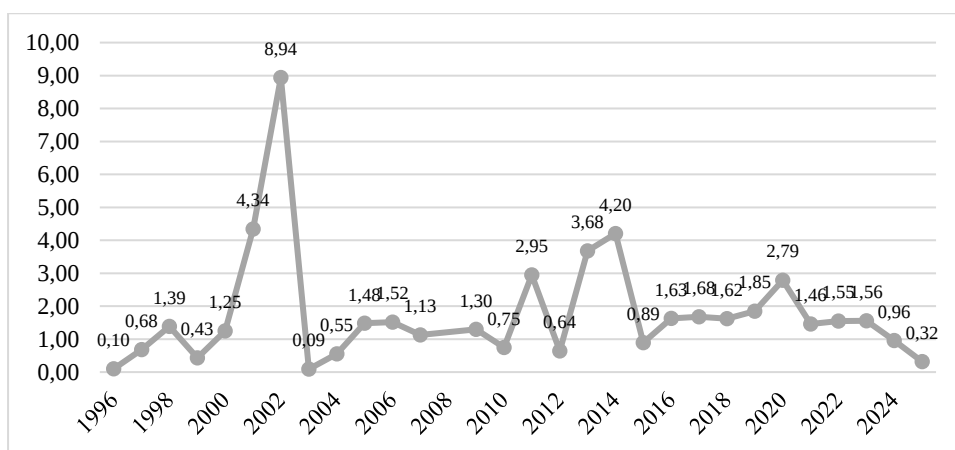


Fig 3. Average citations per year in culturally responsive teaching in higher education (1996 to 2025)

Figure 3 illustrates the average annual citation count for publications on CRT in higher education between 1996 and 2025. The data reveal clear fluctuations in citation impact over three decades. During the foundational years (1996–2006), the field experienced modest citation averages, generally ranging from 0.10 to 1.52 citations per article per year. An exception occurred in 2002, which recorded the highest average citation impact of 8.94, signaling the presence of seminal works that became key reference points in early CRT scholarship. This spike suggests that a small number of highly influential publications contributed disproportionately to the field’s intellectual foundation.

A second notable period of heightened scholarly influence was observed between 2011 and 2014. During this phase, citation averages ranged from 2.95 (2011) to 4.20 (2014), indicating that publications during this time attracted sustained academic attention. These peaks likely reflect the growing institutional emphasis on inclusive pedagogies and the integration of CRT into higher education reforms. As awareness of educational equity expanded, research during these years contributed significantly to shaping the CRT discourse. From 2015 to 2019, the citation averages stabilized between 0.89 and 1.85, marking a period of consolidation in which CRT themes became more widely adopted, although not necessarily yielding high citation volumes per article.

More recently, between 2020 and 2025, citation averages have declined steadily, from 2.79 in 2020 to just 0.32 in 2025. This downward trend is a common bibliometric phenomenon often attributed to citation latency, where newly published works have not had sufficient time to accumulate citations (You et al., 2024). As bibliometric scholars have emphasized, academic citations typically increase several years after publication (Chávez Santos et al., 2024), and lower citation figures in recent years should not be equated with diminished scholarly value. Instead, they highlight the temporal dynamics of knowledge dissemination. Foundational or widely cited reviews continue to shape the field, while more recent contributions await recognition and integration into the broader research landscape (Karagöl, 2025; Khunou & Ojo, 2024).

These trends correspond with broader patterns in educational research. (You et al., 2024), for example, identified similar lags in citation accumulation for publications on higher education leadership, while (Chávez Santos et al., 2024) noted uneven but growing citation activity in intercultural bilingual education. In line with these findings, Karagöl, (2025) described CRT as a rapidly expanding yet still maturing field, wherein citation impact tends to center around pivotal theoretical frameworks and widely adopted conceptual models. Accordingly, the observed variation in citation averages underscores CRT’s

evolving influence in academic discourse and its future potential as more recent works gain scholarly traction.

Most relevant countries

Table 4 presents the results of the *co-authorship analysis by countries* using VOSviewer, identifying the top 10 out of 32 nations contributing to CRT research in higher education from 1995 to 2025. The findings show that the top ten countries together account for 85.23% of the total output (619 of 726 documents), underlining a strong concentration of CRT scholarship within a relatively small group of nations. In regional terms, North America (United States and Canada) contributes 63.36% of all publications, while Europe (United Kingdom, Germany, Ireland, and Spain) adds 5.10%, so that North America and Europe together represent 68.46% of the global output. Oceania (Australia and New Zealand) contributes approximately 10.74%, and Asia (China, Malaysia, Indonesia) about 8.40%, whereas Africa and Latin America remain marginal in this dataset. The United States stands out as the principal driver, with 428 publications and 5,848 citations, reflecting its central role in developing CRT scholarship. Foundational contributions by (Banks, 1993; Ladson-Billings, 1995) laid the conceptual groundwork, and subsequent work by scholars such as (Gay, 2018; Howard, 2019) has helped diffuse CRT into broader teacher education and curriculum debates, a pattern corroborated by recent bibliometric mapping (Patras et al., 2024).

In terms of citation impact, the United States recorded the highest total citations (TC = 5,848) and an average of 13.66 citations per article, demonstrating both productivity and scholarly influence. Australia follows with 540 citations (AAC = 8.85) and Canada with 270 citations (AAC = 8.44), confirming that these countries maintain not only a high research output but also strong academic resonance. New Zealand, though representing a smaller body of work, shows an exceptionally high average citation rate (AAC = 30.53), reflecting the notable visibility and impact of its limited corpus. Meanwhile, China (AAC = 3.85), Malaysia (AAC = 2.81), and Indonesia (AAC = 4.00) indicate emerging yet developing engagement in global CRT scholarship. This trend illustrates the maturity of CRT discourse in Western academia, where research has long been intertwined with multicultural and equity-based educational policies (Banks, 1993), while also highlighting the gradual diffusion of CRT frameworks into Asian contexts. As emphasized by (Teixeira da Silva & Dobránszki, 2016), stronger co-authorship density is often associated with higher citation visibility, as research circulated across multiple networks reaches broader academic audiences. These findings confirm that collaborative intensity among leading CRT-producing countries has played a pivotal role in advancing theoretical refinement and cross-cultural adaptation of CRT principles, thereby strengthening its position as a globally recognized educational paradigm (Sleeter, 2024; Gay, 2018; Howard, 2019; Patras et al., 2024).

Table 4. Top 10 most productive countries

Country/Territory	NP	TC	AAC	FP
United States	428	5848	13.66	1996
Australia	61	540	8.85	2010
Canada	32	270	8.44	2011
China	33	127	3.85	2005
Germany	6	66	11.00	2024
Ireland	6	66	11.00	2009
United Kingdom	14	122	8.71	2019
Malaysia	16	45	2.81	2012
Spain	11	89	8.09	2017

Indonesia	12	48	4.00	1997
-----------	----	----	------	------

NP total number of publications, TC total number of citations, AAC average number of citations per article, FP year of the first publication

From the Scopus dataset, the three most productive and influential countries, the United States, Australia, and Canada, form the intellectual and collaborative core of global CRT scholarship in higher education. The United States, as the leading contributor, has historically anchored the development of culturally responsive education through national efforts to achieve equity and justice in learning. According to [Saucedo & Jimenez, \(2021\)](#) in The Institute of Education Sciences, culturally responsive education in the United States emerged from the legacy of desegregation policies and diversity reforms, emphasizing that equitable learning requires the recognition of students' cultural experiences and identities. These long-standing commitments have positioned U.S. researchers at the forefront of theoretical innovation and global dissemination of CRT frameworks. Australia, occupying the second position, demonstrates a strong alignment between national education policy and culturally responsive pedagogy. As noted by [\(Morrison et al., 2019\)](#), Australian education has institutionalized CRT principles through commitments to reconciliation, Indigenous inclusion, and multicultural engagement in teacher preparation programs. This has created a distinctive Australian strand of CRT that foregrounds the integration of First Nations knowledge and culturally sustaining pedagogy. Canada, ranked third, exhibits a parallel trajectory characterized by systemic initiatives to embed diversity and equity across educational institutions. Empirical work by [Chitpin & Karoui, \(2021\)](#) reveals that Canadian schools and universities have increasingly adopted culturally responsive pedagogical leadership to support multilingual and immigrant learners, underscoring the country's commitment to intercultural understanding and inclusive practice. Together, these three Anglophone nations not only dominate global CRT publication output but also drive theoretical and policy directions that shape how CRT is conceptualized and implemented worldwide.

A co-authorship network between countries was visualized using VOSviewer, as shown in figure 4. For this analysis, the type of analysis was *co-authorship* with the *unit of analysis* being countries, and the *counting method* applied was full counting. A minimum threshold of three documents and five citations per country was used, resulting in 32 countries meeting the inclusion criteria out of the total 81 identified in the dataset. Each circle in the visualization represents a country, with the size of the node proportional to the number of publications, while the connecting lines denote co-authorship links whose thickness indicates the strength of collaboration. The results reveal nine distinct clusters, each represented by a different color, reflecting the diversity and distribution of international partnerships in CRT research. The overall structure confirms that CRT collaborations are primarily concentrated among countries with long-established higher-education systems and active international research linkages, consistent with prior findings that scientific collaboration networks tend to mirror linguistic, geographic, and historical affinities ([Glänzel & Schubert, 2006](#); [van Eck & Waltman, 2010](#)).

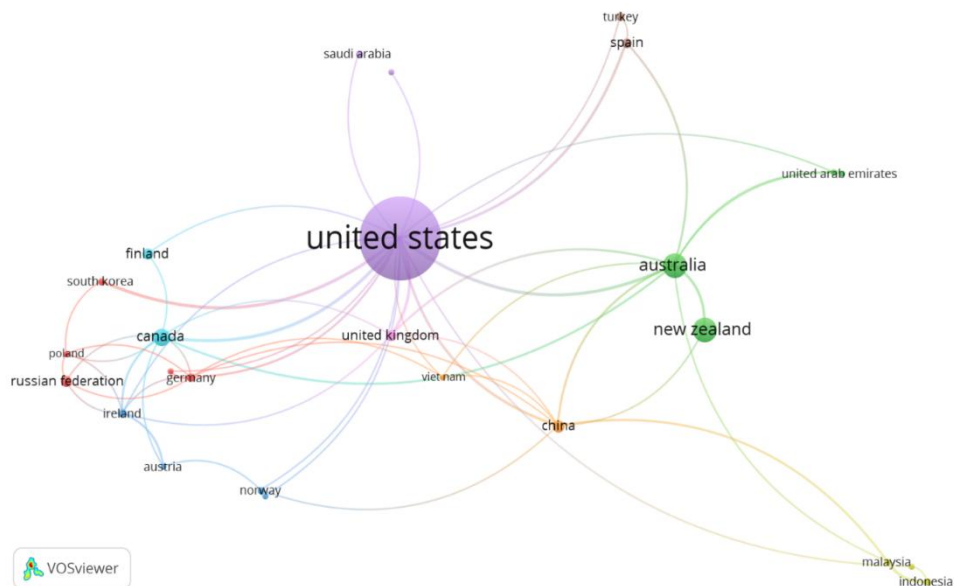


Fig 4. Co-authorship networks of countries

At the center of the visualization, the United States clearly dominates the co-authorship network with the highest Total Link Strength (TLS: 35), confirming its central coordinating role in global CRT research. It maintains strong partnerships with Australia (TLS: 19) and Canada (TLS: 14), forming the core triad of international collaboration that drives theoretical and empirical development in the field. These three Anglophone nations also connect extensively with the United Kingdom and New Zealand, extending their influence across the North American and Oceanian clusters. The United States' leadership in CRT research aligns with its long-standing academic infrastructure and federal emphasis on equity-oriented education policy (Leydesdorff & Wagner, 2008). Likewise, Australia's growing collaboration strength reflects its policy commitment to Indigenous inclusion and multicultural teacher education, while Canada's active partnerships highlight its investment in intercultural pedagogy and reconciliation-focused research. In contrast, China (TLS: 12), Malaysia (TLS: 7), and Indonesia (TLS: 5) display emerging yet modest international connections, suggesting developing engagement within the global CRT research network. Similar to observations by (Dehdarirad & Nasiri, 2017), countries with denser co-authorship ties tend to exhibit higher research impact and visibility, implying that the collaborative dominance of the U.S.–Australia–Canada cluster amplifies both the diffusion and global influence of CRT scholarship.

