

A graphical analysis of the intellectual structure of The Australian Journal of Indigenous Education

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This work represents the second part of a general bibliometric analysis we have prepared for *The Australian Journal of Indigenous Education* (AJIE), motivated by the first 50 years of the journal. This study develops a graphical analysis of AJIE by using the VOSviewer software, Scopus and the Web of Science database. Utilising bibliometric methods such as co-citation, bibliographic coupling and co-occurrence of keywords in the VOSviewer software, this study reveals AJIE's impact on key Indigenous education topics, including culturally responsive pedagogy, decolonisation, Indigenous health and teacher education. The analysis highlights AJIE's strong national presence, supported by substantial contributions from Australian institutions, along with a modest yet notable level of international engagement, particularly from New Zealand, Canada and the United States. The journal's transition to open access, combined with its inclusion in major academic indexes, has increased its visibility and citation reach, reinforcing its role as a leading publication in the field of Indigenous education.

Keywords: Indigenous education, bibliometrics, Scopus, Web of Science, VOSviewer

Introduction

Established in 1973, *The Australian Journal of Indigenous Education* (AJIE) has grown from a practitioner-focused publication into a globally recognised, peer-reviewed journal. Its development from *The Aboriginal Child at School* to a high-impact, open-access journal indexed in major international databases reflects both the maturation of Indigenous education as a field and AJIE's ongoing relevance within it.

Now published biannually by the Aboriginal and Torres Strait Islander Studies Unit at The University of Queensland, AJIE serves as a leading platform for interdisciplinary research on Indigenous education in Australia, Oceania and beyond. The journal's commitment to accessible, high-quality scholarship is evidenced by its DOAJ Seal, an *h*-index of 32, and a consistent presence in databases such as Scopus, Web of Science (WoS) Core Collection, ERIC, and the Australian Education Index. These achievements underscore AJIE's influence across multiple scholarly domains, particularly Anthropology (Q1) and Education (Q2).

As AJIE celebrated its 50th anniversary in 2023, this milestone provided an opportunity to critically reflect on its scholarly impact. This study builds on that legacy by offering a bibliometric analysis of the journal's publication and citation patterns. By examining trends over five decades, the analysis identifies influential works, leading contributors, and the broader academic networks engaged with AJIE, providing insight into the journal's evolving role in shaping Indigenous education discourse. Note that this article is the second part of a general bibliometric analysis we have prepared for AJIE.

The study employs the Visualisation of Similarities viewer (VOSviewer) software, developed by Van Eck and Waltman (2010), which is designed to construct and visualise bibliometric networks. Several bibliometric indicators are utilised, including bibliographic coupling (Figuerola-Wischke et al., 2024; Kessler, 1963), co-citation (Gaviria-Marín et al., 2018; Small, 1973), or co-occurrence of author keywords (Callon et al., 1983; Martínez-López et al., 2018), to provide a detailed retrospective assessment of AJIE's scholarly impact and reach.

The structure of this paper is organised as follows. Section 2 describes the bibliometric methods and evaluation metrics used in the study. Section 3 examines the publication and citation structure of AJIE. Section 4 conducts a co-citation analysis to identify intellectual linkages among cited works. Section 5 explores bibliographic coupling to understand shared citation patterns among AJIE articles. Section 6 provides a keyword and topical analysis to uncover thematic trends and research focus areas over time. Finally, Section 7 concludes the paper by summarising the key findings and their implications for future research in Indigenous education.

Bibliometric methods and evaluation metrics

Quantitative approaches such as citation analysis, co-citation analysis and bibliographic coupling are central to bibliometric research, offering systematic ways to examine the influence and interconnections within scholarly work (Broadus, 1987; Pritchard, 1969). Originally rooted in library and information science, these techniques have become essential for analysing research output, uncovering disciplinary trends and mapping the evolution of academic knowledge (Ding et al., 2014; Hicks et al., 2015). Their application spans multiple fields, including the study of learning technologies (Torres-Vergara et al., 2025; Wilson, 2022; Zurita et al., 2022), leadership and policy in education (Hallinger, 2023), engineering pedagogy (Pawley et al., 2016), and marketing education (Donthu et al., 2021a), demonstrating the versatility and value of bibliometric insights across disciplines.

This article follows the Scientific Procedures and Rationales for Systematic Literature Reviews (SPAR-4-SLR) (Donthu et al., 2021b; Paul et al., 2021) to ensure a structured, transparent and replicable bibliometric review of AJIE. The procedure consists of three key stages: assembling, arranging and assessing, each comprising several detailed steps. Table 1 summarises the protocol. Note that this paper is not actually a systematic literature review. Therefore, perhaps it would be better to call the methodological approach as Scientific Procedures and Rationales for Bibliometric Reviews (SPAR-4-BR).

In the **assembling stage**, the study focused on *The Australian Journal of Indigenous Education*, aiming to conduct a graphical bibliometric analysis using VOSviewer. Guided by four research questions, the analysis explored citation patterns; influential authors, institutions and countries; co-citation and bibliographic coupling structures; and thematic evolution. Data were collected from Scopus (1973–2023) using both current and former journal titles, yielding 1,278 documents. Additional records were retrieved from the WoS Core Collection (2005–2023), SciVal and archival issues on the journal's website.

During the **arranging phase**, the dataset was refined by excluding documents from 2024–2025 and limiting to articles and reviews. This reduced the Scopus dataset to 1,107 items, which was further supplemented with selected archival content to total 1,169 documents. Equivalent filters applied to the WoS data yielded 396 documents for comparative analysis.

Finally, in the **assessing stage**, the datasets were analysed using Excel and VOSviewer. Performance indicators included publication and citation counts, h-index, average citations per paper, field-weighted citation impact (FWCI), and prominent percentile (PP) scores. VOSviewer was used to visualise co-citation, bibliographic coupling and keyword co-occurrence networks, offering insights into AJIE's scholarly development. While the analysis reflects data available as of August – October 2024, future updates to databases may affect these results.

Table 1. Procedure of the study based on the SPAR-4-SLR protocol

Activity		
Assembling	Identification	Domain: The Australian Journal of Indigenous Education (AJIE).
		Research objective: Present a graphical analysis of AJIE by using the VOSviewer software.
		Research questions:
		1) Which are the most cited articles of AJIE and which documents does AJIE cite more frequently?
		2) Who are the most productive authors, institutions and countries of AJIE?
		3) How is the co-citation and bibliographic coupling structure of AJIE linked?
		4) How is the keyword and topical structure of AJIE visualised?
	Acquisition	Search platform: Scopus.
		Search period: 1973–2023. The search was performed in August – October 2024.
		Source title: Australian Journal of Indigenous Education or Aboriginal Child at School.
		Results = 1,278.
		Search in WoS Core Collection (2005–2023): 489 documents.
		Additional results: SciVal (Scopus).
Arranging	Purification	Filter 1. Exclude 2024–2025 (1973–2023). Number of documents: 1,278.
		Filter 2: Article & Review. Final number: 1,107 documents.
		Adding secondary documents and the journal webpage (1975, 1990, 1999, 2001 and 2004): 1,169 documents.
		Final result in WoS Core Collection with equivalent filters (Articles & Reviews): 396 documents.
Assessing	Evaluation	Computer software: VOSviewer and Microsoft Excel.
		Performance analysis:
		1) Analysis according to the number of articles and citations.
		2) Bibliometric indicators: Number of documents and citations, cites per paper, <i>h</i> -index, cites per year, papers and cites per capita, temporal classification, field-weighted citation impact (FWCI), and prominent percentile (PP).
		Graphical analysis:
		1) Mapping with the VOSviewer software.
		2) Analysis with co-citation, bibliographic coupling and co-occurrence of author keywords.
	Reporting	Agenda proposal method:
		1) Present a graphical bibliometric overview of AJIE between 1973 and 2023.
		2) Analyse the leading and current trends of AJIE, and study open questions for future research.
	Reporting	Reporting conventions: Explanations with numbers, tables and figures.
		Limitations:
		1) The bibliographic information is from August – October 2024, but changes through time.
		2) The weaknesses of the Scopus and WoS databases condition the results of this study.

Publication and citation structure of AJIE

This section outlines the core results of the analysis. Over the 50-year period from 1973 to 31 December 2023, AJIE published a total of 1,278 documents. Although this output includes 158 editorials, 9 letters and 4 errata, the present study is limited to peer-reviewed articles and review papers indexed in the Scopus database. As of 15 August 2024, AJIE had received 3,828 citations in total, with 3,314 of these excluding self-citations, yielding an average of 9.67 citations per publication. The journal has attained an *h*-index of 32, meaning that 32 of its papers have each been cited at least 32 times. This bibliometric analysis investigates AJIE's citation and publication dynamics, with a focus on identifying its most impactful articles, as well as the primary contributing authors, institutions and countries.

Table 2 provides an overview of the annual citation structure for AJIE, capturing the publication and citation metrics from 1973 to 2023. The table categorises the number of papers that have achieved specific citation thresholds (≥ 50 , ≥ 20 , ≥ 10 , ≥ 5 , ≥ 1 citations), offering insights into the journal's impact and influence over time. A notable increase in citation counts is evident, particularly from the mid-2000s onward, coinciding with AJIE's transition to a peer-reviewed research journal and its subsequent move to open access. This shift likely broadened the journal's reach and enhanced its visibility, attracting a wider academic audience and contributing to its rising influence within Indigenous education research. Specific years, such as 2007, 2006 and 2013, exhibit exceptionally high average citations per paper (26.90, 18.70 and 17.19 respectively), potentially due to the publication of influential articles or increased academic interest in Indigenous education during those periods.

Table 2. Annual citation structure of AJIE (Scopus)

Year	TP	TC	C/P	≥ 50	≥ 20	≥ 10	≥ 5	≥ 1
1973	27	11	0.41	0	0	0	0	8
1974	31	5	0.16	0	0	0	0	5
1975	22	27	1.23	0	0	0	1	11
1976	30	52	1.73	0	0	2	2	14
1977	24	9	0.38	0	0	0	0	4
1978	49	18	0.37	0	0	0	1	11
1979	41	7	0.17	0	0	0	0	6
1980	28	19	0.68	0	0	0	1	8
1981	16	7	0.44	0	0	0	0	6
1982	39	40	1.03	0	0	0	2	16
1983	25	6	0.24	0	0	0	0	5
1984	30	72	2.40	0	1	1	4	10
1985	25	14	0.56	0	0	0	0	8
1986	25	31	1.24	0	0	0	2	12
1987	25	23	0.92	0	0	0	2	7
1988	19	20	1.05	0	0	0	1	8
1989	22	34	1.55	0	0	0	3	12
1990	21	12	0.57	0	0	0	0	10
1991	21	45	2.14	0	0	1	4	14
1992	23	34	1.48	0	0	1	2	10
1993	32	38	1.19	0	0	1	4	10
1994	46	37	0.80	0	0	1	1	18
1995	21	70	3.33	0	0	1	7	16
1996	18	45	2.50	0	0	0	2	14
1997	15	40	2.67	0	0	1	3	13
1998	10	33	3.30	0	0	1	2	7
1999	11	28	2.55	0	0	0	2	6
2000	10	48	4.80	0	0	1	5	7
2001	10	109	10.90	0	2	4	5	9
2002	9	53	5.89	0	0	2	4	9
2003	20	280	14.00	1	4	8	12	19

2004	10	102	10.20	0	2	4	4	5
2005	15	155	10.33	0	3	5	8	14
2006	10	187	18.70	1	3	5	6	10
2007	31	834	26.90	3	6	12	18	27
2008	33	501	15.18	2	7	16	21	33
2009	21	254	12.10	0	5	8	12	18
2010	23	368	16.00	1	7	13	23	23
2011	13	183	14.08	1	2	4	9	12
2012	26	279	10.73	1	4	10	18	24
2013	16	275	17.19	0	3	11	14	16
2014	21	183	8.71	0	2	6	15	19
2015	17	205	12.06	0	2	7	16	17
2016	19	240	12.63	0	4	10	14	17
2017	18	124	6.89	0	0	4	11	17
2018	22	177	8.05	0	3	5	12	22
2019	16	141	8.81	0	1	7	10	15
2020	19	150	7.89	0	1	8	13	17
2021	46	280	6.09	1	2	5	17	43
2022	34	47	1.38	0	0	0	1	24
2023	14	11	0.79	0	0	0	0	7
Total	1,169	5,963	295.39	11	64	165	314	693
%	100%	–	25.27%	0.94%	5.47%	14.11%	26.86%	59.28%

Abbreviations: TP: total papers; TC: total citations; C/P: cites per paper;
 ≥ 50 , ≥ 20 , ≥ 10 , ≥ 5 , ≥ 1 : number of papers with equal or more than 50, 20, 10, 5, 1 citations

The distribution of citations indicates that most articles (59.28%) have received at least one citation, with a significant portion (26.86%) cited five or more times, and 14.11% reaching 10 or more citations. However, only a small subset of articles has achieved higher citation thresholds, with 5.47% cited 20 times or more and 0.94% reaching 50 citations. This pattern suggests that, while the majority of AJIE articles contribute valuable insights to the field, only a small number have gained substantial scholarly recognition. The overall trends reflect AJIE's increasing visibility and impact within Indigenous education research, likely influenced by its broader accessibility and indexing in major academic databases.