It is worth highlighting that the co-authorship visualization identified nine distinct research clusters reflecting diverse but interconnected collaboration networks in CRT research. As shown in Figure 4, Cluster 1 (red) includes *Germany, the Netherlands, Poland, the Russian Federation, and South Korea*, representing strong European–Asian research linkages driven by institutional partnerships and mobility programs. Cluster 2 (green), comprising *Australia, Ghana, New Zealand, and the United Arab Emirates*, indicates a prominent Oceania–Middle Eastern collaboration centered around equity-based educational policy and inclusive pedagogy. Cluster 3 (blue) groups *Austria, India, Ireland, and Norway*, while Cluster 4 (yellow) connects *Indonesia, Malaysia, and Thailand*, emphasizing regional cooperation in Southeast Asia. Cluster 5 (purple) includes *the Czech Republic, Saudi Arabia, and the United States*, showing the U.S. as a bridging node linking Western and Middle Eastern scholarship. Smaller clusters, such as Cluster 6 (cyan) with *Canada and Finland*, and Cluster

7 (orange) comprising *China* and *Vietnam*, demonstrate the growing presence of cross-regional partnerships in CRT-related research. Cluster 8 (brown) links *Spain* and *Turkey*, while Cluster 9 (pink) consists solely of *the United Kingdom*, reflecting its independent but historically influential publication base. Collectively, these clusters visualize the structural complexity of CRT research collaboration, where Anglophone nations form the central core while European and Asian countries emerge as regional hubs. This pattern confirms previous findings that international scientific networks are shaped by linguistic affinity, geographic proximity, and shared educational priorities (Glänzel & Schubert, 2006; Leydesdorff & Wagner, 2008), while the clustering method applied through *VOSviewer* effectively captures relational strength and thematic cohesion within global co-authorship patterns (van Eck & Waltman, 2010).

Most relevant institutions

Numerous universities across North America and Oceania have been instrumental in advancing research on CRT in higher education. As shown in Table 5, the *University of California* leads globally with 71 publications, followed by the *University of Wisconsin–Madison* with 34, and *Texas Tech University* and *The University of Queensland* each contributing 22 articles. The top ten institutions are predominantly located in the United States and Australia, with additional representation from New Zealand through *The University of Auckland* (19 articles). This concentration reflects the historical and institutional leadership of U.S. universities in developing the theoretical foundations of CRT, grounded in multicultural education and equity-oriented pedagogies (Banks, 1993; Ladson-Billings, 1995). The *University of California* system, for instance, has long served as an intellectual hub for diversity, equity, and inclusion research, supported by state-funded initiatives promoting culturally responsive teacher preparation (Sleeter, 2024). Similarly, the prominence of Australian institutions such as *The University of Queensland* and the *University of South Australia* (17 publications) can be attributed to the national focus on Indigenous reconciliation and intercultural pedagogy in higher education (Morrison et al., 2019). In Canada and Oceania, the *University of Auckland's* consistent contributions illustrate the region's engagement with inclusive teaching practices and bicultural educational policy aligned with the Treaty of Waitangi (Bishop, 2019). Collectively, these findings confirm that institutions from the United States, Australia, and New Zealand dominate CRT scholarship due to long-established policy frameworks, sustained research funding, and institutional commitments to social justice in education. This global pattern echoes earlier bibliometric findings by (Teixeira da Silva & Dobránszki, 2016), who emphasized that academic environments with robust equity-based mandates tend to yield higher productivity and citation impact in pedagogical innovation research.

Table 5. Top 10 most productive institutions

Institutions	Location	NP	FP
University of California	United States	71	1997
University of Wisconsin-Madison	United States	34	2009
Texas Tech University	United States	22	2000
The University of Queensland	Australia	22	2020
The University of Auckland	New Zealand	19	2014
University of Hawai'i at Manoa	United States	18	2014
University of South Australia	Australia	17	2017
University of South Florida	United States	17	2014

California State University	United States	15	1997
Northern Arizona University	United States	15	2020

NP total number of publications, FP year of the first publication

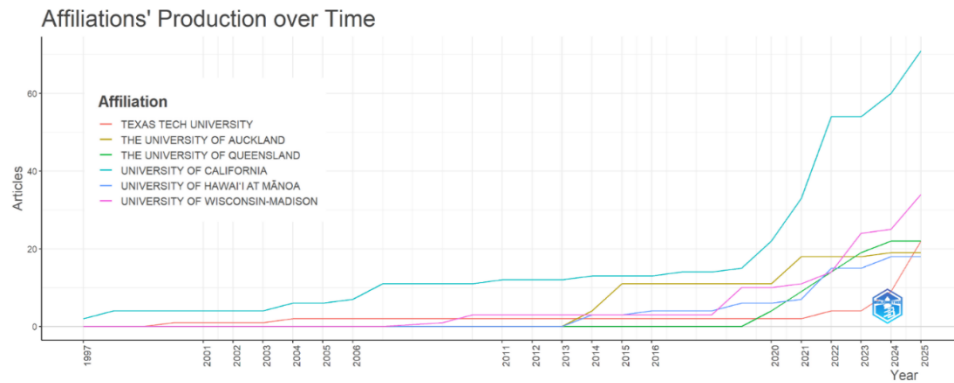


Fig 5. Affiliations' production over time

Among the most productive institutions, the University of California (UC) stands out as the leading contributor to CRT scholarship, with 71 publications listed in the Top-10 Affiliations dataset. The earliest record associated with UC appears in 1997 in the *Journal of Black Psychology*, which has received 41 citations. UC's most influential contribution in this field, published in the *Harvard Educational Review* in 2014, has accumulated 431 citations, reflecting its substantial theoretical and empirical influence on CRT discourse. The University of Wisconsin–Madison, ranked second with 34 publications, made its first appearance in 2001 through a study published in the *Journal of Vocational Behavior*, which has since garnered 190 citations. Meanwhile, Texas Tech University, occupying the third position with 22 publications, entered the field in 2000 with a paper featured in the *Journal of Literary Research*, now cited 23 times in Scopus. These institutions collectively represent critical hubs for CRT research, signaling a shift toward a more geographically inclusive academic community.

As shown in figure 5, the temporal analysis of institutional productivity reveals an upward trend in CRT-related publications, particularly between 2014 and 2025, indicating the field's maturation. The University of California consistently leads this upward trend because it has maintained a strong and long-standing commitment to diversity, equity, and inclusion initiatives (UC, 2024). These initiatives not only provide funding and institutional support for research in culturally responsive pedagogy UC, (2025) but also ensure that such principles are deeply embedded in teacher education programs and academic research across its campuses (UC San Diego Extension., 2025). By actively integrating culturally responsive teaching practices into curriculum design, faculty development, and educational policy, the University of California has established itself as a national leader in promoting equity and social justice within higher education. Similarly, the University of Wisconsin–Madison benefits from a long-established research ecosystem through the Wisconsin Center for Education Research (WCER), which has served as a hub for equity-oriented and evidence-based pedagogical innovation (Nguyen & Commins, 2020; W.C.E.R., 2025). Texas Tech University's growth in CRT-related research reflects the institutional strengthening of its College of Education, which since the mid-2000s has emphasized community-based practice and multicultural teacher preparation within diverse classroom contexts (Texas Tech University, 2025). As Dehdarirad & Nasiri, (2017); Glänzel & Schubert, (2006) note, institutions positioned at the intersection of robust funding

structures, interdisciplinary research networks, and strong international collaborations tend to demonstrate both higher productivity and greater citation impact. In this regard, UC, UW–Madison, and Texas Tech exemplify how sustained institutional support and scholarly collaboration shape the global trajectory of CRT research.

Most impactful journals

Table 6 presents the ten most influential journals contributing to the advancement of CRT scholarship in higher education, ranked by total citations (TC). Among the 476 sources identified in the dataset, these top journals collectively account for a substantial share of total citations, underscoring their academic influence in shaping CRT discourse. *Curriculum Inquiry* ranks first (TC = 520; H = 2; Q1), followed by *Harvard Educational Review* (TC = 431; H = 1; N/A), *Journal of Higher Education* (TC = 391; H = 1; Q1), *Educational Administration Quarterly* (TC = 302; H = 3; Q1), and *Journal of Teacher Education* (TC = 299; H = 3; Q1). Notably, *Journal of Negro Education* (TC = 243; H = 7; Q3) also stands out as a historically significant venue focusing on diversity, race, and equity in education. The predominance of *Curriculum Inquiry* and *Harvard Educational Review* can be attributed to their longstanding reputation as leading venues for theoretical and empirical contributions that bridge curriculum theory, pedagogical reform, and educational equity. The possible reason behind their prominence lies in these journals' commitment to interdisciplinary approaches that connect educational theory with sustainable and socially just pedagogical practices. This orientation aligns with global academic trends emphasizing inclusive and equitable learning environments (Banks & Banks, 2020; Sleeter, 2024). Furthermore, their consistent classification in the top quartile (Q1) of educational research journals reflects their scholarly rigor and high citation impact. The continued dominance of these journals also demonstrates persistent engagement with CRT themes, reinforcing their roles as central publication venues for advancing discourse on cultural responsiveness, social justice, and transformative pedagogy in higher education (Gay, 2018; McCARTY & Lee, 2014). Together, these indicators highlight that leading Q1 journals such as *Curriculum Inquiry* and *Harvard Educational Review* function not only as platforms for disseminating CRT theory but also as intellectual spaces where the intersection of culture, equity, and education continues to evolve through critical inquiry and reflective scholarship.

Table 6. Top 10 most influential journal

Source	TC	NP	H	Q	Publisher	FP
Curriculum Inquiry	520	2	2	Q1	Taylor and Francis Ltd.	2006
Harvard Educational Review	431	1	1	N/A	Harvard University	2014
Journal of Higher Education	391	1	1	Q1	Taylor and Francis Ltd.	2002
Educational Administration Quarterly	302	3	3	Q1	SAGE Publications Inc.	2009
Journal of Teacher Education	299	3	3	Q1	SAGE Publications Inc.	2005
Journal of Negro Education	243	7	7	Q3	Howard University	1998

Teaching and Teacher Education	237	6	4	Q1	Elsevier Ltd	2009
Journal of Vocational Behavior	136	2	2	Q1	Academic Press Inc.	2001
Teacher College Record	201	4	3	Q1	Teachers College Record	2006
Urban Review	195	8	4	Q1	Springer Netherlands	1999

TC total number of citations, NP total number of publications, H h-index, Q quartile, FP year of the first publication

A closer examination of the two most-cited outlets helps clarify their centrality within the CRT research landscape. *Curriculum Inquiry*, a long-standing international journal dedicated to advancing curriculum theory and educational experience, ranks first with 520 citations across two publications, holding an H-index of 2 and indexed in Quartile 1 (Q1) under Taylor and Francis Ltd. since its first contribution in 2006. The journal's editorial mission explicitly bridges curriculum studies with critical theory, focusing on equity, identity, and pedagogical justice. Its consistent publication of theoretically grounded and critically reflective works has positioned it as a foundational platform for research on culturally responsive curriculum design, teacher education, and social transformation. Through its interdisciplinary approach, *Curriculum Inquiry* attracts scholarship that interrogates the sociopolitical dimensions of teaching and learning, emphasizing culturally inclusive and justice-oriented pedagogical frameworks (SJR, 2025; Taylor & Francis, 2025). Meanwhile, *Harvard Educational Review*, published by Harvard University since 2014, ranks second with 431 citations from one publication and maintains an H-index of 1. Although not assigned a quartile ranking in the current dataset, it remains a globally recognized journal that serves as a wide-reaching forum for interdisciplinary research and policy-relevant critique in education. The journal specializes in publishing conceptual and empirical works that engage deeply with educational equity, systemic reform, and practitioner-driven inquiry, frequently featuring scholarship on culturally responsive and socially just pedagogy (Harvard Education Publishing Group., 2025). Its broad readership among scholars, educators, and policymakers amplifies its impact, ensuring that CRT-related discourse extends beyond academia to inform practice and educational reform agendas. The topical alignment between these journals' editorial priorities, curriculum critique, equity, and educational policy, and the core principles of CRT research explains their exceptionally high citation counts within the bibliometric mapping. In summary, the prominence of *Curriculum Inquiry* and *Harvard Educational Review* highlights how the most influential journals in CRT research are those that integrate theoretical innovation with practical implications for equity-oriented education. Their dominance reflects a broader intellectual movement in higher education toward critically engaged, socially responsive, and interdisciplinary scholarship. Recognizing the leading roles of these journals is thus essential not only for identifying key publications to review in future CRT studies but also for understanding how editorial missions and scholarly traditions shape the evolving discourse on cultural responsiveness and social justice in education.

Core Sources by Bradford's Law

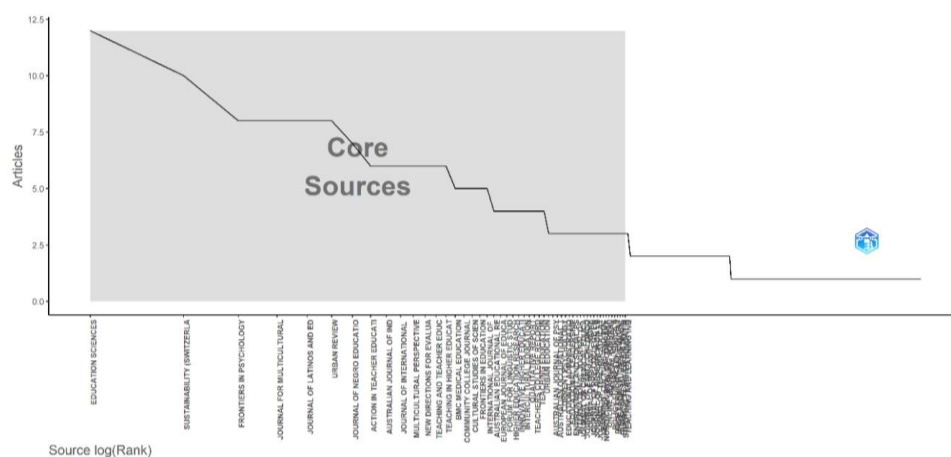


Fig 6. Core sources through Bradford's law

In accordance with Bradford's Law, the distribution of journals publishing research on CRT in higher education reveals a distinct core-periphery structure that highlights the field's intellectual consolidation and expansion. As illustrated in table 7 and supported by the Core Sources analysis, the first zone or Bradford core comprises 40 journals that collectively produced 198 articles, representing 11.2% of the total sources and 34.5% of the total documents. These journals constitute the central body of CRT scholarship, functioning as the primary channels through which influential and frequently cited research is disseminated. The second zone includes 176 journals with 225 publications (accounting for 35.9% of all sources and 39.2% of total documents), while the third zone consists of 260 journals contributing 220 articles, representing 52.9% of the total sources and 26.3% of the documents. This three-tiered distribution pattern indicates that a relatively small number of high-impact journals (Zone 1) concentrate a substantial proportion of scholarly output, whereas a broader range of peripheral journals (Zones 2 and 3) provide complementary and emerging contributions. Such dispersion demonstrates the interdisciplinary character and growing global interest in CRT, intersecting with adjacent domains such as multicultural education, teacher preparation, educational psychology, and sustainability studies. This trend aligns with prior bibliometric observations (Gay, 2018; González & Sebastián-López, 2022; Karagöl, 2025; Ladson-Billings, 2021), emphasizing that CRT has evolved from a specialized subfield into a mature and diversified area of inquiry that is firmly integrated within the broader discourse on equity, inclusion, and transformative pedagogy in higher education.

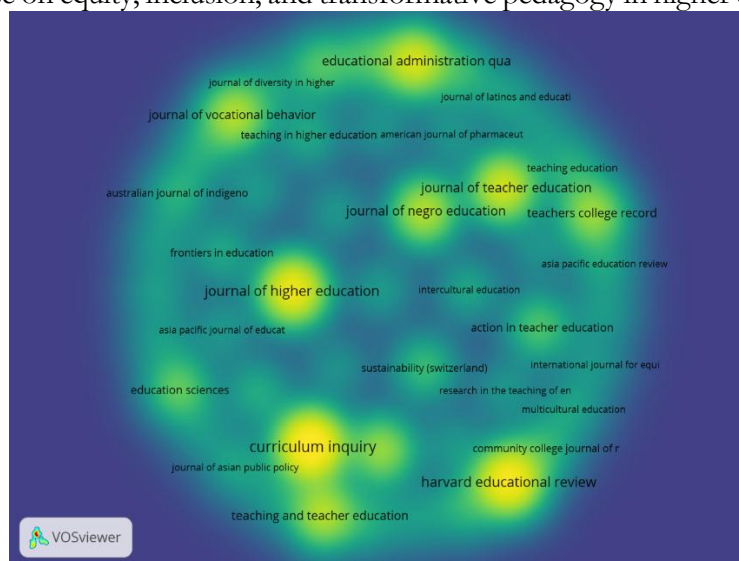


Fig 7. Density visualization of source citations

To determine which journals exert the strongest citation influence within the CRT literature, a direct citation analysis of sources was conducted using VOSviewer. This approach identifies the most frequently cited journals within the dataset, offering insight into the outlets that have made the most substantial intellectual contributions to the development of CRT in higher education. The analysis used *sources* as the unit of analysis and applied the full counting method, with a minimum threshold of one document and 35 citations per source. Of the 475 indexed sources, 50 met these criteria and were included in the visualization. The figure presents the citation density map generated using VOSviewer, based on this direct citation analysis. The density color gradient indicates the concentration of citations per source (Fig. 7), with warmer colors (yellow–red) representing journals receiving higher citation counts, and cooler colors (blue–green) reflecting less-cited sources. This visualization highlights the journals that most frequently attract scholarly attention and serve as central references in CRT research within higher education.

The highest-impact sources in the dataset are *Curriculum Inquiry* (TC = 520) and *Harvard Educational Review* (TC = 431), followed by *Journal of Higher Education* (TC = 391), *Educational Administration Quarterly* (TC = 302), and *Journal of Teacher Education* (TC = 299). These journals appear as the most intensely colored nodes on the map, indicating high citation density and thus strong influence in shaping CRT discourse. Their prominence reflects the field's intellectual breadth, ranging from theoretical debates on curriculum and pedagogy to institutional and teacher-education practices. The inclusion of *Journal of Negro Education* (TC = 243) and *Teaching and Teacher Education* (TC = 237) underscores the field's diversity, bridging historical scholarship on educational equity with contemporary classroom research. The density distribution suggests that citation influence in CRT scholarship is not confined to a single outlet but rather shared among a cluster of journals addressing pedagogy, identity, and educational leadership, consistent with established bibliometric approaches in educational research (Glänzel & Schubert, 2006; van Eck & Waltman, 2010).

These findings are particularly valuable for researchers and practitioners seeking appropriate publication venues or foundational readings in CRT. Identifying the journals with the highest citation density allows scholars to engage with the most visible and influential works in the field, facilitating better alignment between research focus and dissemination strategy. Furthermore, the map reveals that impactful CRT studies are disseminated across a balance of theory-oriented journals (e.g., *Curriculum Inquiry*, *Harvard Educational Review*) and practice-oriented ones (e.g., *Teaching and Teacher Education*, *Journal of Teacher Education*). This pattern illustrates that CRT research thrives at the intersection of theory, policy, and classroom practice, highlighting the field's evolving and interdisciplinary nature.

Most cited documents

From the total number of articles analyzed in this study, the ten most frequently cited works occupy a pivotal position in shaping the intellectual landscape of CRT in higher education. Interestingly, all of these articles were published in highly reputable Q1 journals, including *Curriculum Inquiry*, *Harvard Educational Review*, *Teaching and Teacher Education*, and *The Journal of Higher Education*. This pattern reflects the wide scholarly recognition that CRT research has gained within international academic forums. As shown in Table 7, the articles published between 2002 and 2020 have accumulated a substantial number of citations, demonstrating the quality, reach, and influence of their contributions to the evolution of CRT discourse. Citation analysis of this kind is instrumental in tracing seminal works, as it identifies the most influential

studies that serve as both theoretical and methodological foundations for subsequent research in the field of CRT (Gay, 2013; Kezar & Eckel, 2002; McCARTY & Lee, 2014).

Table 7. Top 10 most cited articles

DOI	Author	Journal	TC	TCY
https://doi.org/10.1111/curi.12002	(Gay, 2013)	Curric. Inq.	514	39.54
https://doi.org/10.17763/harv.educ.rev.84.1.q83746nl5pj34216	(McCarty & Lee, 2014)	Harv. Educ. Rev.	431	35.92
https://doi.org/10.1080/00221546.2002.11777159	(Kezar & Eckel, 2002)	J. High. Educ.	391	16.29
https://doi.org/10.1016/j.tate.2010.11.005	(Hogg, 2011)	Teach. Teach. Educ.	204	13.60
https://doi.org/10.1177/0022487110381998	(Marx & Moss, 2011)	J. Teach. Educ.	192	12.80
https://doi.org/10.1006/jvbe.2000.1785	(Torres & Solberg, 2001)	J. Vocat. Behav.	190	7.60
https://doi.org/10.1177/0013161X13505287	(Santamaría, 2014)	Educ. Adm. Q.	157	13.08
https://doi.org/10.1186/s40594-020-00230-7	(O'Leary et al., 2020)	Int. J. STEM Educ.	114	19.00
N/A	(Santamaria & Johnson, 2009)	Teach. Coll. Rec.	114	6.71
https://doi.org/10.1007/s11256-016-0366-9	(Blitz et al., 2016)	Urban Rev.	80	8.00

TC total number of citations, TCY total citations per year

The analysis revealed that the article by Gay, (2013), published in *Curriculum Inquiry*, received the highest number of citations (514), indicating its substantial academic impact and influence in the field of CRT. Gay, (2013) emphasized the importance of culturally responsive pedagogies in promoting equity and diversity within higher education while enhancing learning outcomes among students from diverse cultural backgrounds. Ranked second is the study by (McCARTY & Lee, 2014), published in the *Harvard Educational Review* with 431 citations, which extends the discourse through an Indigenous community-based educational approach, illustrating how culturally grounded teaching can strengthen the educational sovereignty of Indigenous peoples. Meanwhile, the article by (Kezar & Eckel, 2002), published in *The Journal of Higher Education*, ranks third with 391 citations, highlighting the significance of institutional transformation in embedding diversity values within university structures. Other influential works, such as those by Hogg, (2011) in *Teaching and Teacher Education* and Marx & Moss, (2011) in the *Journal of Teacher Education*, also stand out with over 190 citations, reinforcing the position of CRT research as a well-established academic foundation and an essential theoretical framework for teacher education and reflective learning across diverse contexts.

In addition to the total number of citations (TC), the analysis also considered total citations per year (TCY), which provides insight into each article's sustained influence over time. The results indicate that Gay, (2013) article has the highest TCY, with 39.54 citations per year, followed by McCARTY & Lee, (2014) with 35.92, underscoring the enduring relevance and

continued scholarly impact of these two works within academic discourse. More recent publications, such as [Blitz et al., \(2016\)](#) Blitz et al. in *The Urban Review*, although ranking tenth in total citations (80), exhibit a relatively high TCY of 8 citations per year, suggesting that newer studies continue to attract consistent academic attention. Thus, the combination of TC and TCY demonstrates that both seminal and contemporary works make meaningful contributions to advancing CRT research in higher education. Overall, these highly cited studies have played a crucial role not only in shaping the conceptual framework of CRT but also in demonstrating its sustained relevance in influencing policy directions, expanding inclusive pedagogical practices, and promoting social justice within educational contexts ([Blitz et al., 2016](#); [Santamaría, 2014](#)).

Most influential authors

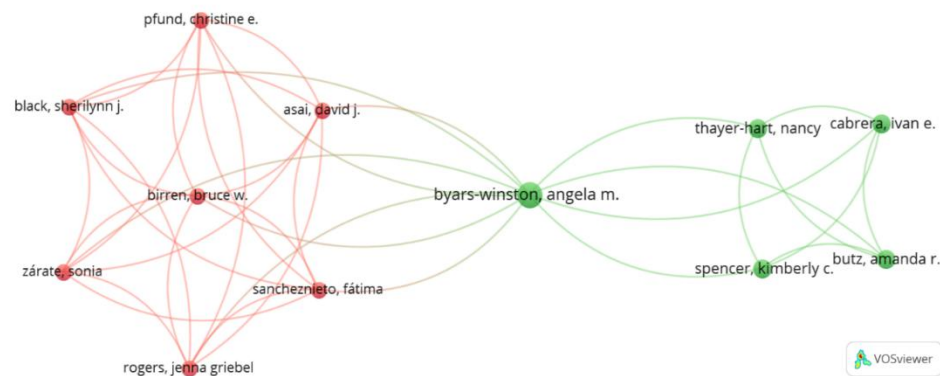
The present study further examined the most influential authors contributing to the field of CRT in higher education through a co-authorship analysis. This approach enables the identification of prominent researchers, collaboration patterns, and intellectual linkages within the global CRT research community. Using VOSviewer, the analysis was conducted with type of analysis = co-authorship and unit of analysis = authors, applying the *full-counting method with minimum thresholds of 1 document and 20 citations per author*. Of the 2,113 authors identified in the dataset, 282 met the inclusion criteria and were included in the visualization. Table 8 presents the ten most influential authors ranked by total citations (TC), together with their institutional affiliations, number of publications (NP), h-index (H), and year of first publication (FP). The resulting visualization (Figure 8) displays authors as nodes, with node size proportional to citation impact and connecting lines indicating co-authorship links. Each cluster is color-coded to represent groups of researchers who frequently collaborate, providing a visual representation of collaborative intensity and thematic proximity across CRT scholarship.