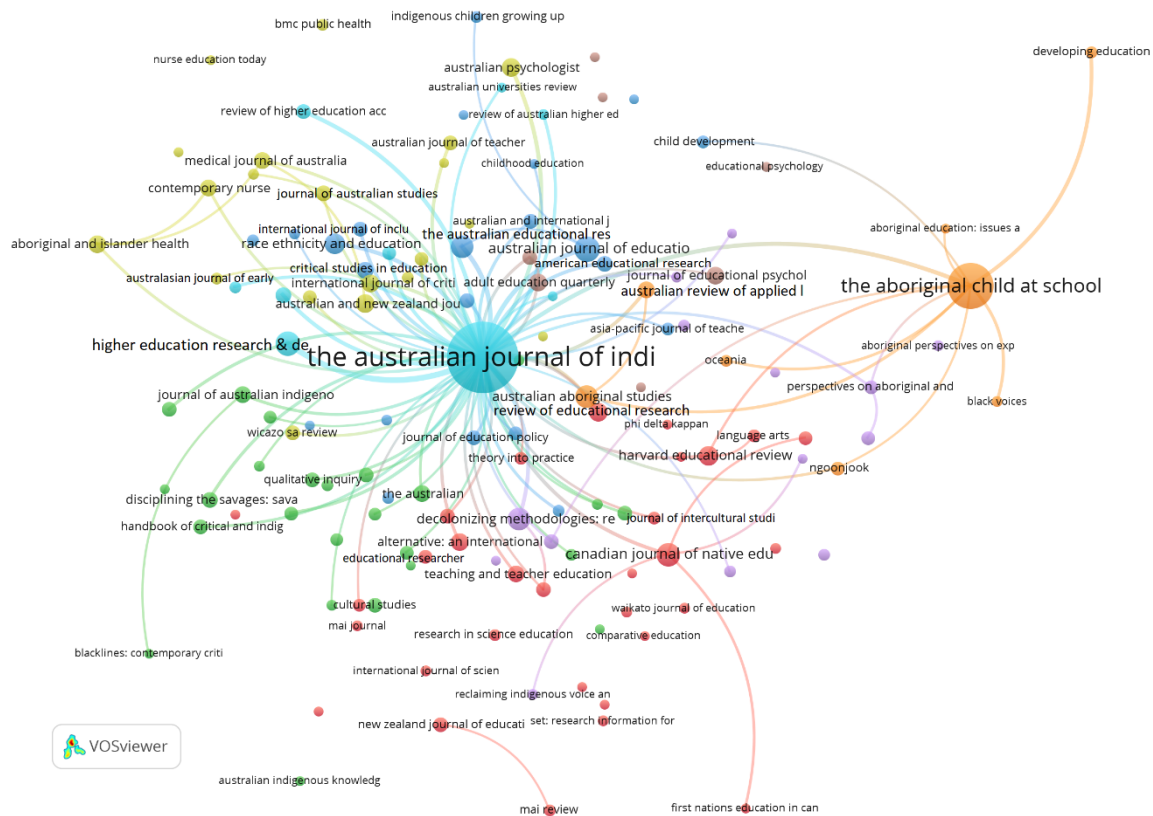
Co-citation analysis of AJIE

This section provides a graphical mapping of the data using VOSviewer software (Van Eck & Waltman, 2010). In the visual networks generated by VOSviewer, the size of each circle represents the significance of an item, while the link strength indicates the degree of association between items. Colour-coded clusters denote distinct groups, offering valuable insights into the primary themes and connections within the dataset. We begin by examining the co-citation of journals cited in AJIE (Figures 1 to 7). Co-citation (Small, 1973) occurs when two documents from different journals are both cited by a third document in another journal. Next, bibliographic coupling is explored (Kessler, 1963), linking two documents based on shared references, with the number of shared references indicating the degree of relatedness (Figures 8 to 11). Finally, the co-occurrence of author keywords is analysed (Callon et al., 1983), revealing thematic connections by tracking how often specific keywords appear together in the literature (Figures 12 to 14). Our analysis focuses on data from 1973 to 2023. All figures in this section are based on this timeframe and Scopus data, unless stated otherwise. Note that the WoS database does not provide data prior to 2005.

Figure 1 presents a co-citation network of journals that frequently cite articles from AJIE, including only those journals with a minimum of 20 citations and showing the 100 most frequent co-citation links. The diagram, generated by VOSviewer, visualises thematic and disciplinary connections between journals,

where each node represents a journal. The size of the nodes indicates the relative significance of each journal in the network, and the colours, proximity and strength of links between nodes reflect the frequency of co-citations, signalling thematic connections. The nodes that do not have links are those with less influence in the journal or do not have significant co-citation connections with other journals.

Figure 1. Co-citation of journals in AJIE – minimum 20 citations, 100 links



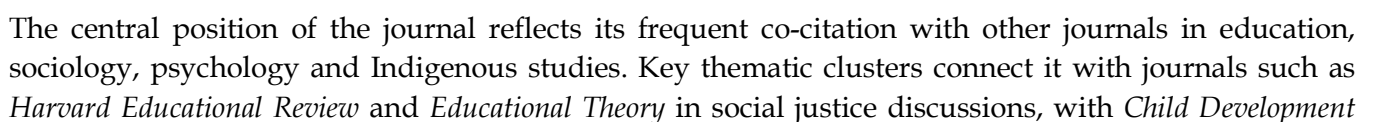
AJIE occupies a central and prominent position in the network, highlighting its foundational role in Indigenous education research. The extensive links between AJIE and other journals suggest that it serves as a key reference for researchers across various fields intersecting with Indigenous studies and education. Alongside AJIE, *The Aboriginal Child at School* forms a closely linked cluster, illustrating a strong historical and thematic continuity with many citations to old papers published in the journal. This connection highlights the sustained influence of early Indigenous education research, emphasising themes of cultural responsiveness, Indigenous knowledge and educational equity that remain relevant in contemporary scholarship.

The network reveals several distinct clusters represented by colours, each representing thematic groupings within the broader field of Indigenous and educational research. Journals in the green cluster, such as *Higher Education Research & Development* and *Australian Educational Researcher*, focus on higher education and educational policy, reflecting AJIE's influence in mainstream education research. This cluster suggests AJIE's contribution to discussions on incorporating Indigenous perspectives within broader educational frameworks and policy.

The orange cluster, which includes journals such as *The Aboriginal Child at School*, *AlterNative* and *Medical Journal of Australia*, appears to emphasise health, social work and community-based research. This cluster indicates AJIE's interdisciplinary reach, extending its influence into fields where culturally safe practices and community engagement are vital. AJIE's contributions to public health and social work demonstrate

The co-citation network shows a regional concentration, with many of the highly connected journals based in Australia or focusing primarily on Australian or Oceanic contexts. This pattern may indicate a relatively limited international reach beyond these regions, particularly in the Americas, Asia and Africa. While AJIE's central position in the network highlights its influence within Indigenous education and related fields, there is potential for the journal to expand its international impact by fostering connections with more globally recognised journals in Indigenous studies or educational research. Expanding international collaborations could diversify AJIE's influence and contribute to broader global discussions on Indigenous knowledge, cultural safety and educational inclusion.

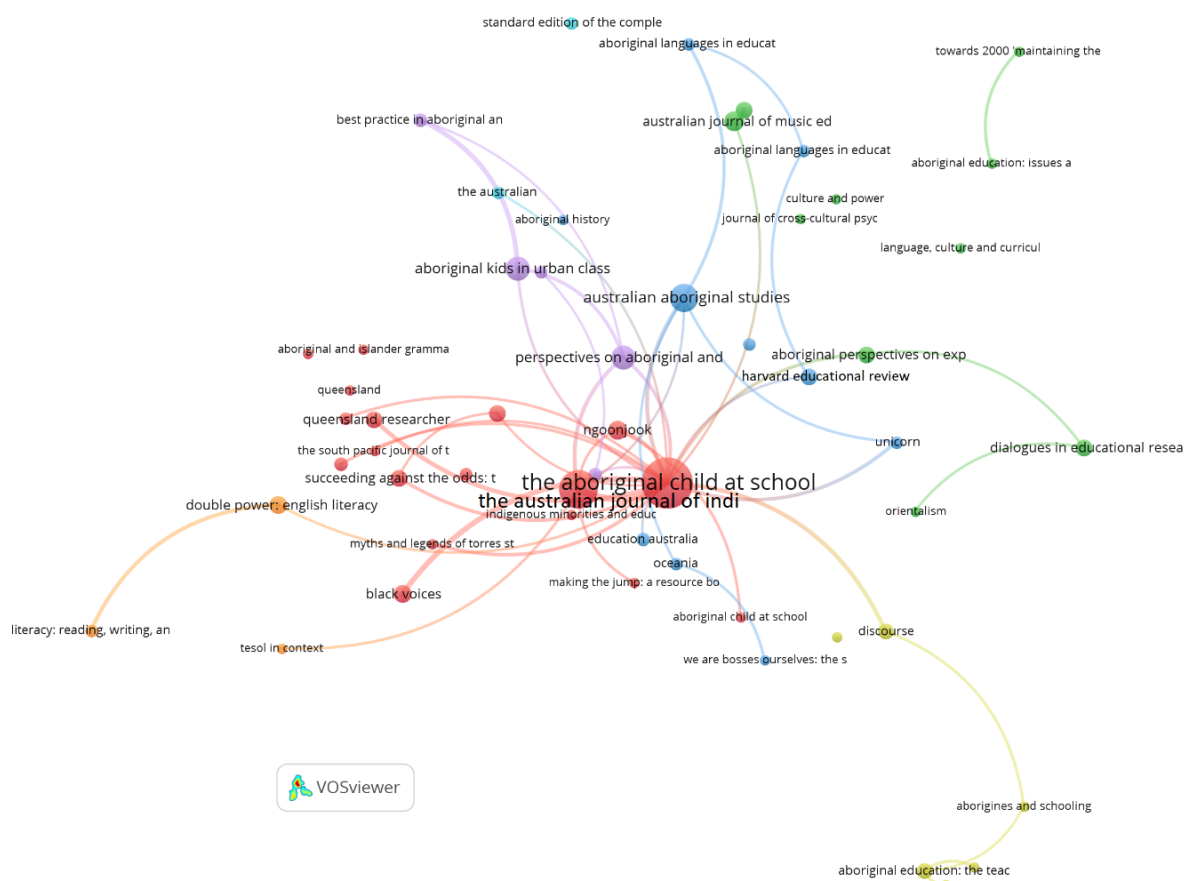
Figure 2. Co-citation of journals in AJIE 1973–1993 – minimum 3 citations, 50 links



and *Journal of Educational Psychology* in developmental research, and with *Language Arts* and *TESOL Quarterly* in language and literacy studies. While the network is concentrated in education and psychology, expanding connections to health and environmental studies could enhance its relevance in contemporary Indigenous research.