Table 8. Top 10 most influential authors

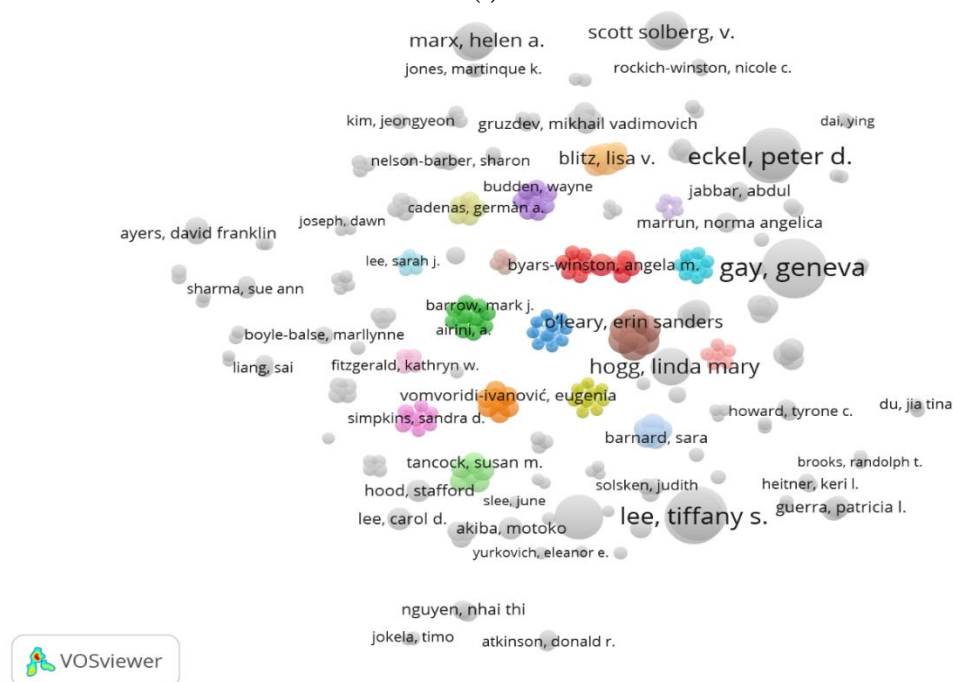
Author	TC	NP	H	FP	Institution
Gay, Geneva	514	1	1	2013	University of Washington, USA
Lee, Tiffany S.	431	1	1	2014	University of California, USA
McCarty, Teresa L.	431	1	1	2014	University of California, USA
Eckel, Peter D.	391	1	1	2002	University of Maryland, USA
Kezar, Adriana J.	391	1	1	2002	University of Southern California, USA
Santamaria, Lorri Johnson	286	3	3	2009	University of Auckland, New Zealand
Hogg, Linda Mary	204	1	1	2011	Victoria University of Wellington, New Zealand
Marx, Helen A.	192	1	1	2011	Eastern Connecticut State University, USA
Moss, David M.	192	2	1	2011	University of Connecticut, USA
Scott, Solberg V.	190	1	1	2001	Boston University, USA

TC total number of citations, NP total number of publications, H h-index, FP

year of the first publication



(a)



(b)

Fig 8. Co-authorship networks of authors: a 12 items and b 282 items

According to Table 8, *Geneva Gay* stands out as the most influential scholar in the field of CRT, having accumulated 514 total citations, representing approximately 24.3 % of the total citations attributed to the top 10 authors. With an h-index of 1 in this dataset and her seminal publication, *Teaching To and Through Cultural Diversity* (2013), Gay has profoundly shaped the theoretical foundation of CRT by emphasizing the role of cultural knowledge, prior experience, and performance styles of ethnically diverse students as assets for teaching and learning (Gay, 2018). Following her are *Tiffany S. Lee* and *Teresa L. McCarty* from the University of California, each with 431 citations (20.3 %), whose collaborative publication *Critical Culturally Sustaining/Revitalizing Pedagogy and Indigenous Education Sovereignty* in *Harvard Educational Review* (2014) advanced the discourse on Indigenous language reclamation and epistemic sovereignty (McCARTY & Lee, 2014). Their study demonstrates how culturally sustaining pedagogies strengthen Indigenous learners' identity and community engagement within academic institutions. *Peter D. Eckel* (University of Maryland) and *Adriana J. Kezar* (University of Southern California), both with 391 citations (18.4 %), expanded the CRT paradigm into higher-education leadership through their influential work

Taking the Reins: Institutional Transformation in Higher Education (2002), published by Greenwood Press. Their research highlights how leadership strategies grounded in equity and organizational learning foster institutional cultures responsive to diversity. Collectively, these four authors account for over 63 % of the citation impact among the leading contributors, underscoring their central role in defining the intellectual and institutional foundations of CRT scholarship across North America. Their pioneering works not only shaped early conceptual frameworks but also continue to guide empirical research and teacher-education practices globally (Sleeter, 2024; Donthu et al., 2021).

Beyond the United States, several influential authors from the Asia-Pacific region, particularly Lorri J. Santamaría (University of Auckland, TC = 286) and Linda Mary Hogg (Victoria University of Wellington, TC = 204), demonstrate growing international recognition. Santamaría's research has advanced culturally responsive leadership and decolonial pedagogy in higher education, notably through her article "Sustainable Culturally Responsive Practices:..." in *International Journal of Multicultural Education* (Hogg, 2011; Santamaría & Santamaría, 2015), which has been widely cited for its case-study analysis of leadership in Aotearoa New Zealand schools. Hogg's work centres on the "funds of identity" framework to support minoritised learners in New Zealand, as in her review article *A Synthesis of Funds of Identity Research: Purposes, Tools, Pedagogical Approaches and Outcomes* (Hogg & Volman, 2020); h-index = 14) and reveals how identity-based pedagogy advances culturally responsive teaching. Similarly, Helen A. Marx (Eastern Connecticut State University, TC = 192) and David M. Moss (University of Connecticut, TC = 192) emphasise experiential and intercultural learning in teacher education, for example, in *Journal of Teacher Education* (Marx & Moss, 2011) where they found that study-abroad immersions substantially enhanced preservice teacher intercultural development. Meanwhile, Scott Solberg (Boston University, TC = 190) contributes early empirical insights on multicultural career development and educational access. The co-authorship map generated via VOSviewer identifies two major clusters of collaboration: the first includes tightly connected U.S.-based researchers (e.g., Asai, Pfund, Black, Sánchez-Nieto, Zárte), reflecting entrenched partnerships around equity-driven faculty development; the second cluster (e.g., Byars-Winston, Cabrera, Thayer-Hart) represents cross-institutional collaborations focused on inclusive mentorship and institutional equity programs. This network structure illustrates that although CRT scholarship is globally dispersed, strong collaborative communities have emerged around shared commitments to equity, diversity, and inclusion. Such patterns reaffirm the field's interdisciplinary maturity and its increasing global interconnectedness across regions and paradigms (Karagöl, 2025; van Eck & Waltman, 2010).

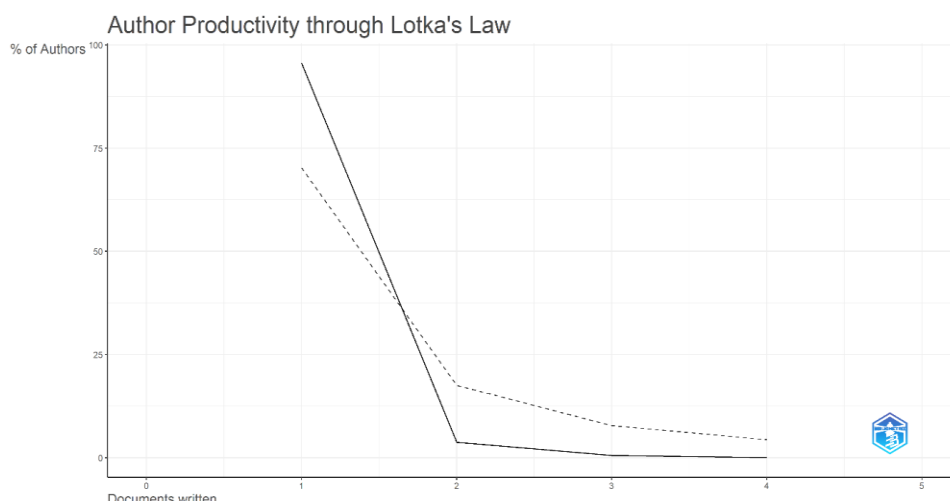


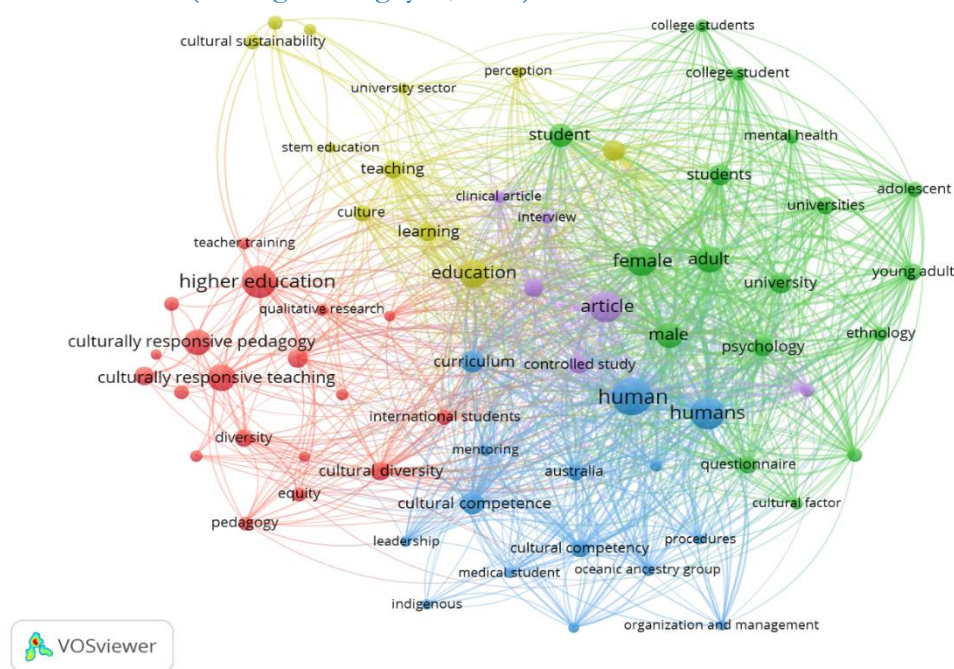
Fig 9. Author productivity through Lotka's law

Based on the Lotka's Law analysis generated through Bibliometrix, the distribution of author productivity in the CRT–higher education dataset reveals a highly skewed pattern consistent with classical bibliometric expectations. As shown in the empirical data, 2,021 authors (95.6%) contributed only one publication, representing the overwhelming majority of the scholar population in this field. A much smaller group, 80 authors (3.8%), produced two publications, followed by 12 authors (0.6%) who wrote three documents, and only one author (0.05%) who produced four publications. When compared with the theoretical distribution predicted by Lotka's inverse square law (Lotka, 1926), the observed proportions mirror the expected pattern, where approximately 70.2% of authors would publish one work, 17.6% two works, 7.8% three works, and 4.4% four works. The empirical curve (solid line) closely follows the theoretical curve (dashed line), reaffirming that productivity in CRT scholarship is dominated by a very small cluster of highly active authors, while most contributors publish only once, an outcome also noted in recent bibliometric evaluations across other educational fields (Manthiramoorathi et al., 2019; Oesterle et al., 2026). These findings indicate that CRT research in higher education, similar to many academic domains, is driven disproportionately by a limited core of prolific scholars, confirming the persistent relevance of Lotka's Law in mapping authorship patterns.

Keyword analysis

Keyword analysis provides valuable insights into the intellectual structure and thematic evolution of CRT research in higher education. By examining the frequency with which specific keywords co-occur, this analysis enables scholars to identify dominant themes, conceptual relationships, and emerging areas of inquiry within the field. Figure 10 illustrates the co-occurrence network generated from author keywords extracted from the Scopus database. As emphasized in bibliometric studies, author keywords serve as concise indicators of a paper's core topics and offer a direct lens through which to interpret broader scholarly trends (Zupic & Čater, 2015). In such network visualizations, the size of each node represents the frequency of a keyword's occurrence, with larger nodes indicating more frequently discussed topics, while the proximity between nodes reflects the strength of their conceptual association (Callon et al., 1983; van Eck & Waltman, 2010). Thicker connecting lines denote stronger co-occurrence links between keywords, and the use of color clusters visually distinguishes thematic groupings, thereby revealing the intellectual organization and developmental trajectories of CRT research (van Eck & Waltman, 2010).

To identify the major thematic directions within CRT scholarship, a co-occurrence analysis was performed in VOSviewer using author keywords as the unit of analysis. A minimum occurrence threshold of 9 was applied, resulting in 68 keywords out of 3,032 meeting the inclusion criteria. For each of these terms, VOSviewer calculated Total Link Strength (TLS) and produced a network map that ranks keywords by the strength of their co-occurrence relationships. As visualized in the figure, the network consists of 1,344 links with a total link strength of 6,474, revealing a highly interconnected intellectual landscape. Keywords with the highest TLS, such as *culturally responsive teaching*, *education*, *higher education*, *student*, and *cultural competence*, occupy central positions in the network, indicating their foundational role in structuring CRT discourse. The visualization further identifies five clusters, each representing a distinct but related thematic strand ranging from equity-oriented pedagogy and teacher preparation to student identity, cultural psychology, and professional or health-education contexts. Overall, the density and structure of the map demonstrate that CRT research is both conceptually cohesive and methodologically diverse, integrating insights from education, sociology, psychology, leadership studies, and cultural studies. These findings align with established bibliometric evidence showing that co-word analysis is effective for capturing interdisciplinary trends and mapping the evolving structure of educational research fields (Hallinger & Nguyen, 2020).