Figure 3 presents the co-citation network of journals citing *The Aboriginal Child at School* and AJIE from 1994 to 2003, highlighting the thematic evolution and growing influence of AJIE alongside its predecessor. This figure considers a minimum threshold of three citations and the 50 most representative co-citation links.

Figure 3. Co-citation of journals in AJIE 1994–2003 – minimum 3 citations, 50 links



Both journals appear as central nodes, suggesting their significance as core references in Indigenous education research. Distinct thematic clusters emerge, including a regional focus on Australian and Oceanic education, represented by the journals *Queensland Researcher* and *South Pacific Journal of Teacher Education*; broader educational theory and social justice discussions, shown by links to journals such as *Harvard Educational Review*; and language and literacy themes, connected through journals such as *TESOL in Context* and *Literacy*. By 2003, AJIE's reach extended beyond Indigenous education into cultural studies, psychology and social sciences, addressing broader social issues related to Indigenous identity and empowerment. Although AJIE's influence was expanding internationally, it remained primarily concentrated in regional journals, marking a transitional phase as it moved towards broader global recognition in Indigenous scholarship.

Figure 4. Co-citation of journals in AJIE 2004–2013 – minimum 1 citation, 100 links

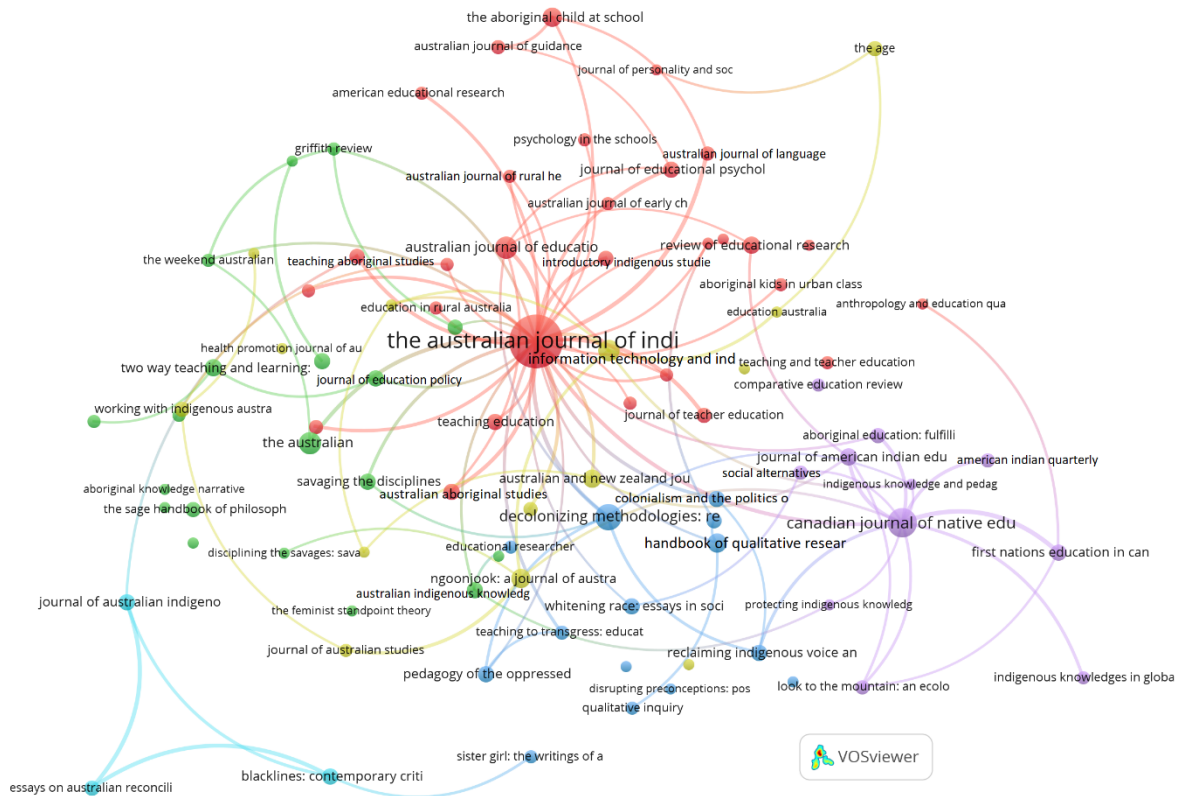


Figure 4 illustrates the co-citation network of journals citing AJIE from 2004 to 2013, with a minimum of one citation and 100 links. In this period, AJIE occupies a central position in the network, underscoring its influential role in Indigenous education research and its expansion into various academic fields. The network's dense connections indicate AJIE's solidified status as an authoritative source within Indigenous studies, influencing educational research, social sciences and cultural studies. Several thematic clusters reveal AJIE's interdisciplinary scope: the red cluster includes mainstream educational research journals, reflecting AJIE's role in inclusive and culturally responsive teaching; the green cluster, focused on Australian and Indigenous cultural studies, emphasises AJIE's engagement with issues of identity, history and policy in an Australian context; and the blue and purple clusters align with decolonising methodologies and qualitative research, highlighting AJIE's commitment to Indigenous ways of knowing. This period also shows increased international connections, particularly with North American journals, e.g., *Canadian Journal of Native Education*, indicating AJIE's growing global impact. However, while international engagement is expanding, the network remains primarily centred on Australian and New Zealand journals, suggesting room for further integration into global Indigenous research networks.

Figure 5. Co-citation of journals in AJIE 2014–2023 – minimum 10 citations, 100 links

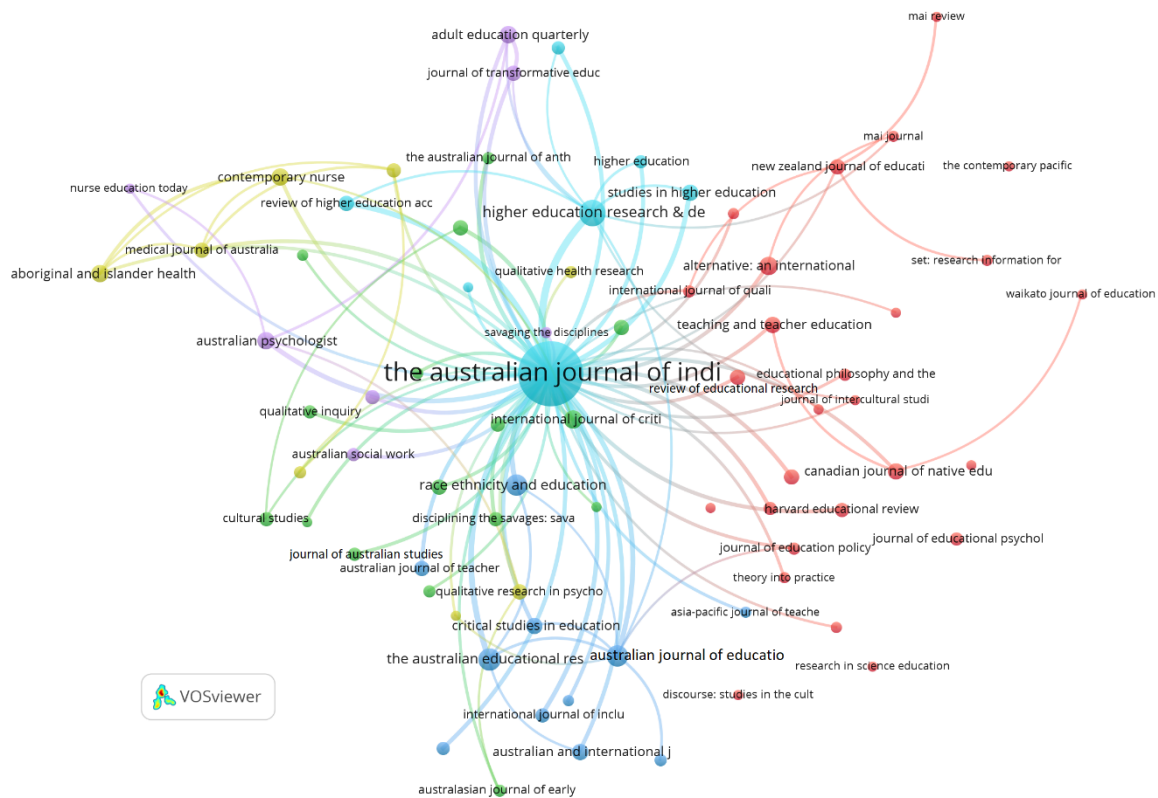


Figure 5 shows the co-citation network of journals citing AJIE from 2014 to 2023, with *The Australian Journal of Indigenous Education* as a central node, highlighting its influential role in Indigenous education research and expanding interdisciplinary reach. Key thematic clusters indicate AJIE's impact on culturally responsive pedagogy and educational policy (red cluster), higher education and policy studies (blue cluster), health and social work (yellow cluster), and cultural and social studies (green cluster). Additionally, international connections, particularly with *Canadian Journal of Native Education*, reflect AJIE's growing global influence. While AJIE's reach is expanding, it remains regionally concentrated, especially within Australian and Oceanic journals. Further global engagement, particularly with underrepresented regions, could enhance AJIE's impact and foster broader international discourse on Indigenous education and cultural inclusion.

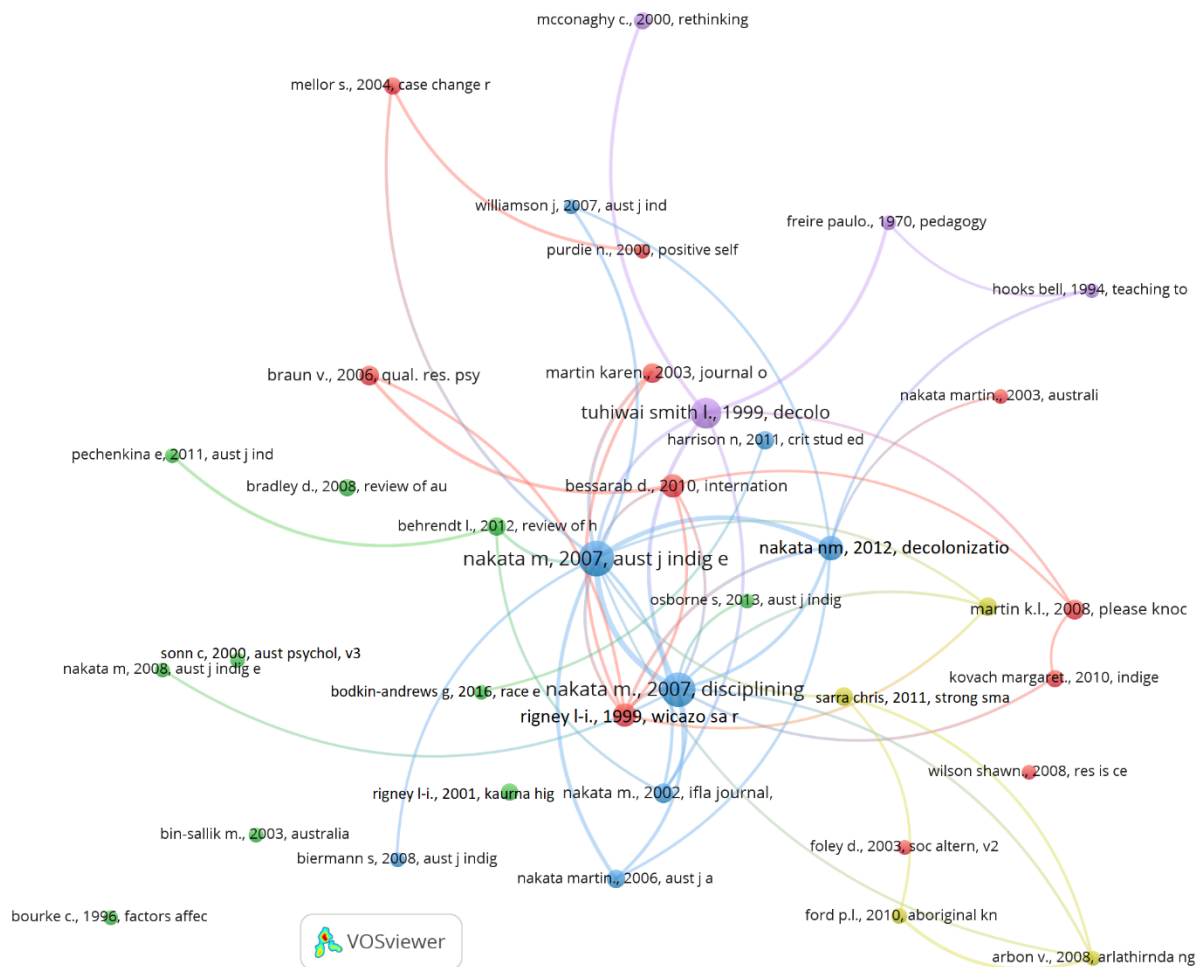
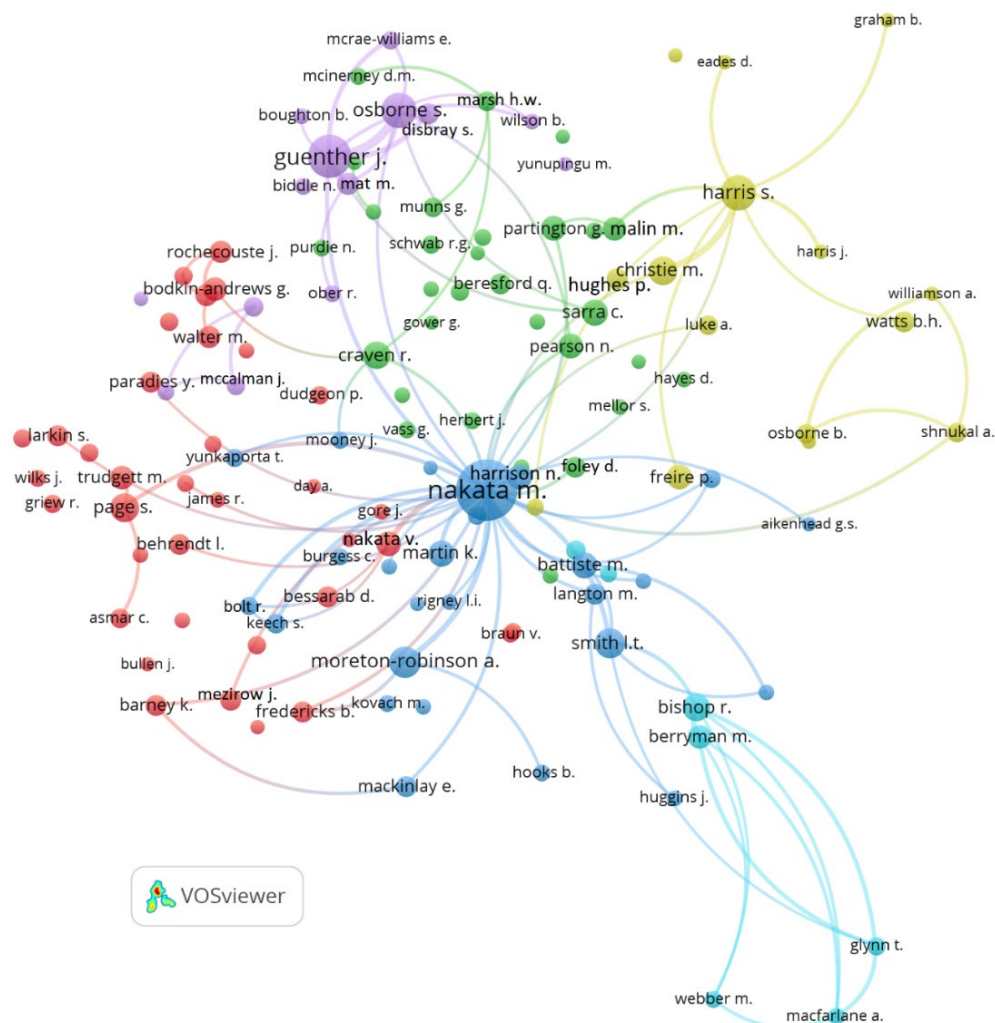
Figure 6. Co-citation of documents in AJIE from WoS (2005–2023) – minimum 10 citations, 50 links

Figure 6 presents a co-citation network of documents cited in AJIE from 2005 to 2023 based on WoS data with a minimum of 10 citations and 50 strongest co-citation links. This visualisation highlights influential works shaping Indigenous education research and the interdisciplinary foundations AJIE draws upon. Each node represents a document, sized by co-citation frequency, with links indicating thematic relationships based on shared citations.

Central to the network are foundational texts such as Nakata's "The Cultural Interface" (2007) and Smith's *Decolonizing Methodologies* (1999), which are pivotal in discourse on Indigenous methodologies and decolonisation. Their positing signals their enduring influence on AJIE's scholarly community. Other key contributors, including Rigney (1999) and Martin / Mirraoopa (2003), reinforce AJIE's alignment with critical Indigenous scholarship focused on challenging colonial paradigms and foregrounding Indigenous epistemologies.

The colour-coded clusters reveal four thematic strands: red for decolonisation and critical theory (e.g., Freire, hooks); blue for Indigenous knowledge systems and epistemology (e.g., Nakata, Rigney); green for equity and student support (e.g., Pechenkina, Bin-Sallik); and yellow for health, wellbeing and cultural safety (e.g., Wilson, Foley). Together, these clusters illustrate the breadth of AJIE's interdisciplinary influences and its ongoing engagement with transformative, culturally grounded research frameworks.

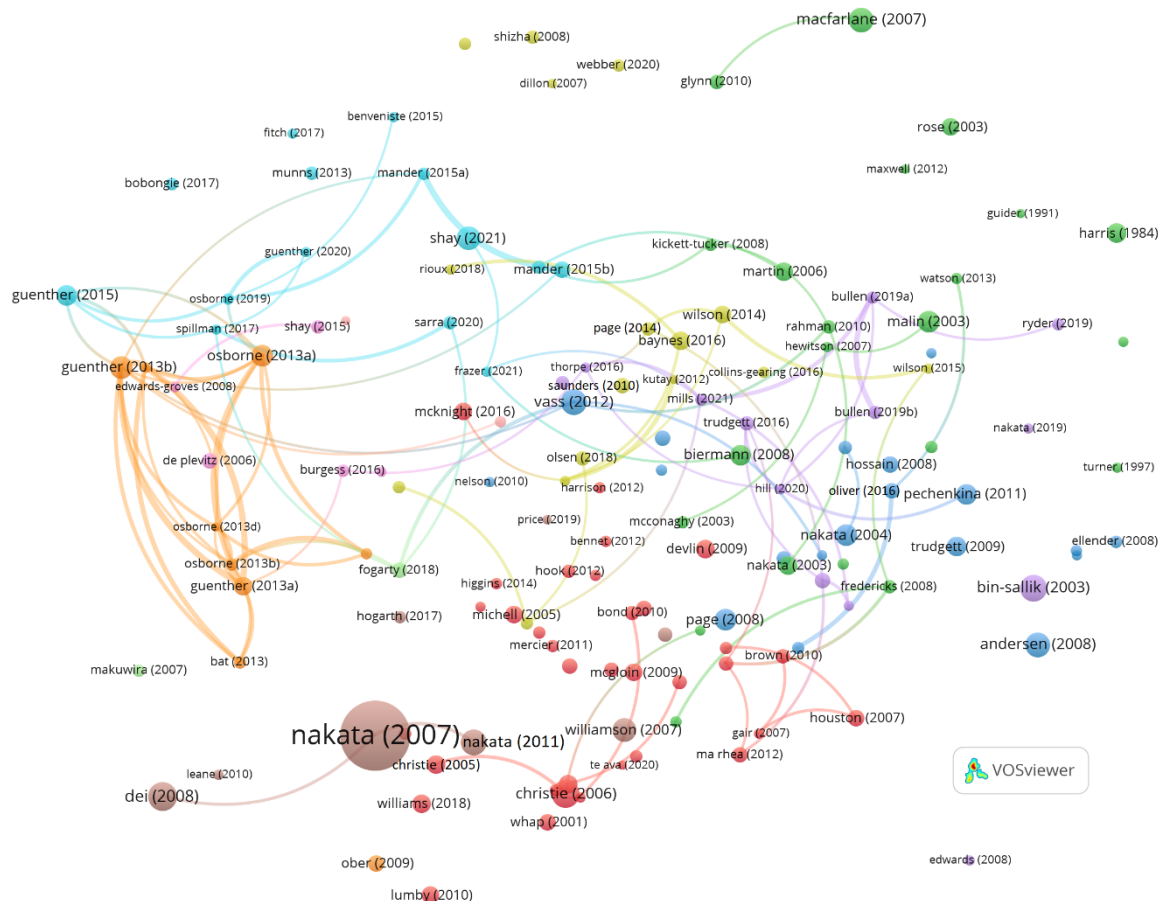
Figure 7. Co-citation of authors in AJIE – minimum 20 citations, 100 links



Bibliographic coupling of AJIE

Figure 8 illustrates the bibliographic coupling network of documents in AJIE, featuring publications with at least 10 citations and 100 links. At the core of the network, Nakata's 2007 work emerges as a central node, highlighting its role as a key reference in AJIE, particularly regarding the cultural interface theory, which examines the interaction between Indigenous knowledge systems and Western educational frameworks.