(a)

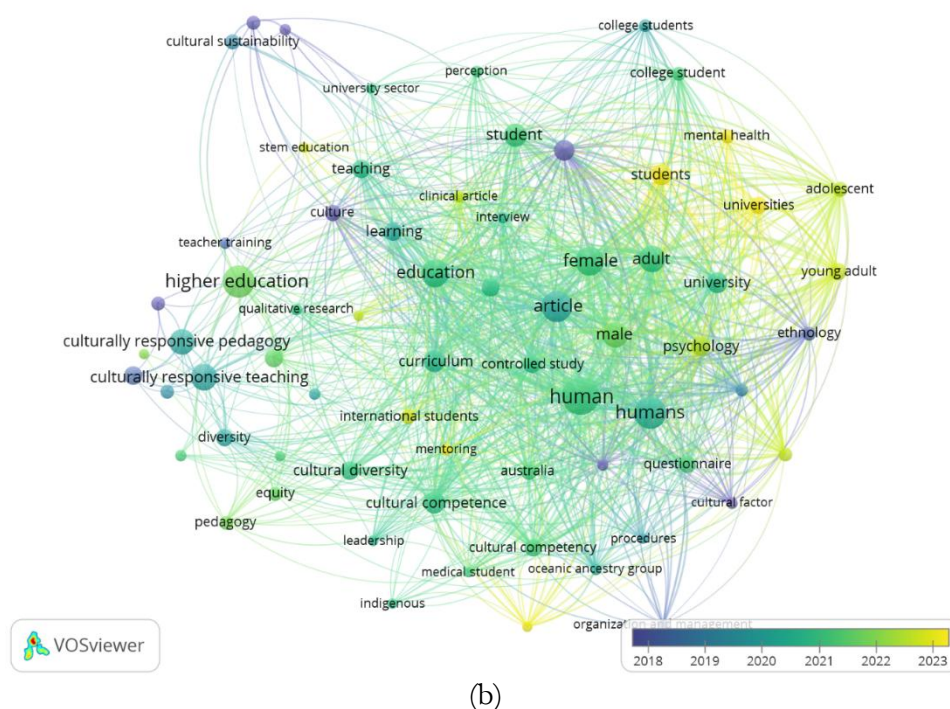


Fig 10. Analysis of keyword co-occurrence: a clustering network and b time-overlapping network

A closer examination of the co-occurrence map shows that each cluster reflects a distinct thematic orientation within CRT scholarship. Cluster 1 (19 items, red) and Cluster 2 (17 items, green) occupy the core of the network, with the largest nodes, those with the highest TLS, including *culturally responsive teaching* (Occurrences = 54; TLS = 77), *education*, *higher education*, *student*, *humans*, *universities* and *cultural competence*. These terms form the conceptual backbone of the field. Cluster 1 primarily encompasses themes related to cultural diversity, equity, inclusion, multicultural education, teacher training, and social justice, highlighting the persistent emphasis on equity-oriented pedagogy and the transformation of teaching practices in higher education. Meanwhile, Cluster 2 captures keywords associated with student identity, psychological factors, and demographic diversity, including *student*, *college student*, *ethnicity*, *mental health*, *psychology*, *male*, and *female*, indicating growing scholarly interest in how cultural identity and psychological well-being shape student engagement and academic experiences. Surrounding these central clusters, Cluster 3 (15 items, blue) and Cluster 4 (11 items, yellow) bring forward emerging themes such as *cultural competence in health education*, *medical training*, *intercultural learning*, *sustainability*, and *STEM education*, suggesting that CRT principles are increasingly applied in professional and interdisciplinary contexts. Cluster 5 (6 items, purple), though smaller, includes high-connectivity terms such as *article*, *clinical article*, *interview*, and *controlled study*, signaling a methodological shift toward more empirical and mixed-methods investigations. The prominence of high-TLS keywords like *cultural competence* and *higher education* underscores the maturation of CRT scholarship into a multidimensional and institutionally grounded research domain. This pattern reflects broader theoretical assertions (Gay, 2018; Ladson-Billings, 2021) that CRT now extends beyond classroom pedagogy toward systemic, psychological, and interdisciplinary frameworks for educational equity:

Cluster 1 (19 items, shown in red) centers on the overarching themes of cultural diversity, equity, and inclusion (DEI) within the contexts of higher education and teacher education, marking the theoretical and pedagogical foundation of research on CRT. Core keywords such as *cultural diversity*, *equity*,

inclusion, higher education, teacher education, social justice, multicultural education, professional development, and culturally responsive pedagogy form the principal nodes with high TLS, indicating that issues of equity, cultural diversity, and social justice constitute the intellectual core of CRT scholarship. The presence of terms such as *indigenous, intercultural competence, pedagogy, and international students* further signals an expansion of research interest toward cultural sustainability and global citizenship, demonstrating how CRT has evolved beyond localized contexts toward broader cross-cultural perspectives. These patterns align with [Ladson-Billings, \(1995\)](#) foundational framework, which emphasizes that CRT empowers learners intellectually, socially, and emotionally through cultural referents, and is reinforced by [\(Darling-Hammond, 2012; Ladson-Billings, 2021\)](#), who argue that developing educators' cultural competence and critical consciousness is essential for creating inclusive and equitable learning environments. Taken together, the keyword structure in Cluster 1 reflects a sustained scholarly commitment to social justice, oriented pedagogical transformation, affirming that implementing CRT in higher education extends beyond classroom practices to include the systemic and institutional dimensions of educational equity [\(Gay, 2018\)](#).

Cluster 2 (17 items, green) represents themes centered on student identity, developmental stages, and psychological well-being within higher-education contexts. High-TLS keywords such as *student, students, college student, college students, adolescent, adult, young adult, mental health, psychology, and cultural factor* collectively point to a research focus on how demographic and psychosocial characteristics shape learners' academic and socio-emotional experiences. Additional terms such as *ethnology, female, male, questionnaire, and surveys and questionnaires* indicate that much of the scholarship in this cluster relies on empirical, survey-based designs to examine the influence of cultural background, gender, and psychosocial adjustment across age groups. Recent open-access studies reinforce these thematic patterns. For instance, [Hutson & He, \(2024\)](#) show that culturally aware mentoring and support structures substantially enhance minoritized students' sense of belonging and academic persistence, highlighting the role of culturally grounded developmental relationships in shaping well-being. Complementing this, [Platow et al., \(2025\)](#) demonstrate that strong social identification with one's university community significantly improves psychological well-being and deep learning approaches, particularly for culturally diverse students navigating complex identity and adjustment processes. Overall, the structure and density of Cluster 2 underscore a sustained scholarly interest in understanding how cultural, psychological, and developmental factors interact to shape student engagement and well-being in higher education.

Cluster 3 (15 items, blue) centers on cultural competence and its integration into professional education, with prominent keywords such as *cultural competence, cultural competency, curriculum, mentoring, leadership, medical student, and health care delivery*. These terms indicate a scholarly focus on how institutions embed cultural understanding and responsive practices into training for future professionals particularly in health, education, and social-service sectors. The inclusion of region-specific keywords such as *Australia, indigenous, oceanic ancestry group, and Torres Strait Islander* highlights a growing body of research examining culturally grounded curricula designed to affirm Indigenous knowledge systems and address inequities rooted in colonial histories. Recent empirical work supports this direction: [Arruzza & Chau, \(2021\)](#) show that experiential learning models improve cultural competence among health-profession students, while [Omland et al., \(2025\)](#) show that co-creation and participatory

curriculum design in higher education enhance cultural relevance and strengthen students' sense of ownership in culturally diverse learning environments, [Ramli & Bohori, \(2025\)](#) further demonstrate that integrating local knowledge and cultural modules into university curricula supports culturally sustaining practices and deepens students' engagement with community-informed educational values. [Hutson & He, \(2024\)](#) additionally emphasize that equity-oriented professional development requires culturally responsive mentoring, reflective practice, and identity-affirming support structures that foster student well-being and persistence. Collectively, Cluster 3 reflects a research trajectory in which cultural competence is conceptualized not merely as an instructional strategy but as a structural requirement for equitable professional preparation.

Cluster 4 (11 items, yellow) emphasizes themes related to cultural sustainability, learning processes, and broader educational structures. High-frequency keywords such as *cultural sustainability*, *sustainability*, *sustainable development*, *culture*, *education*, *learning*, and *teaching* indicate an interdisciplinary intersection between CRT principles and global sustainability agendas. The presence of terms such as *STEM education*, *perception*, *university sector*, and *United States* suggests growing scholarly interest in examining how culturally responsive approaches support sustainable and equitable teaching practices across diverse institutional and disciplinary contexts. Recent work illustrates this convergence: [Zurba et al., \(2024\)](#) show how Indigenous leadership and collaborative governance can sustain Indigenous knowledges and advance cultural sustainability within institutional settings; [Dost & Mazzoli Smith, \(2023\)](#) demonstrate that culturally attuned learning environments shape students' sense of identity and belonging; and [Zitha et al., \(2023\)](#) provides evidence that culturally inclusive instructional strategies, such as collaborative learning and scaffolded course design, significantly enhance student engagement across disciplines. Collectively, Cluster 4 reflects an expanding scholarly commitment to linking CRT with sustainability, institutional transformation, and cross-cultural learning.

Cluster 5 (6 items, purple) captures the methodological and empirical foundations of CRT scholarship, centering on keywords such as *article*, *clinical article*, *controlled study*, *cultural anthropology*, *human experiment*, and *interview*. These terms indicate that a subset of CRT research relies on empirical, study-based designs, ranging from qualitative interviews to controlled experimental approaches to examine how cultural factors shape learning experiences and educational interactions. The presence of *cultural anthropology* suggests that scholars increasingly incorporate ethnographic or anthropological lenses to explore how cultural practices, identities, and community contexts influence educational participation. Recent open-access evidence supports this methodological direction: [Dost & Mazzoli Smith, \(2023\)](#) demonstrate that culturally attuned learning environments, analyzed through qualitative and mixed-methods designs, significantly shape students' perceptions of identity and belonging; meanwhile, [Anyichie et al., \(2023\)](#) show through classroom-based empirical studies that culturally responsive instructional practices enhance engagement and self-regulation among diverse learners. Collectively, the structure of Cluster 5 reflects a methodological core within CRT scholarship that blends anthropological insight with empirical rigor, underscoring the field's commitment to grounding culturally responsive practices in systematically collected, evidence-based data drawn from real educational contexts.

As shown in the network visualization (Fig. 10a), several keywords appear centrally with high occurrences and TLS, underscoring their pivotal role in structuring the intellectual landscape of CRT-related scholarship. Terms such as “human” (Occurrences: 106; TLS: 984) and “humans” (79; 791) dominate the network, indicating that CRT scholarship is strongly anchored in human-centered and socio-cultural perspectives. Meanwhile, keywords such as “female” (63; 705), “adult” (54; 598), and “male” (49; 580) highlight demographic dimensions often examined in studies addressing diversity, identity, and equity in higher education. Conceptually substantive terms, including “education” (57; 499), “psychology” (30; 362), “student” (39; 357), “university” (32; 349), and “cultural competence” (35; 300) function as thematic connectors across clusters, linking pedagogical, developmental, and cultural discussions within CRT-related research. The number of occurrences reflects how frequently a keyword appears across the corpus, whereas TLS captures its degree of conceptual interconnection; here, high values signal that these terms serve as structural anchors in the knowledge domain. Similar patterns have been observed in recent bibliometric studies. For instance, [Kilavuz, \(2023\)](#) found that keywords such as *cultural diversity*, *multicultural education*, *equity*, and *teacher education* function as dense nodes in a co-word network mapping multicultural education research, thereby reinforcing the centrality of culture and equity in global educational scholarship. Likewise, [Ertem, \(2025\)](#) demonstrated through a bibliometric analysis that terms such as *mental health*, *higher education*, *student*, and *psychology* repeatedly emerge with high link strength in higher-education mental-health studies, highlighting how human-centered and psychological constructs dominate the field. These convergent findings affirm that CRT scholarship is conceptually cohesive, with recurring emphases on human experience, cultural identity, and pedagogical structures. Altogether, the visualization from this study offers a clear map of where CRT research converges and where gaps remain, pointing toward emerging intersections such as CRT and institutional governance, mental health support systems, and culturally grounded student engagement frameworks.

Figure 10b presents the overlay visualization of author keywords, revealing the temporal development of conceptual and applied themes in the CRT-related literature. Keywords appearing in cooler blue–green tones, such as *human*, *humans*, *female*, *male*, *education*, and *student*, represent earlier scholarly emphases anchored in foundational human-subject research, demographic perspectives, and general educational settings. More recent terms, displayed in yellowish hues, include *curriculum*, *university sector*, *sustainable development*, *cultural sustainability*, *STEM education*, *interview*, and *controlled study*, indicating a shift toward institutional, methodological, and sustainability-oriented approaches. This progression reflects the field’s movement from broad humanistic and pedagogical foundations toward empirically driven, systems-focused, and contextually embedded CRT applications in higher education. Contemporary research supports this trajectory; for instance, [Ertem, \(2025\)](#) found that emerging higher education research increasingly prioritizes culturally anchored academic well-being, curriculum responsiveness, and inclusive instructional design. Recent studies further reinforce this evolving landscape. For example, a global open-access analysis by [Leal Filho et al., \(2022\)](#) shows that sustainability-oriented pedagogical reforms, particularly those integrating cultural relevance, contextual learning, and community–institution partnerships, are becoming increasingly embedded within higher-education systems as part of broader institutional commitments to equity and

transformation. In a related development, Murillo-Zamorano et al., (2019), through a large-scale meta-analysis of pedagogical innovation in higher education, demonstrate that student-centered, inclusive, and culturally attuned instructional approaches significantly enhance student engagement, learning outcomes, and perceptions of educational relevance. Together, these studies highlight a global shift toward institutional and curriculum redesign that foregrounds cultural responsiveness, sustainability, and equity as core dimensions of contemporary higher-education reform. Collectively, the overlay visualization demonstrates that CRT scholarship is maturing, from early human-centered foundations toward more specialized, institutionally grounded, and sustainability-linked directions, reflecting its expanding relevance in shaping equitable, culturally responsive, and future-oriented higher education systems worldwide. Overall, the overlay visualization underscores the maturation of CRT research, from theoretical foundations toward applied, institutional, and policy-driven dimensions, highlighting its growing relevance in advancing cultural equity and pedagogical innovation in global higher education contexts.

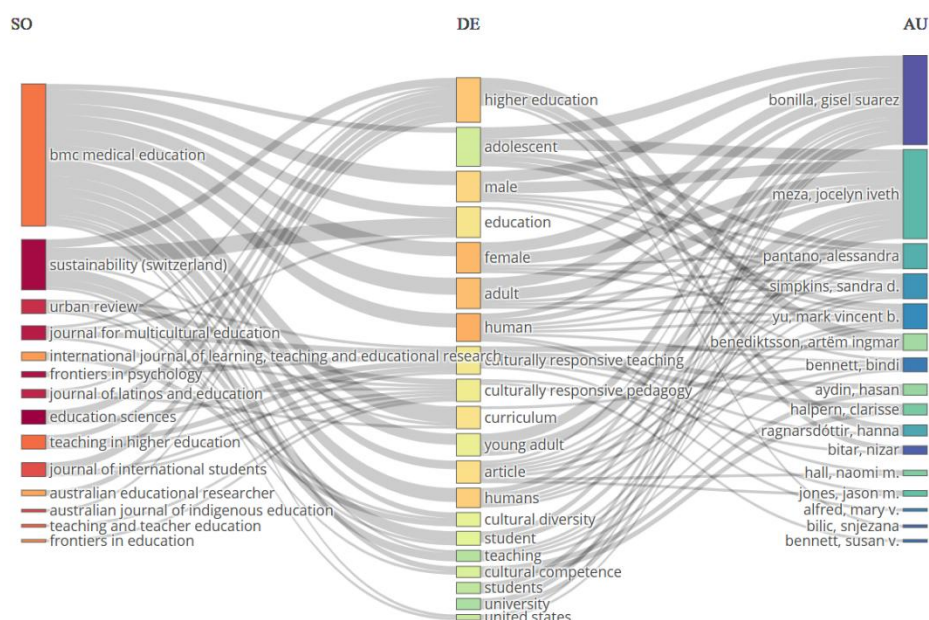


Fig 11. Sankey diagram: journals (left), keywords (middle), authors (right)

The Sankey diagram (Fig. 11) visualizes the thematic evolution of the CRT research landscape by mapping the flow of information from high-frequency author keywords to contributing authors and, subsequently, to the most influential journals within the dataset. On the left side of the diagram, core CRT-related keywords, such as *culturally responsive teaching*, *cultural competence*, *higher education*, *social justice*, and *multicultural education*, emerge as central thematic anchors, functioning as key conceptual nodes that structure scholarly inquiry in the field. The varying thickness of the connecting bands represents the strength of association between keywords, authors, and publication venues, indicating how certain themes disproportionately shape CRT scholarship. These patterns converge with the findings from the VOSviewer analysis, which likewise identified *cultural competence*, *education*, *student*, and *curriculum* as the most interconnected and frequently co-occurring terms in the network. Journals positioned on the right side of the Sankey diagram, including *Curriculum Inquiry*, *Harvard Educational Review*, *Journal of Teacher Education*, and *Teaching and Teacher Education*, serve as major publication outlets for CRT scholarship. Meanwhile,

the diagram also highlights high-impact authors who frequently publish in these venues, reflecting a dynamic ecosystem where conceptual themes, scholarly contributors, and journals reciprocally reinforce one another in shaping the intellectual contours of CRT research in higher education.

In addition to mapping structural relationships, the Sankey diagram underscores emerging thematic trajectories that reflect the evolving priorities of CRT research. Notably, keywords linked to *curriculum*, *cultural sustainability*, *inclusive education*, *identity*, and *student engagement* show increasing prominence and broader connectivity across authors and journals, suggesting a collective shift toward applied, institutional, and equity-driven transformations in higher education. These emerging terms mirror the temporal patterns revealed in the overlay visualization, where more recent research emphasizes curriculum redesign, institutional responsiveness, and the integration of culturally sustaining pedagogies. The strong linkages between high-impact journals and recurring keywords highlight the field's growing attention to systemic approaches that embed CRT principles into policy frameworks, university governance, and program-level reforms. Such thematic mapping is valuable not only for identifying dominant research clusters but also for illustrating how scholars collectively advance CRT as a multidimensional and interdisciplinary field. For researchers, the diagram highlights strategic areas of scholarly engagement in which collaborative work is most active, while for institutions and policymakers, it reveals priority areas, such as cultural competence development, inclusive curriculum design, and sustainability-oriented pedagogy, that can guide future investments and capacity-building efforts. Overall, the Sankey visualization demonstrates how CRT research continues to expand in depth and breadth, linking foundational concepts with emerging institutional and pedagogical innovations across global higher education.

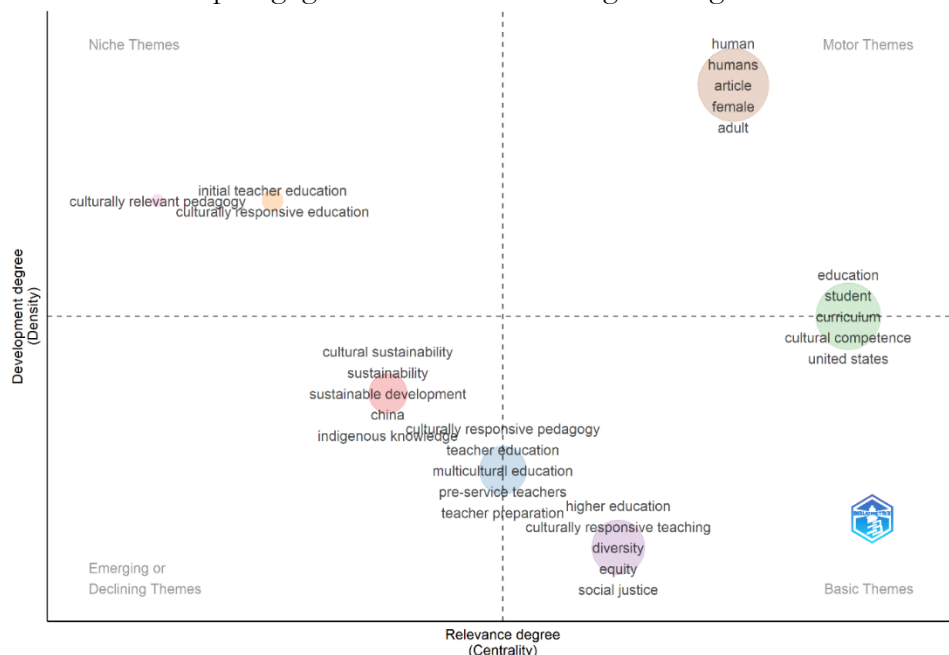


Fig 12. Thematic map

Figure 12 displays the thematic map derived from the Bibliometrix network analysis, which visualizes the structural organization of author keywords across the field. The horizontal axis (centrality) represents the degree of interconnection among themes, indicating their relevance and influence within the broader scholarly network. Meanwhile, the vertical axis (density) reflects the internal cohesiveness and maturity of each theme, signaling its

capacity for ongoing development. Together, these two dimensions classify topics into four quadrants: (i) motor themes, both highly developed and highly central; (ii) basic themes, highly central but less internally developed; (iii) niche themes, conceptually mature but peripheral to the main field; and (iv) emerging or declining themes, topics that are still developing or shifting in scholarly relevance. The size of each bubble further represents keyword occurrence, offering insight into thematic prominence and research intensity. As illustrated in the thematic configuration, certain bubbles cluster closely, indicating strong thematic correlations. Themes sharing conceptual proximity frequently co-occur across publications, reflecting intertwined intellectual trajectories. For example, in CRT-related bibliometric structures, terms like *human*, *education*, and *student* appear in neighboring proximity within high-centrality regions, signaling their function as intellectual anchors of the field. Meanwhile, terms related to cultural responsiveness, such as *culturally relevant pedagogy*, *culturally responsive teaching*, and *cultural sustainability*, form distinct clusters, demonstrating domain-specific orientations that enrich the larger research landscape. The following sections elaborate on each quadrant, drawing on representative empirical studies aligned with the primary keywords found in each thematic cluster.

Motor themes (quadrant 1) combine strong internal cohesion with high density and high centrality, indicating both conceptual maturity and major influence in the field. In this map, the prominence of keywords such as *human*, *humans*, *article*, *female*, and *adult* reflects the long-standing orientation of CRT-related research toward human-centered learning, identity, and interpersonal dynamics in educational contexts. Their placement suggests that scholarship in this domain consistently foregrounds students' lived experiences, cultural identities, and relational environments as essential components of effective pedagogy. This thematic emphasis aligns with findings by (Anderson & Deil-Amen, 2024), who investigated how humanizing and culturally responsive practices shape community college students' experiences in STEM programs. Their study aimed to understand how cultural context mediates students' sense of belonging and persistence in rigorous academic tracks. Results demonstrated that humanizing pedagogy, characterized by relational instruction, culturally aware mentoring, and affirming learning climates, substantially strengthened students' engagement and resilience. These findings reinforce why *human* functions as a core, structurally influential theme: the field of CRT is fundamentally anchored in examining how educational environments respond to human needs, identities, and cultural narratives.

Niche themes (quadrant 2) demonstrate strong internal cohesion but remain peripheral to the broader thematic landscape with high density and low centrality. The presence of keywords such as *culturally relevant pedagogy*, *culturally relevant education*, and *initial teacher education* signals a specialized line of inquiry focused on embedding cultural responsiveness into instructional design, often through methodological or context-specific innovations. Although conceptually robust, its limited centrality suggests that this line of research, while mature, has not yet been fully integrated into the broader CRT framework. A representative example is offered by Eppard et al., (2021), who explored how culturally relevant pedagogy can be effectively integrated into educational technology (EdTech) environments. Their study aimed to identify ways digital tools can support cultural relevance through personalized and contextualized learning pathways. The findings showed that EdTech-enhanced culturally relevant pedagogy improves learner engagement, identity affirmation, and instructional inclusivity, though implementation challenges

persist due to institutional and technological constraints. This aligns with the niche-status classification: *culturally relevant pedagogy* is methodologically advanced but situated within specialized domains such as EdTech integration and teacher education.

Emerging or declining themes (quadrant 3) located in the lower-left quadrant, themes such as *cultural sustainability*, *indigenous knowledge*, and *sustainable development*, demonstrate low centrality and density, indicating areas that are either nascent or represent declining attention. *Cultural sustainability* appears prominently here, indicating growing scholarly interest but limited integration into the main CRT discourse. The keyword cluster suggests an evolving intersection between cultural preservation, sustainability education, and community-based pedagogies, fields that have yet to gain stable centrality within CRT literature. An illustrative study is provided by [Huhmarniemi & Jokela, \(2020\)](#), who examined how Arctic arts contribute to sustaining Indigenous culture and community identity. Their research sought to understand how traditional artistic practices foster cultural continuity and intergenerational knowledge transfer. Findings revealed that Indigenous-led arts initiatives serve as powerful vehicles for sustaining cultural identity, countering marginalization, and promoting ecological and cultural resilience. Although directly relevant to CRT's broader commitment to cultural responsiveness, *cultural sustainability* remains relatively peripheral, hence its position in the emerging/declining quadrant.

Basic themes (quadrant 4) are foundational to the field, exhibiting high centrality, low density but moderate internal development. Keywords such as *culturally responsive teaching*, *higher education*, and *teacher preparation* emerge as crucial pillars that anchor various thematic clusters across the network. Although their density is lower compared to motor themes, their centrality indicates that they are extensively connected to multiple research areas, functioning as the conceptual backbone of CRT scholarship. This central importance is reflected in [Al Alaleeli, \(2022\)](#) study, which explored how culturally responsive teaching empowers female pre-service teachers in the United Arab Emirates. The research aimed to identify how CRT practices influence teacher identity formation, intercultural competence, and readiness for diverse classroom environments. Results demonstrated that CRT strengthened pre-service teachers' pedagogical confidence, critical awareness, and appreciation of cultural diversity, while also revealing contextual variations in how Arab and expatriate educators conceptualize culturally responsive practice. These insights affirm CRT's classification as a basic theme, a foundational construct that informs teacher education, curriculum design, and inclusive pedagogical reform across contexts.

CONCLUSION

Culturally Responsive Teaching has developed into an increasingly established area of higher education research, with scholarship expanding from its early pedagogical foundations toward broader concerns involving cultural diversity, inclusion, institutional responsiveness, professional education, and sustainability. The bibliometric evidence indicates that the field has gained greater scholarly visibility and thematic breadth, although knowledge production and international collaboration remain concentrated in a limited number of countries and institutions. These patterns suggest that the future development of Culturally Responsive Teaching in higher education should move beyond isolated classroom practices toward more systematic integration into curriculum design, faculty development, institutional policy, and cross-

cultural collaboration. Higher education institutions and researchers should therefore strengthen context-sensitive and internationally inclusive research partnerships, particularly by increasing participation from underrepresented regions, while further examining how culturally responsive principles can be translated into sustainable institutional practices. In this way, the findings provide a basis for advancing Culturally Responsive Teaching as both a scholarly field and a practical framework for promoting more inclusive, equitable, and culturally responsive higher education.