Figure 8. Bibliographic coupling of documents in AJIE – minimum 10 citations, 100 links



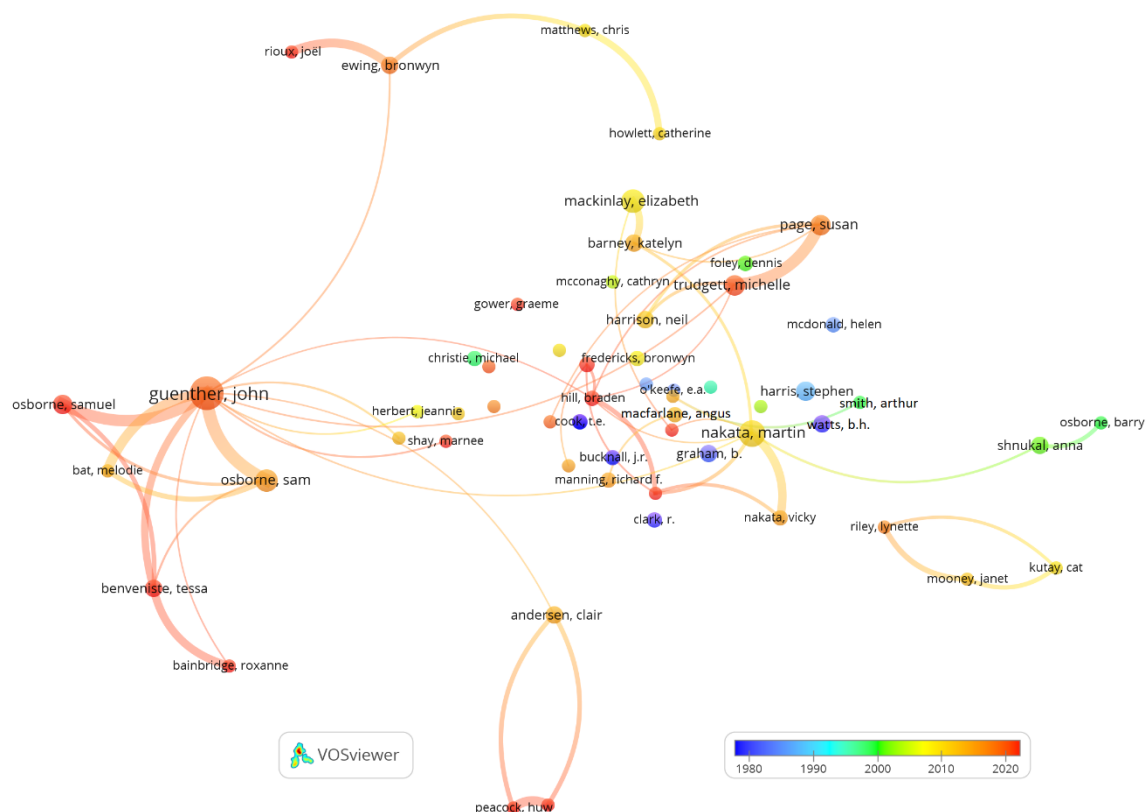
Several distinct colour-coded clusters reveal thematic areas within AJIE's research focus. The orange cluster includes works by Guenther and Osborne, who have explored various educational and socio-cultural contexts affecting Indigenous students, particularly in remote and regional settings, and the challenges of culturally responsive education. The red cluster, centred around Nakata (2007) and Christie (2006), emphasises critical Indigenous pedagogy and decolonisation, showcasing AJIE as a platform for a scholarship that critiques dominant educational frameworks and offers pathways toward decolonial education. The blue cluster features work by Pechenkina and Andersen, focusing on Indigenous participation in higher education and examining policies and support systems that facilitate Indigenous student success. This cluster reflects AJIE's commitment to equity and access, highlighting both barriers and strategies for promoting Indigenous representation in higher education. The green cluster, including works by Harris and Ryder, focuses on language and literacy in Indigenous education, with an emphasis on bilingual education, Indigenous languages and literacy development, accentuating AJIE's dedication to the preservation of language as an essential aspect of cultural identity and educational success. Additionally, the purple cluster includes research by Wilson and Hossain on the connections between

education, health and wellbeing in Indigenous communities, reflecting AJIE's interdisciplinary approach and recognition that educational outcomes are closely tied to broader socio-cultural and health factors.

The unconnected dots in the figure indicate that their bibliographic coupling in AJIE is lower than the most representative variables. But since they appear in the figure, they have some minor relevance, although less significant and connected than the central documents.

Figure 9 illustrates the bibliographic coupling network of authors publishing in AJIE, with each author having contributed a minimum of three documents and connected by at least 50 links. This visualisation reveals clusters of influential authors, where each node represents an author, with the size of the node indicating the author's influence based on the volume of publications and citations. Links between nodes show the degree of shared references, forming thematic groupings within AJIE's author network. The colour gradient represents the timeline of author contributions, with blue and green indicating earlier publications, while orange and red reflect more recent work.

Figure 9. Bibliographic coupling of authors publishing in AJIE – minimum 3 documents, 50 links



The prominent positioning of Guenther, who occupies the largest node, highlights his significant role within AJIE, particularly in research related to Indigenous education in remote and regional settings. His connections with authors such as Osborne, Bainbridge and Bat indicate a collaborative network focused on Indigenous educational contexts, with a particular emphasis on practical and policy-oriented studies. Guenther's network features his contributions to understanding educational dynamics in areas that face unique cultural and logistical challenges, aligning with AJIE's mission to address the diverse needs of Indigenous communities.

Another prominent cluster includes Page and Martin Nakata, connected to a broad array of authors such as Harrison, Trudgett and Manning. This grouping suggests a shared focus on decolonisation,

Indigenous methodologies and critical pedagogy within Indigenous education. Nakata's central role, reinforced by his collaborations with scholars such as Page and Harrison, signifies AJIE's foundational interest in reshaping educational frameworks to be more inclusive of Indigenous perspectives. These connections reflect the journal's commitment to advancing decolonial and Indigenous-centred scholarship.

The map also reveals emerging contributions from authors such as Mackinlay, Barney and Fredericks, who are positioned in the orange-to-red spectrum, indicating more recent influence within the network. This group's work often intersects with cultural studies, music education and arts-based approaches in Indigenous education, suggesting an evolving diversification of AJIE's research scope. The presence of interdisciplinary themes signals AJIE's openness to varied methodologies that support Indigenous knowledge systems and cultural expression within education.

Authors such as Andersen and Peacock, situated further from the central clusters, represent specialised thematic contributions that connect with AJIE's broader mission but are somewhat distinct from the core clusters. These authors' connections with both central and peripheral figures reflect AJIE's flexibility in accommodating a wide range of research topics while maintaining a coherent focus on Indigenous education.

Figure 10 presents the bibliographic coupling of institutions publishing in AJIE between 2005 and 2023, using data from the WoS. Each institution represented by a node has published a minimum of five documents, with at least 50 shared references linking them to other institutions. The size of each node indicates the relative volume of publications, while the link strength between nodes reflects the extent of shared bibliographic references. The colour gradient represents the timeline of institutional contributions, with blue indicating earlier engagement and orange-red representing more recent involvement.

Beyond these structural features, the figure highlights important patterns in AJIE's scholarly ecosystem. The dense network of Australian universities, with The University of Queensland and University of Sydney as central hubs, reflects AJIE's strong national base and sustained institutional leadership in Indigenous education research. Other regional institutions such as James Cook University and Queensland University of Technology contribute significantly within specific contexts. International partners, including University of Auckland, University of Canterbury, University of Saskatchewan and University of Ontario, signal emerging cross-national engagement, although the relatively weak bibliographic coupling beyond Oceania indicates limited global integration. This pattern is significant because it demonstrates both AJIE's success in consolidating a regional scholarly community and its opportunity to broaden international collaboration. Expanding these networks could enrich comparative perspectives on Indigenous education, diversify theoretical and methodological approaches, and strengthen AJIE's role as a platform for global Indigenous scholarship.

Figure 10. Bibliographic coupling of institutions publishing in AJIE from WoS (2005–2023) – minimum 5 documents, 50 links