REFERENCES

- Al Alaleeli, S. (2022). Empowering female pre-service teachers through culturally responsive teaching: shared and divergent views of Arab and expatriate teacher educators in the United Arab Emirates. In *Education 3-13* (Vol. 50, Issue 5, pp. 592–611). <https://doi.org/10.1080/03004279.2021.1876133>
- Anderson, B. L., & Deil-Amen, R. (2024). Exploring How Culture Matters in Building Responsive and Humanizing Contexts for Community College Students Pursuing STEM. *Education Sciences*, 14(9). <https://doi.org/10.3390/educsci14090956>
- Anidar, J., Nursyamsi, N., Diminurman, A., & Engkizar, E. (2026). Building religious character in students: a qualitative study of youth information and counseling centers. *Jurnal Konseling Dan Pendidikan*, 14(1), 194–204. <https://doi.org/https://doi.org/10.29210/1158400>
- Anyichie, A. C., Butler, D. L., & Nashon, S. M. (2023). Exploring teacher practices for enhancing student engagement in culturally diverse classrooms. *Journal of Pedagogical Research*, 7(5), 183–207. <https://doi.org/10.33902/JPR.202322739>
- Aria, M., & Cuccurullo, C. (2017). bibliometrix: An R-tool for comprehensive science mapping analysis. *Journal of Informetrics*, 11(4), 959–975. <https://doi.org/10.1016/j.joi.2017.08.007>
- Arruzza, E., & Chau, M. (2021). The effectiveness of cultural competence education in enhancing knowledge acquisition, performance, attitudes, and student satisfaction among undergraduate health science students: a scoping review. *Journal of Educational Evaluation for Health Professions*, 18. <https://doi.org/10.3352/JEEHP.2021.18.3>
- Aryasutha, R., Azizah Ria Kusri, N., Nurul Ulya, J., & Syamsiah Septiani, N. (2025). Opportunities and Challenges for Islamic Education Teachers in Using Artificial Intelligence in Learning. *Muaddib.Intischolar.Id*, 2(1), 43. <https://muaddib.intischolar.id/index.php/muaddib/article/view/6>
- Banks, J. A. (1993). Chapter 1: Multicultural Education: Historical Development, Dimensions, and Practice. *Review of Research in Education*, 19(1), 3–49. <https://doi.org/10.3102/0091732X019001003>
- Banks, J. A. (2016). Cultural diversity and education: Foundations, curriculum, and teaching. In *Cultural Diversity and Education: Foundations, Curriculum, and Teaching* (6th ed., pp. 1–342). <https://doi.org/10.4324/9781315622255>
- Banks, J. A., & Banks, C. A. M. (2020). *Multicultural Education: Issues and Perspectives* (J. A. Banks & C. A. M. Banks (eds.); 10th ed.). Wiley. <https://www.wiley.com>.
- Bishop, R. (2019). Teaching to the North-East: Relationship-Based Learning in Practice. *NZCER Press*, 164. <http://www.nzcer.org.nz/nzcerpress>
- Blitz, L. V., Anderson, E. M., & Saastamoinen, M. (2016). Assessing Perceptions of Culture and Trauma in an Elementary School: Informing

- a Model for Culturally Responsive Trauma-Informed Schools. *Urban Review*, 48(4), 520–542. <https://doi.org/10.1007/s11256-016-0366-9>
- Brito, E., Neves, M. P., Gomes, N., & Lopes, N. (2025). Inclusion and Internationalization: Perception of Higher Education Students. *Interchange*, 56(3–4), 259–283. <https://doi.org/10.1007/s10780-025-09544-3>
- Callon, M., Courtial, J. P., Turner, W. A., & Bauin, S. (1983). From translations to problematic networks: An introduction to co-word analysis. *Social Science Information*, 22(2), 191–235. <https://doi.org/10.1177/053901883022002003>
- Chávez Santos, R., Cruz Caro, O., Reina Marín, Y., Sánchez Bardales, E., & Carrasco Rituay, A. M. (2024). Bibliometric exploration of Intercultural Bilingual Education: an analysis of scientific production and its implications. *Cogent Social Sciences*, 10(1), 1–13. <https://doi.org/10.1080/23311886.2024.2365973>
- Chitpin, S., & Karoui, O. (2021). Culturally Responsive Pedagogy: A Canadian Perspective. *Journal of Higher Education Policy and Leadership Studies*, 2(1), 45–62. <https://doi.org/10.52547/johepal.2.1.45>
- Christine E. Sleeter. (2024). Critical multicultural education: Theory and practice. In *Teachers College Record Book Review*. In Teachers College Press. Teacher College Press.
- Darling-Hammond, L. (2012). Powerful Teacher Education: Lessons from Exemplary Programs. In *The JosseyBass education series*. John Wiley & Sons. <http://www.loc.gov/catdir/toc/ecip068/2006004499.html>
- Dehdarirad, T., & Nasiri, S. (2017). Research impact in co-authorship networks: a two-mode analysis. *Journal of Informetrics*, 11(2), 371–388. <https://www.researchgate.net/publication/324105065>
- Donthu, N., Kumar, S., Mukherjee, D., Pandey, N., & Lim, W. M. (2021). How to conduct a bibliometric analysis: An overview and guidelines. *Journal of Business Research*, 133, 285–296. <https://doi.org/10.1016/j.jbusres.2021.04.070>
- Dost, G., & Mazzoli Smith, L. (2023). Understanding higher education students' sense of belonging: a qualitative meta-ethnographic analysis. *Journal of Further and Higher Education*, 47(6), 822–849. <https://doi.org/10.1080/0309877X.2023.2191176>
- Efendi, E., Jaafar, A., & Engkizar, E. (2026). Muslim Women's Leadership in Conflict Management in Higher Education. *Tadris: Jurnal Keguruan Dan Ilmu Tarbiyah*, 11(2), 826–838. <https://doi.org/https://doi.org/10.24042/tadris.v11i2.30474>
- Elsevier. (2014). *Scopus: Content Coverage Guide* (pp. 1–22). <https://www.elsevier.com/products/scopus/content>
- Engkizar, E., Jaafar, A., Hamzah, M. I., Syafril, S., Febriani, A., Oktavia, G., & Satrial, A. (2026). Quran Teachers' Skills as Pedagogical Foundations: Conceptual and Practical Insights into Nine Competencies. *Muaddib: Journal of Islamic Teaching and Learning*, 2(1), 22–38. <https://doi.org/10.67055/xt598c43>
- Engkizar, E., Jaafar, A., Hamzah, M. I., Syafril, S., Oktavia, G., Febriani, A., & Albizar, A. (2026). Tartil Method as an Effective Strategy for Transforming Students' Positive Attitudes in Learning the Qur'an. *Journal of Quranic Teaching and Learning*, 2(1), 50–63. <https://doi.org/10.67055/y3htyp95>
- Engkizar, E., Jaafar, A., Muslim, H., Mulyadi, I., & Putra, Y. A. (2025). Ten Criteria for an Ideal Teacher to Memorize the Quran. *Journal of Theory*

and Research Memorization Quran, 1(1), 26–39.
<https://doi.org/10.67055/kjn18a62>

- Eppard, J., Kaviani, A., Bowles, M., & Johnson, J. (2021). Edtech cultivation: Integrating a culturally relevant pedagogy into educational technology. *Electronic Journal of E-Learning*, 19(6), 516–530. <https://doi.org/10.34190/ejel.19.6.2065>
- Ertem, H. Y. (2025). Bibliometric analysis of studies on mental health in higher education from 1960 to 2024. *Discover Psychology*, 5(1). <https://doi.org/10.1007/s44202-025-00402-y>
- Gay, G. (2002). Preparing for culturally responsive teaching. *Journal of Teacher Education*, 53(2), 106–116. <https://doi.org/10.1177/0022487102053002003>
- Gay, G. (2013). Teaching To and Through Cultural Diversity. *Curriculum Inquiry*, 43(1), 48–70. <https://doi.org/10.1111/curi.12002>
- Gay, G. (2018). Culturally responsive teaching: theory, research, and practice. In *Choice Reviews Online* (3rd ed., Vol. 48, Issue 05). Teachers College Press. <https://doi.org/10.5860/choice.48-2812>
- Glänzel, W., & Schubert, A. (2006). Analysing Scientific Networks Through Co-Authorship. In *Handbook of Quantitative Science and Technology Research* (pp. 257–276). Springer. https://doi.org/10.1007/1-4020-2755-9_12
- González, R. de M., & Sebastián-López, M. (2022). Education on Sustainable Development Goals: Geographical Perspectives for Gender Equality in Sustainable Cities and Communities. *Sustainability (Switzerland)*, 14(7). <https://doi.org/10.3390/su14074042>
- Gumus, S., Bellibas, M. S., Esen, M., & Gumus, E. (2018). A systematic review of studies on leadership models in educational research from 1980 to 2014. *Educational Management Administration and Leadership*, 46(1), 25–48. <https://doi.org/10.1177/1741143216659296>
- Hallinger, P., & Nguyen, V. T. (2020). Mapping the landscape and structure of research on education for sustainable development: A bibliometric review. *Sustainability (Switzerland)*, 12(5). <https://doi.org/10.3390/su12051947>
- Harvard Education Publishing Group. (2025). About Harvard Educational Review. Harvard Graduate School of Education. In *Harvard Education Press*. Harvard Graduate School of Education. Harvard Education Press. https://hep.gse.harvard.edu/journals/about-harvard-educational-review/?utm_source=chatgpt.com
- Hogg, L. (2011). Funds of Knowledge: An investigation of coherence within the literature. *Teaching and Teacher Education*, 27(3), 666–677. <https://doi.org/10.1016/j.tate.2010.11.005>
- Hogg, L., & Volman, M. (2020). A Synthesis of Funds of Identity Research: Purposes, Tools, Pedagogical Approaches, and Outcomes. *Review of Educational Research*, 90(6), 862–895. <https://doi.org/10.3102/0034654320964205>
- Howard, T. C. (2019). Why Race and Culture Matter in Schools: Closing the Achievement Gap in America's Classrooms. In *The Wabash Center Journal on Teaching* (2nd ed.) (, Vol. 2, Issue 2). Teacher College Press. <https://doi.org/10.31046/wabashcenter.v2i2.2916>
- Huhmarniemi, M., & Jokela, T. (2020). Arctic arts with pride: Discourses on arctic arts, culture and sustainability. *Sustainability (Switzerland)*, 12(2). <https://doi.org/10.3390/su12020604>
- Hutson, B. L., & He, Y. (2024). Mixed Methods Research Centering on Minoritized Students in Higher Education: A Literature Review.

- Innovative Higher Education*, 49(6), 1051–1076.
<https://doi.org/10.1007/s10755-024-09748-y>
- ICEF Monitor. (2025). The number of students in higher education abroad has more than tripled since the turn of the century. *ICEF Monitor*.
- Irwanto, I. (2025). Research trends on artificial intelligence in K-12 education in Asia: a bibliometric analysis using the Scopus database (1996–2025). *Discover Artificial Intelligence*, 5(1). <https://doi.org/10.1007/s44163-025-00389-4>
- Jelinek, V., & Fomerand, J. (2013). Higher learning institutions and global citizen education. *UN Chronicle*, 50(4), 13–16.
<https://doi.org/10.18356/6a4b2035-en>
- Kandeel, M., Morsy, M. A., Abd El-Lateef, H. M., Marzok, M., El-Beltagi, H. S., Al Khodair, K. M., Soliman, W. E., Albokhdaïm, I., & Venugopala, K. N. (2023). A century of “Camel Research”: a bibliometric analysis. *Frontiers in Veterinary Science*, 10.
<https://doi.org/10.3389/fvets.2023.1157667>
- Karagöl, İ. (2025). Culturally Responsive Teaching: A Bibliometric Investigation of Scholarly Trends. *Dokuz Eylül Üniversitesi Buca Eğitim Fakültesi Dergisi*, 64(64), 2255–2272.
<https://doi.org/10.53444/deubefd.1625031>
- Kezar, A., & Eckel, P. D. (2002). The effect of institutional culture on change strategies in higher education: Universal principles or culturally responsive concepts? *Journal of Higher Education*, 73(4), 435–460.
<https://doi.org/10.1080/00221546.2002.11777159>
- Khanom, J., Islam, T., & Mahmudhassan, M. (2025). Bridging the Gaps: A Bibliometric Key Theme Analysis in Multicultural Education Research (2019-2024). *Bulletin of Islamic Research*, 3(1), 1–24.
<https://doi.org/10.69526/bir.v3i1.163>
- Khunou, B., & Ojo, E. (2024). a Bibliometric Analysis of Culturally Responsive Teaching in Pre-University Education: Trends and Impact in the South African Context. *ICERI2024 Proceedings*, 1, 8104–8113.
<https://doi.org/10.21125/iceri.2024.1979>
- Kilavuz, F. (2023). A Bibliometric Analysis of Multicultural Education Research. *Sosyal Bilimler ve Eğitim Dergisi*, 6(Education Special Issue), 216–238. <https://doi.org/10.53047/josse.1359321>
- 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: A.k.a. The remix. *Harvard Educational Review*, 84(1), 74–84.
<https://doi.org/10.17763/haer.84.1.p2rj131485484751>
- Ladson-Billings, G. (2021). I’m Here for the Hard Re-Set: Post Pandemic Pedagogy to Preserve Our Culture. *Equity and Excellence in Education*, 54(1), 68–78. <https://doi.org/10.1080/10665684.2020.1863883>
- Leal Filho, W., Dinis, M. A. P., Sivapalan, S., Begum, H., Ng, T. F., Al-Amin, A. Q., Alam, G. M., Sharifi, A., Salvia, A. L., Kalsoom, Q., Saroar, M., & Neiva, S. (2022). Sustainability practices at higher education institutions in Asia. *International Journal of Sustainability in Higher Education*, 23(6), 1250–1276. <https://doi.org/10.1108/IJSHE-06-2021-0244>
- Leydesdorff, L., & Wagner, C. S. (2008). International collaboration in science and the formation of a core group. *Journal of Informetrics*, 2(4), 317–325.
<https://doi.org/10.1016/j.joi.2008.07.003>
- Lotka, A. J. (1926). The frequency distribution of scientific productivity. *Journal*