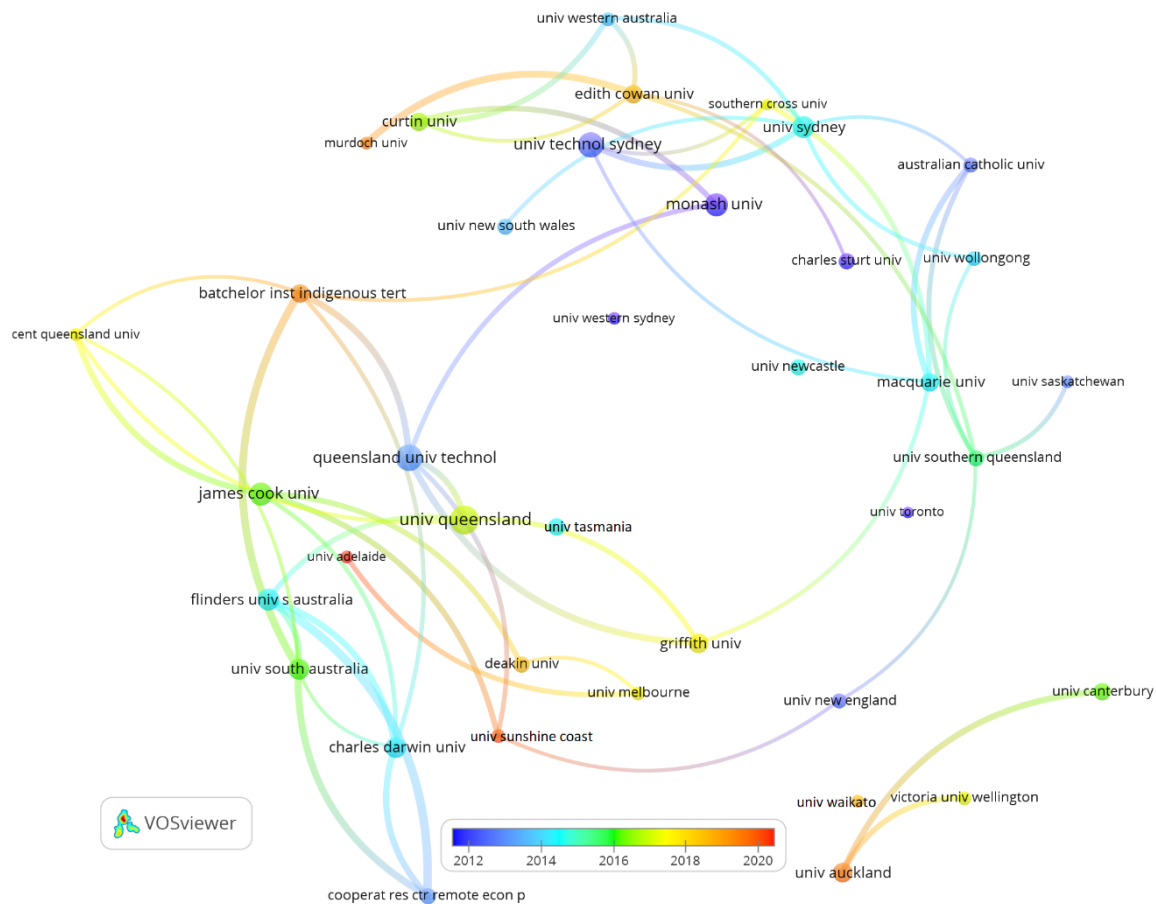


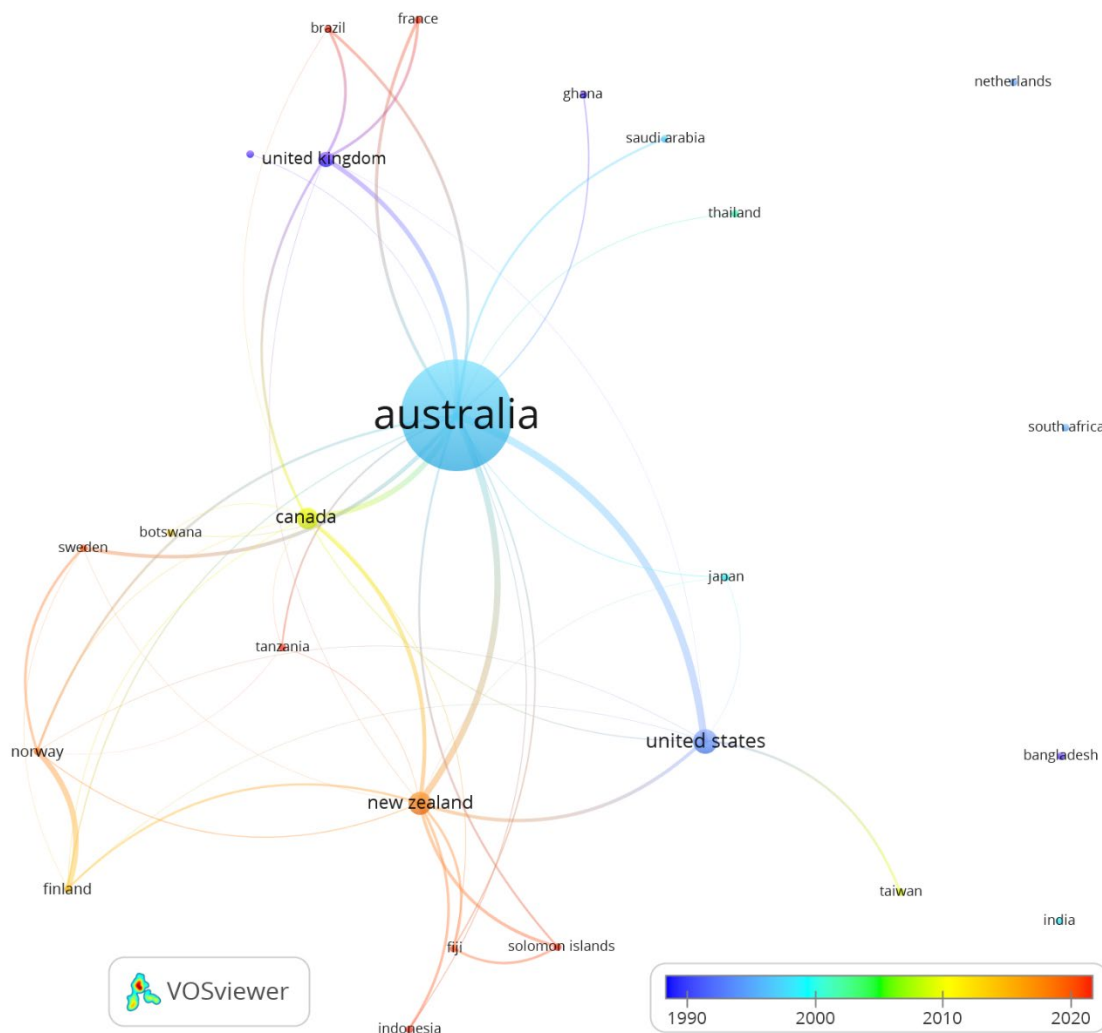
Figure 11 illustrates the bibliographic coupling network of countries publishing in AJIE, with each country having published at least one document and visualising the 50 most frequent bibliographic coupling links. Australia is the dominant node at the centre, reflecting its primary role and leadership in Indigenous education research. The strong connections between Australia and other countries, particularly New Zealand, the United States, Canada and the United Kingdom, suggest active cross-national scholarly engagement on Indigenous education themes.

New Zealand shows notable linkage with Australia, emphasising shared interests in Indigenous issues due to similar socio-historical contexts related to Indigenous populations. Connections with the United States and Canada indicate an expanding collaboration in Indigenous scholarship, where issues of decolonisation, cultural identity and educational equity are common. The involvement of other countries, such as Indonesia, Sweden and Japan, illustrates a broader international interest in Indigenous education, though these connections are less prominent, suggesting that AJIE's impact remains largely regional.

The colour gradient highlights the temporal development of these collaborations, with earlier connections (indicated in blue) predominantly from countries such as the United States, while more recent engagements (indicated in red) emerge from regions such as Southeast Asia and Africa, including Indonesia, Tanzania and Ghana. This shift hints at a growing recognition of Indigenous education beyond traditional Western contexts, reflecting the global relevance of AJIE's research topics in recent years.

While Australia is clearly central, the network suggests opportunities for AJIE to foster deeper ties with underrepresented regions such as Asia, Africa and Latin America. Expanding these connections could enrich AJIE's interdisciplinary impact and facilitate a more inclusive global dialogue on Indigenous education, contributing valuable insights from diverse cultural and educational contexts.

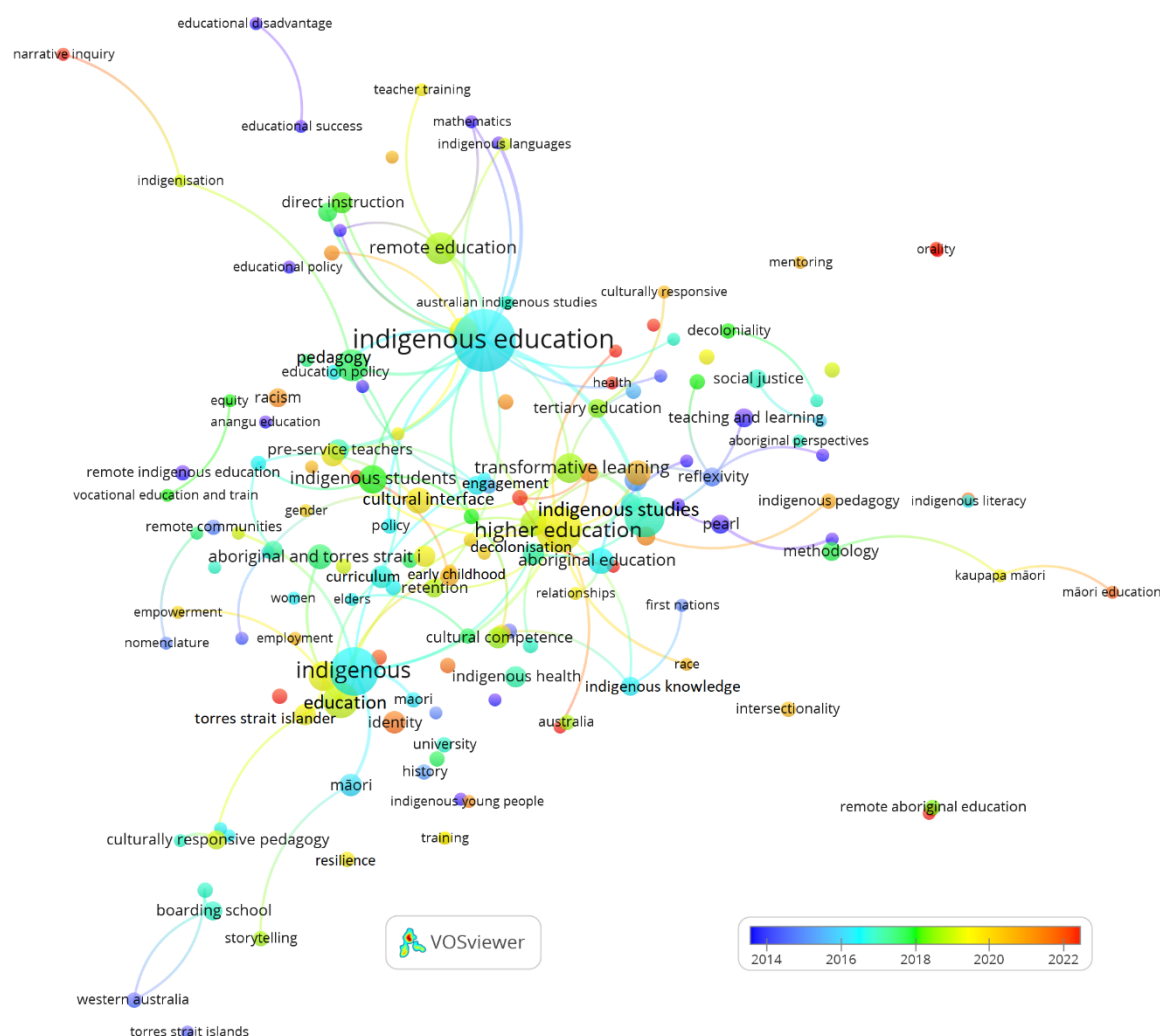
Figure 11. Bibliographic coupling of countries publishing in AJIE – minimum 1 document, 50 links



Keyword and topical analysis in AJIE

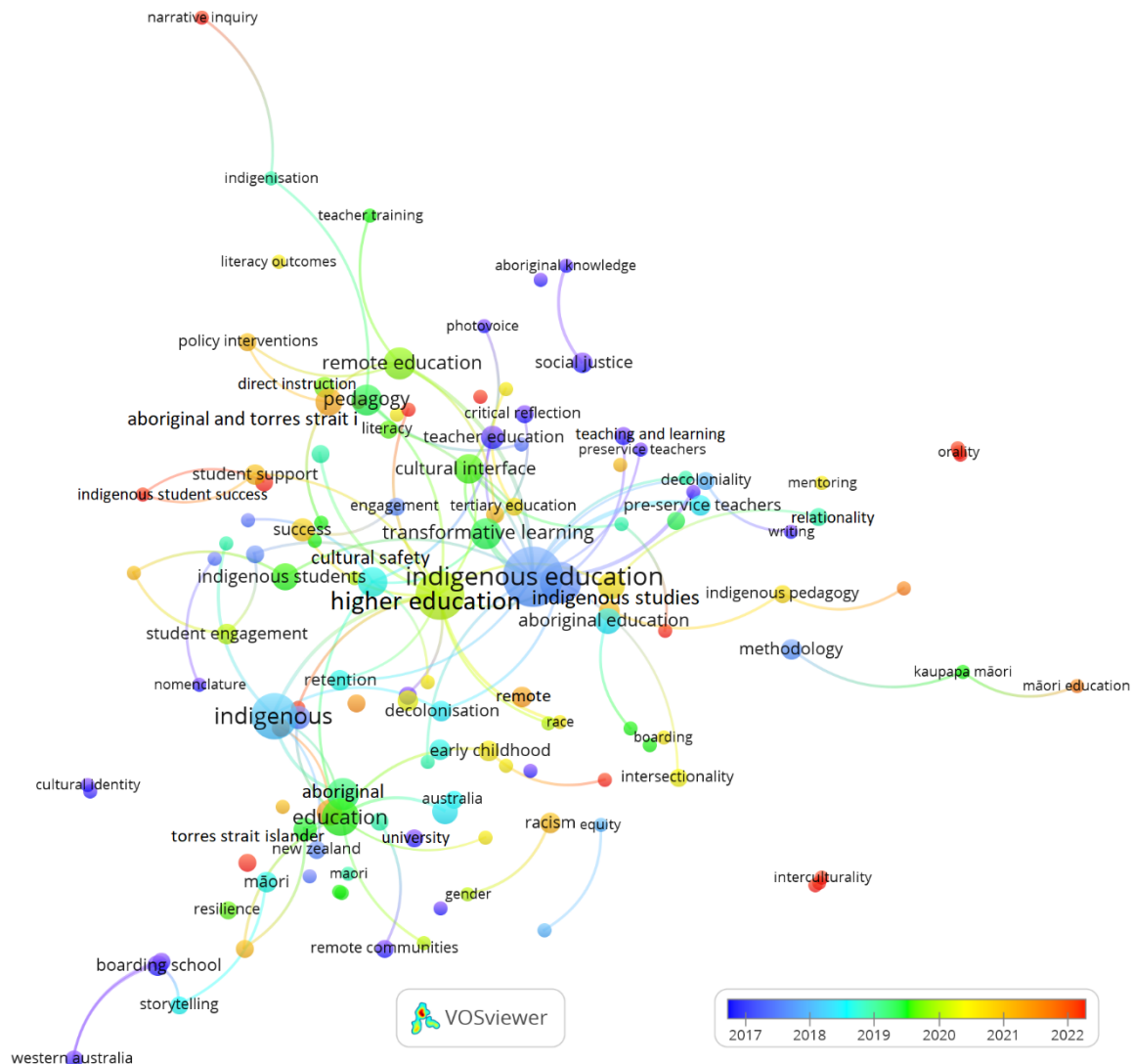
Figure 12 illustrates the co-occurrence network of author keywords in AJIE, centred around “Indigenous education”, reflecting the journal’s core focus. The map highlights several prominent groupings of keywords that signal key areas of scholarly attention. For example, terms such as “Higher education”, “Cultural competence” and “Transformative learning” cluster around issues of tertiary education and student engagement. Recall that co-occurrence of author keywords appears when two author keywords are mentioned in the same article. Figure 12 shows the author keywords that have appeared at least twice in AJIE and visualises the 100 most frequent co-occurrence links.

Figure 12. Co-occurrence of author keywords in AJIE – minimum occurrence 2, 100 links



Another grouping links “Social justice”, “Decoloniality” and “Culturally responsive teaching”, reflecting a growing emphasis on transformative educational practices that challenge colonial frameworks. Topics such as “Remote education” and “Vocational education” indicate AJIE’s engagement with the unique needs of Indigenous communities beyond metropolitan contexts, while keywords such as “Kaupapa Māori”, “Indigenous health” and “Identity” demonstrate interdisciplinary connections. The colour gradient reveals a temporal shift from earlier themes, e.g., “Cultural competence” toward more recent emphasis on “Decoloniality” and “Resilience”, highlighting AJIE’s responsiveness to evolving Indigenous issues.

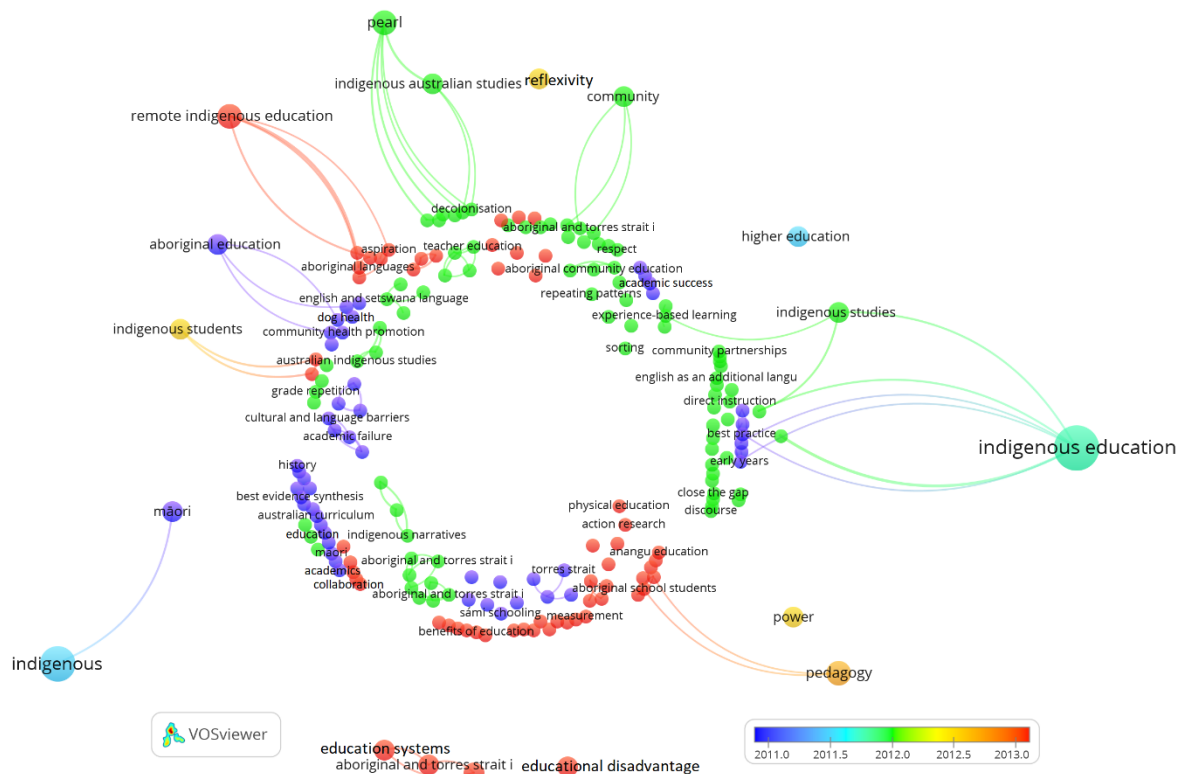
Figure 13. Co-occurrence of author keywords in AJIE (2014–2023), based on a minimum of 2 occurrences and the 100 strongest co-occurrence links



Figures 13 and 14 together present the co-occurrence of keywords of the last 20 years categorised by decades (noting that no keywords were available before 2004). In this network, nodes are sized by frequency of occurrence and coloured to indicate thematic clusters and temporal trends, showing which keywords frequently appear together. While such maps can appear complex, they provide a useful overview of the conceptual linkages and evolving themes that have shaped AJIE's recent scholarship.

The results align with the general interpretations of Figure 12, where foundational themes such as “Higher education”, “Cultural competence”, and “Transformative learning” intersect with evolving topics of “Social justice”, “Decoloniality” and “Culturally responsive teaching”. This clustering reflects AJIE’s focus on integrating Indigenous perspectives into education, addressing both historical and contemporary issues in Indigenous studies, and adapting to shifts in the field to remain relevant in the discourse on Indigenous education.

Figure 14. Co-occurrence of author keywords in AJIE (2004–2013), based on a minimum of 1 occurrence and the 100 strongest co-occurrence links



Compared to the more recent decade (Figure 13), this earlier network appears less consolidated, reflecting the smaller number of articles with keywords during this period and the fragmented nature of the field. The largest node “Indigenous education” is closely linked to terms such as “Higher education”, “Indigenous studies”, “Cultural competence” and “Educational disadvantage”, indicating recurring concerns around identity, access and systemic inequities. At the same time, the dispersed positioning of terms such as “Power”, “Pedagogy” and “Language” shows that critical approaches and culturally grounded perspectives were beginning to emerge but not yet coalescing into strong thematic clusters. This suggests that AJIE during this decade was still shaping an evolving research agenda, with later years (Figure 13) showing a clearer consolidation of themes.

The analysis of Scopus keywords in AJIE, as presented in Table 3, reveals key themes in Indigenous education research and their relative impact. “Indigenous education” stands out with the highest TP at 44 and TC at 432, indicating it as a foundational focus in the journal’s contributions. Keywords such as “Higher education”, “Indigenous studies” and “Pedagogy” also show high citation counts and *h*-index values, suggesting a strong academic influence and engagement in these areas. Themes such as “Remote education” and “Transformative learning” highlight AJIE’s emphasis on addressing the unique educational needs of Indigenous populations, particularly those in geographically isolated areas.

Keywords with fewer publications but notable citation counts per paper, such as “Cultural safety” and “Aboriginal education”, point to specific areas of research that resonate strongly within the academic community despite fewer publications. This suggests that AJIE’s research extends beyond educational theory into critical, cultural and social dimensions, emphasising Indigenous identity, cultural competence and safety. The presence of terms such as “Decolonisation” and “Cultural interface” reflects a scholarly focus on transforming educational practices and frameworks in ways that respect and incorporate Indigenous knowledge systems and perspectives.

Table 3. The most productive and influential Scopus keywords in AJIE

R	Keyword	TP	TC	C/P	H	≥50	≥10
1	Indigenous education	44	432	9.82	12	1	16
2	Indigenous	26	277	10.65	9	1	7
3	Higher education	24	229	9.54	9	0	8
4	Indigenous studies	18	193	10.72	9	0	9
5	Education	14	158	11.29	8	1	4
6	Remote education	12	79	6.58	6	0	4
7	Pedagogy	12	71	5.92	5	0	4
8	Transformative learning	10	93	9.30	6	0	4
9	Aboriginal	10	72	7.20	5	0	2
10	Indigenous students	9	71	7.89	6	0	3
11	Aboriginal and Torres Strait Islander education	9	57	6.33	4	0	4
12	Māori	9	54	6.00	5	0	1
13	Aboriginal education	8	109	13.63	5	1	2
14	Cultural safety	8	86	10.75	4	0	3
15	Cultural interface	8	56	7.00	4	0	3
16	Indigenous knowledges	7	66	9.43	5	0	3
17	Aboriginal and Torres Strait Islander	7	62	8.86	6	0	2
18	Success	6	70	11.67	4	0	2
19	Curriculum	6	64	10.67	5	0	3
20	Teacher education	6	64	10.67	5	0	2
21	Identity	6	25	4.17	2	0	1
22	Decolonisation	5	75	15.00	5	0	3
23	Direct instruction	5	45	9.00	3	0	2
24	Remote	5	36	7.20	3	0	1
25	Pre-Service teachers	5	34	6.80	4	0	1
26	Indigenous health	5	29	5.80	3	0	1
27	Cultural competence	5	26	5.20	3	0	0
28	Torres Strait Islander	5	18	3.60	2	0	0
29	Boarding school	4	67	16.75	4	0	3
–	18 keywords	4	–	–	–	–	–
–	36 keywords	3	–	–	–	–	–
–	76 keywords	2	–	–	–	–	–

Abbreviations: R: rank; TP: total papers; TC: total citations; C/P: cites per paper; H: *h*-index;
≥50 and ≥10, number of papers with equal or more than 50 and 10 citations

AJIE's focus on keywords such as "Indigenous students", "Teacher education" and "Success" highlights its commitment to supporting Indigenous learners and educators. However, the lower citation counts for some keywords, such as "Direct instruction" and "Torres Strait Islander", may indicate emerging areas of interest that have yet to gain broader academic traction. Overall, this keyword analysis features AJIE's role in promoting diverse, interdisciplinary research on Indigenous education, addressing both practical and theoretical aspects relevant to the field. Expanding research in areas with lower citation impact, such as "Cultural competence" and "Indigenous health", could further strengthen AJIE's influence in these essential but underexplored topics.

Table 4 presents an analysis of the predominant topics in AJIE from 2013 to 2022, derived from Scopus data and generated through the SciVal platform (SciVal, 2024). Topics are ranked by TP published, FWCI and worldwide PP, metrics aligned with established bibliometric frameworks (Klavans & Boyack, 2017; Purkayastha et al., 2019), which reflect the global visibility and impact of research in these areas. The highest number of papers (40) focuses on “Aboriginal; Torres Strait; Pre-Service teacher”, indicating AJIE’s significant emphasis on teacher education for Indigenous contexts. This topic shows a moderate FWCI of 0.84, suggesting that, while it is extensively covered, its impact is relatively standard compared to global averages.