- of the Franklin Institute, 202(2), 271. [https://doi.org/10.1016/s0016-0032\(26\)91166-6](https://doi.org/10.1016/s0016-0032(26)91166-6)
- Makda, F. (2025). Digital education: Mapping the landscape of virtual teaching in higher education – a bibliometric review. *Education and Information Technologies*, 30(2), 2547–2575. <https://doi.org/10.1007/s10639-024-12899-2>
- Manthiramoorathi, M., Saravanakumar, R. R., & Thirumagal, A. (2019). Lotka's Law and Pattern of Author Productivity of Information Literacy Research Output. In *Library Philosophy and Practice* (Vol. 2019). <https://digitalcommons.unl.edu/libphilprac>
- Mao, J. (2021). Diversity and Inclusion in Global Higher Education. *Journal of International Students*, 11(3), 761–764. <https://doi.org/10.32674/jis.v11i3.3745>
- Maral, M. (2026). A bibliometric analysis of global research on education in the Scopus database, 2013–2022. *Global Knowledge, Memory and Communication*, 75(3–4), 905–924. <https://doi.org/10.1108/GKMC-01-2024-0039>
- Marginson, S. (2022). Research on international and global higher education: Six different perspectives. *Oxford Review of Education*, 48(4), 421–438. <https://doi.org/10.1080/03054985.2022.2087619>
- Martínez-López, F. J., Merigó, J. M., Valenzuela-Fernández, L., & Nicolás, C. (2018). Fifty years of the European Journal of Marketing: a bibliometric analysis. *European Journal of Marketing*, 52(1–2), 439–468. <https://doi.org/10.1108/EJM-11-2017-0853>
- Marx, H., & Moss, D. M. (2011). Please mind the culture gap: Intercultural development during a teacher education study abroad program. *Journal of Teacher Education*, 62(1), 35–47. <https://doi.org/10.1177/0022487110381998>
- Matthews, K. R. W., Yang, E., Lewis, S. W., Vaidyanathan, B. R., & Gorman, M. (2020). International scientific collaborative activities and barriers to them in eight societies. *Accountability in Research*, 27(8), 477–495. <https://doi.org/10.1080/08989621.2020.1774373>
- McCARTY, T. L., & Lee, T. S. (2014). Critical culturally sustaining/revitalizing pedagogy and indigenous education sovereignty. *Harvard Educational Review*, 84(1), 101–124. <https://doi.org/10.17763/haer.84.1.q83746nl5pj34216>
- Moher, D., Liberati, A., Tetzlaff, J., Altman, D. G., Antes, G., Atkins, D., Barbour, V., Barrowman, N., Berlin, J. A., Clark, J., Clarke, M., Cook, D., D'Amico, R., Deeks, J. J., Devereaux, P. J., Dickersin, K., Egger, M., Ernst, E., Gøtzsche, P. C., ... Tugwell, P. (2009). Preferred reporting items for systematic reviews and meta-analyses: The PRISMA statement. *PLoS Medicine*, 6(7). <https://doi.org/10.1371/journal.pmed.1000097>
- Moral-Muñoz, J. A., Herrera-Viedma, E., Santisteban-Espejo, A., & Cobo, M. J. (2020). Software tools for conducting bibliometric analysis in science: An up-to-date review. *Profesional de La Informacion*, 29(1). <https://doi.org/10.3145/epi.2020.ene.03>
- Morrison, A., Rigney, L.-I., Hattam, R., & Diplock, A. (2019). *Toward an Australian Culturally Responsive Pedagogy*. University of South Australia. <https://childrensa.sa.gov.au/wp-content/uploads/2023/03/Annex-3-Morrison-Rigney-Hattam-Diplock-2019.pdf>
- Morrison, K. A., Robbins, H. H., & Rose, D. G. (2008). Operationalizing culturally relevant pedagogy: A synthesis of classroom-based research. *Equity and Excellence in Education*, 41(4), 433–452.

<https://doi.org/10.1080/10665680802400006>

- Moshtari, M., & Safarpour, A. (2024). Challenges and strategies for the internationalization of higher education in low-income East African countries. *Higher Education*, 87(1), 89–109. <https://doi.org/10.1007/s10734-023-00994-1>
- Murillo-Zamorano, L. R., López Sánchez, J. Á., & Godoy-Caballero, A. L. (2019). How the flipped classroom affects knowledge, skills, and engagement in higher education: Effects on students' satisfaction. *Computers and Education*, 141, 103608. <https://doi.org/10.1016/j.compedu.2019.103608>
- Nguyen, D., & Commins, N. (2020). *Teaching for equity: The CLEAR Paradigm* (p. 17). <https://wcer.wisc.edu/publications/abstract/wcer-working-paper-no-2020-4>
- Nolan, K., & Xenofontos, C. (2023). Mapping teachers' perspectives on culturally responsive pedagogy in mathematics: from academic achievement to insights and opportunities. *Intercultural Education*, 34(6), 550–567. <https://doi.org/10.1080/14675986.2023.2265855>
- Oesterle, A., Kiriş, A., & Haase, A. (2026). Experimental platform to study the neuronal mechanisms of magnetoreception in the honey bee. *BioRxiv*, 2((Vol. 2)), 306–312. <https://doi.org/10.64898/2026.05.05.722881>
- Okenova, B., Xu, W., & Adel, S. (2025). The Practice of Moderate Education to Prevent Interreligious Conflict. *Muaddib: Journal of Islamic Teaching and Learning*, 1(2), 36–54. <https://muaddib.intischolar.id/index.php/muaddib/article/view/8>
- Omland, M., Hontvedt, M., Siddiq, F., Amundrud, A., Hermansen, H., Mathisen, M. A. S., Rudningen, G., & Reiersen, F. (2025). Co-creation in higher education: a conceptual systematic review. *Higher Education*, 90(4), 1017–1047. <https://doi.org/10.1007/s10734-024-01364-1>
- Patras, Y. E., Rahmawati, Y., Japar, M., & Hidayat, R. (2024). Today and Future of Culturally Responsive Teaching (CRT) : Indonesia Needs It. In *Jurnal Kependidikan: Jurnal Hasil Penelitian dan Kajian Kepustakaan di Bidang Pendidikan, Pengajaran dan Pembelajaran* (Vol. 10, Issue 4, p. 1652). <https://doi.org/10.33394/jk.v10i4.12985>
- Pizzi, S., Caputo, A., Corvino, A., & Venturelli, A. (2020). Management research and the UN sustainable development goals (SDGs): A bibliometric investigation and systematic review. *Journal of Cleaner Production*, 276, 124033. <https://doi.org/10.1016/j.jclepro.2020.124033>
- Platow, M. J., Lee, G. C., Wang, C., Grace, D. M., Knezovic, M., Smyth, L., & Mavor, K. I. (2025). The role of student and customer social identification on university students' learning approaches and psychological well-being. *Social Psychology of Education*, 28(1). <https://doi.org/10.1007/s11218-025-10060-6>
- Ramli, M., & Bohori, R. (2025). Guided Inquiry-Based Learning in Biotechnology: Effects on Students' Scientific Attitudes and Academic Achievement at Menglait Middle School Brunei Darussalam. *Journal of Science and Mathematics Education*, 1(3), 75–81. <https://doi.org/10.70716/josme.v1i3.241>
- Ruan, J., Cai, Y., & Stensaker, B. (2024). University managers or institutional leaders? An exploration of top-level leadership in Chinese universities. *Higher Education*, 87(3), 703–719. <https://doi.org/10.1007/s10734-023-01031-x>
- Santamaría, L. J. (2014). Critical Change for the Greater Good: Multicultural Perceptions in Educational Leadership Toward Social Justice and

- Equity. *Educational Administration Quarterly*, 50(3), 347–391. <https://doi.org/10.1177/0013161X13505287>
- Santamaría, L. J., & Santamaría, A. P. (2015). Counteracting educational injustice with applied critical leadership: Culturally responsive practices promoting sustainable change. *International Journal of Multicultural Education*, 17(1), 22–41. <https://doi.org/10.18251/ijme.v17i1.1013>
- Saucedo, D., & Jimenez, C. (2021). Valuing Student Experiences: An Introduction to Culturally Responsive Education (CRE). In *Institute of Education Science*. Institute of Education Science.
- SJR. (2025). SCImago Journal & Country Rank. *Polimeri (Zagreb)*, 29(4), 258–262. https://www.scimagojr.com/?utm_source=chatgpt.com
- Taylor, & Francis. (2025). *Curriculum Inquiry: About this Journal* (Taylor & Francis (eds.)). https://www.tandfonline.com/journals/rcui20/about-this-journal?utm_source=chatgpt.com
- Teixeira da Silva, J. A., & Dobránszki, J. (2016). Multiple Authorship in Scientific Manuscripts: Ethical Challenges, Ghost and Guest/Gift Authorship, and the Cultural/Disciplinary Perspective. *Science and Engineering Ethics*, 22(5), 1457–1472. <https://doi.org/10.1007/s11948-015-9716-3>
- Texas Tech University. (2025). Prep program spotlight: Tech teach at texas tech university. In *National Council on Teacher Quality*. National Council on Teacher Quality. https://reimagineteaching.nctq.org/case-study/texas-tech/?utm_source=chatgpt.com
- UC. (2024). *Chapter 7: Diversity – UC Accountability Report 2024*. https://accountability.universityofcalifornia.edu/2024/chapters/chapter-7.html?utm_source=chatgpt.com
- UC. (2025). Inclusive excellence to, through and beyond UC. In *University of California*. University of California. https://diversity.universityofcalifornia.edu/?utm_source=chatgpt.com
- UC San Diego Extension. (2025). Embracing Diversity and equity through culturally responsive teaching (K-12). In *UC San Diego Division of Extended Studies*.
- UNESCO. (2025). Record number of higher education students highlights global need for recognition of qualifications. In *Unesco*. <https://www.unesco.org/en/articles/record-number-higher-education-students-highlights-global-need-recognition-qualifications>
- van Eck, N. J., & Waltman, L. (2010). Software survey: VOSviewer, a computer program for bibliometric mapping. *Scientometrics*, 84(2), 523–538. <https://doi.org/10.1007/s11192-009-0146-3>
- W.C.E.R. (2025). *Research Overview | WCER*. Wisconsin Center for Education Research. https://wcer.wisc.edu/research/?utm_source=chatgpt.com
- Yoon, B. (2023). Research Synthesis on Culturally and Linguistically Responsive Teaching for Multilingual Learners. *Education Sciences*, 13(6). <https://doi.org/10.3390/educsci13060557>
- You, C., Awang, S. R., & Wu, Y. (2024). Bibliometric analysis of global research trends on higher education leadership development using Scopus database from 2013–2023. *Discover Sustainability*, 5(1), 1–20. <https://doi.org/10.1007/s43621-024-00432-x>
- Zitha, I., Mokganya, G., & Sinthumule, O. (2023). Innovative Strategies for Fostering Student Engagement and Collaborative Learning among Extended Curriculum Programme Students. *Education Sciences*, 13(12). <https://doi.org/10.3390/educsci13121196>
- Zupic, I., & Čater, T. (2015). Bibliometric Methods in Management and

Organization. *Organizational Research Methods*, 18(3), 429–472.
<https://doi.org/10.1177/1094428114562629>

Zurba, M., Suchet-Pearson, S., Bullock, R., Castillo, A. R., Chang, K., Archer, R., Enns, E., Sherpa, P. D., Batzin, R., Munguia, O., Papadopoulos, A., Lamoureux, B., Greenlees, C., Habibi, M., Hameed, A., & Howitt, R. (2024). Enhancing meaningful Indigenous leadership and collaboration in international environmental governance forums. *Environmental Science and Policy*, 162. <https://doi.org/10.1016/j.envsci.2024.103864>

Copyright holder:

© Sari, R., Purwanto, A., Nurjayadi, M., Irwanto, I. (2026)

First publication right:

International Journal of Multidisciplinary of Higher Education (IJMURHICA)

This article is licensed under:

CC-BY-SA