Table 4. Leading topics in AJIE between 2013 and 2022 (Scopus)

R	Topic	TP	FWCI	PP
1	Aboriginal; Torres Strait; Pre-Service teacher	40	0.84	73.14
2	Cultural safety; Indigenous health care; Health service	31	1.17	82.61
3	Boarding schools; Aboriginal; Aboriginal and Torres Strait Islander	29	0.83	47.60
4	Indigenous student; Aboriginal; Aboriginal and Torres Strait Islander	26	0.84	67.43
5	Wellbeing; Mental health; Aboriginal and Torres Strait Islander	15	1.53	96.55
6	Decolonization; Canada; Indigenous knowledge	7	1.29	93.25
7	New Zealand; Oceania; Pacific Islander minority group	7	0.7	81.15
8	New Zealand; Secondary schools; Leadership in education	7	0.48	51.91
9	New Zealand; Wellbeing; Māori knowledge	6	0.3	84.74
10	Decolonization; Coloniality; Global South	5	0.64	92.57
11	Bilingual education; Aboriginal; Territory	4	0.29	25.37
12	Case study; South Africa; Science education	3	0.66	60.98
13	Revitalization; Endangered language; Endangerment	2	0	75.34
14	School mathematics; Case study; English language	2	0.46	68.75
15	Adult literacy; Numeracy; Vocational education	2	0.69	35.96
16	New Zealand; Revitalization; Māori language	2	0.55	33.45
17	Indigenous peoples; Brazil; Anthropology	2	0.11	18.81
–	43 topics	1	–	–

Abbreviations: R: rank; TP: total papers; FWCI: field-weighted citation impact (data from Scopus);
PP: worldwide prominent percentile (according to Scopus and FWCI)

“Cultural safety; Indigenous health care; Health service” ranks second with 31 papers, a higher FWCI of 1.17, and a PP of 82.61, reflecting its substantial impact and alignment with international research priorities in health. This high impact may indicate a growing recognition of Indigenous health issues and the importance of culturally safe practices within healthcare education and research. In contrast, “Boarding schools; Aboriginal; Aboriginal and Torres Strait Islander” ranks third with 29 papers but has a lower FWCI of 0.83 and a PP of 47.60, suggesting this area has received limited attention internationally, despite its importance within the Australian context.

Topics such as “Wellbeing; Mental health; Aboriginal and Torres Strait Islander” exhibit both high impact and visibility, with an FWCI of 1.53 and PP of 96.55, highlighting a substantial influence in international Indigenous mental health research. Similarly, “Decolonization; Canada; Indigenous knowledge” and “Decolonization; Coloniality; Global South” show high FWCI values (1.29 and 0.64 respectively) and significant PPs, highlighting AJIE’s contributions to global decolonisation discourse, which resonates with scholars in the fields of Indigenous knowledge and post-colonial studies. These topics reflect AJIE’s

role in fostering a broader understanding of Indigenous perspectives and the socio-political implications of decolonisation within education.

Some topics, such as “Bilingual education; Aboriginal; Territory” and “Revitalization; Endangered language; Endangerment”, have a relatively low FWCI and PP, indicating that, while these areas are relevant within AJIE, they may not have reached a wider international audience. This could suggest opportunities for AJIE to enhance the visibility of these areas, or that these topics are more region-specific in interest and applicability. Note that these topics were very popular in the 1970s and 1980s.

Overall, while AJIE demonstrates strength in covering diverse Indigenous topics, there is a marked difference in the global resonance of these clusters. Enhancing interdisciplinary approaches and expanding AJIE’s focus to include more widely impactful themes could improve the visibility and influence of certain topics, thereby amplifying AJIE’s contribution to both Indigenous and global research dialogues.

Conclusion

Over its five-decade trajectory, AJIE has grown from a practitioner-oriented outlet into a peer-reviewed journal of international standing. This bibliometric analysis demonstrates its evolution into a central platform for Indigenous education scholarship, combining strong regional leadership with emerging global reach. Metrics such as an *h*-index of 32, over 3,800 citations, and consistent indexing in Scopus and Web of Science highlight AJIE’s growing academic influence, though a relatively small number of papers account for the highest citation impact.

The co-citation analysis illustrates AJIE’s intellectual foundations, with key works such as Smith’s *Decolonizing Methodologies* (1999), Nakata’s “The Cultural Interface” (2007), Rigney’s Indigenous research principles (1999) and Martin / Mirraboopa’s Indigenous methodologies (2003) shaping the journal’s critical orientation. These texts, along with influential authors such as Nakata, Guenther and Page, anchor AJIE’s commitment to Indigenous-led scholarship and decolonial perspectives. The journal is positioned as a hub for thematically diverse clusters spanning pedagogy, cultural studies, health, equity and social justice, though its strongest co-citation ties remain concentrated in Australian and Oceanic contexts.

Bibliographic coupling findings reinforce AJIE’s role in consolidating national research communities while gradually expanding its international collaborations. Document-level clusters emphasise culturally responsive pedagogy, Indigenous student success, language and literacy, and the intersection of education with health and wellbeing. Author networks highlight Guenther, Nakata and Page as central figures, while emerging scholars such as Mackinlay, Barney and Fredericks signal diversification of themes and methodologies, including arts-based and interdisciplinary approaches. Institutional and country-level analyses show the dominance of Australian universities, led by The University of Queensland and University of Sydney, alongside growing ties with New Zealand, Canada and North America. More recent linkages with Southeast Asia and Africa suggest the potential for AJIE to broaden its global integration, though much of its scholarly base remains regionally concentrated.

The keyword and topical analysis further demonstrate AJIE’s thematic evolution. Core terms such as “Indigenous education”, “Higher education” and “Cultural competence” remain foundational, but recent growth in keywords such as “Decoloniality”, “Social justice” and “Resilience” reflects responsiveness to contemporary Indigenous concerns. Comparative keyword maps across decades show an early fragmentation of themes (2004–2013), later consolidating into stronger clusters (2014–2023).

centred on “Transformative learning” and “Culturally responsive pedagogy”. Topic-level analyses reveal strengths in “Teacher education”, “Indigenous health and wellbeing”, and “Decolonisation”, where AJIE’s output aligns with global priorities and achieves strong impact metrics. By contrast, topics such as boarding schools, bilingual education and language revitalisation, while historically significant, exhibit lower field-weighted citation impact and limited international visibility, suggesting opportunities for revitalising these research areas.

Taken together, these findings position AJIE as both a regional leader and an increasingly visible participant in global Indigenous education scholarship. Its interdisciplinary reach – spanning education, health, social justice and cultural studies – highlights its importance as a site of dialogue across fields. At the same time, bibliometric patterns reveal structural limitations: its dominance by Australian institutions and reliance on conventional citation metrics risk underrepresenting the practical, community-led and critically disruptive scholarship that is central to Indigenous research traditions.

Moving forward, AJIE’s growth will depend on a dual strategy: consolidating its strong regional base while deepening global engagement, particularly with underrepresented regions such as Asia, Africa and Latin America. Equally important is embracing evaluative frameworks that extend beyond citations to recognise Indigenous knowledge sovereignty, community impact and educational transformation. By amplifying diverse voices and fostering collaborations that cross disciplinary and geographic boundaries, AJIE can continue shaping the intellectual, practical and policy landscapes of Indigenous education in Australia and across the world.

References

- Broadus, R. N. (1987). Toward a definition of “bibliometrics”. *Scientometrics*, 12(5–6), 373–379.
- 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.
- Christie, M. (2006). Transdisciplinary research and Aboriginal knowledge. *The Australian Journal of Indigenous Education*, 35(1), 78–89.
- Ding, Y., Rousseau, R., & Wolfram, D. (2014). *Measuring scholarly impact: Methods and practice*. Springer.
- Donthu, N., Kumar, S., Mills, A., & Pattnaik, D. (2021a). *Journal of Marketing Education: A retrospective overview between 1979 and 2019*. *Journal of Marketing Education*, 43(2), 139–158.
- Donthu, N., Kumar, S., Mukherjee, D., Pandey, N., & Lim, W. M. (2021b). How to conduct a bibliometric analysis: An overview and guidelines. *Journal of Business Research*, 133, 285–296.
- Figuerola-Wischke, A., Merigó, J. M., Gil-Lafuente, A. M., Kydland, F. E., & Amiguet, L. (2024). *The Scandinavian Journal of Economics at 125: A bibliometric overview*. *Scandinavian Journal of Economics*, 126(4), 643–697.
- Gaviria-Marín, M., Merigó, J. M., Popa, S. (2018). Twenty years of the *Journal of Knowledge Management: A bibliometric analysis*. *Journal of Knowledge Management*, 22(8), 1655–1687.
- Hallinger, P. (2023). An empirical reflection on *Educational Administration Quarterly*’s distinctive contributions to the field, 1965–2020. *Educational Administration Quarterly*, 59(5), 884–913.
- Hicks, D., Wouters, P., Waltman, L., de Rijcke, S., & Rafols, I. (2015). Bibliometrics: The Leiden Manifesto for research metrics. *Nature*, 520(7548), 429–431.
- Kessler, M. M. (1963). Bibliographic coupling between scientific papers. *American Documentation*, 14(1), 10–25.
- Klavans, R. & Boyack, K. W. (2017). Research portfolio analysis and topic prominence. *Journal of Informetrics*, 11(4), 1158–1174.

- Martin, K. / Mirraboopa, B. (2003). Ways of knowing, being and doing: A theoretical framework and methods for Indigenous and Indigenist re-search. *Journal of Australian Studies*, 27(76), 203–214.
- Martínez-López, F. J., Merigó, J. M., Valenzuela, L., & Nicolás, C. (2018). Fifty years of the *European Journal of Marketing*: A bibliometric analysis. *European Journal of Marketing*, 52(1–2), 439–468.
- Nakata, M. (2007). The cultural interface. *The Australian Journal of Indigenous Education*, 36(S1), 7–14.
- Paul, J., Lim, W. M., O’Cass, A., Hao, A. W., & Bresciani, S. (2021). Scientific procedures and rationales for systematic literature reviews (SPAR-4-SLR). *International Journal of Consumer Studies*, 45(4), O1–O16.
- Pawley, A. L., Schimpf, C., & Nelson, L. (2016). Gender in engineering education research: A content analysis of research in JEE, 1998–2012. *Journal of Engineering Education*, 105(3), 508–528.
- Pritchard, A. (1969). Statistical bibliography or bibliometrics? *Journal of Documentation*, 25, 348–349.
- Purkayastha, A., Palmaro, E., Flak-Krzesinski, H. J., & Baas, J. (2019). Comparison of two article-level, field-independent citation metrics: Field-weighted citation impact (FWCI) and relative citation ratio (RCS). *Journal of Informetrics*, 13(20), 635–642.
- Rigney, L.-I. (1999). Internationalization of an Indigenous anticolonial cultural critique of research methodologies: A guide to Indigenist research methodology and its principles. *Wicazo Sa Review*, 14(2), 109–121.
- SciVal. (2024). *Quick reference guide*. Elsevier.
- Small, H. (1973). Co-citation in the scientific literature: A new measure of the relationship between two documents. *Journal of the American Society for Information Science*, 24, 265–269.
- Smith, L. T. (1999). *Decolonizing methodologies: Research and Indigenous peoples*. Zed Books.
- Torres-Vergara, C. J., Alfaro-García, V. G., Merigó, J. M., Atif, A., & McGreal, R. (2025). Twenty-five years of *The International Review of Research in Open and Distributed Learning*: A bibliometric analysis. *The International Review of Research in Open and Distributed Learning*, 26(2), 286–306.
- Van Eck, N. J., & Waltman, L. (2010). Software survey: VOSviewer, a computer program for bibliometric mapping. *Scientometrics*, 84(2), 523–538.
- Wilson, M. L. (2022). Topics, author profiles and collaboration networks in the *Journal of Research on Technology in Education*: A bibliometric analysis of 20 years of research. *Journal of Research on Technology in Education*, 56(3), 291–313.
- Zurita, G., Mulet-Forteza, C., Merigó, J. M., Lobos-Ossandon, V., & Ogata, H. (2022). A bibliometric overview of the *IEEE Transactions on Learning Technologies*. *IEEE Transactions on Learning Technologies*, 15(6), 656–672.

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