Innovations in Education and Teaching International

ISSN: (Print) (Online) Journal homepage: www.tandfonline.com/journals/riie20

The significance of partnerships to future university missions: A systematic literature review

Amanda S. Gutierrez, Jillian Fox & Jennifer Clifton

To cite this article: Amanda S. Gutierrez, Jillian Fox & Jennifer Clifton (14 Jul 2024): The significance of partnerships to future university missions: A systematic literature review, Innovations in Education and Teaching International, DOI: 10.1080/14703297.2024.2377127

To link to this article: https://doi.org/10.1080/14703297.2024.2377127

Published online: 14 Jul 2024.

INNOVATIONS IN EDUCATION AND TEACHING INTERNATIONAL
https://doi.org/10.1080/14703297.2024.2377127

The significance of partnerships to future university missions: A systematic literature review

Amanda S. Gutierrez [a], Jillian Fox [b] and Jennifer Clifton [c]

[a]Faculty of Education and Arts, Australian Catholic University, Brisbane, Australia; [b]James Cook University, Brisbane, Australia; [c]Faculty of Creative Industries, Education, and Social Justice, Queensland University of Technology, Brisbane, Australia

ABSTRACT

In this era of knowledge-intensive and innovation-focused economies, university missions are pivoting. Universities need to consider new and varied ways of working, including developing key partnerships, collaborations, and engagements with various stakeholders and end users. This paper presents an integrative literature review providing insight into the partnerships universities typically embrace to inform future partnership practices. A total of 751 abstracts from peer-reviewed articles published between 2008 and 2018 were examined and categorised, aligning with the pillars of university business: Teaching and Learning, Research, and Service. The review also includes identification of the types of journals partnership research is predominately published in, and the disciplines and fields that dominate research reporting on partnerships. This paper highlights trends in the findings around patterns of partnership engagements in higher education, discussing how funding models, university agendas, and the historical value placed on different disciplines influence the uptake of and worth placed on partnerships.

KEYWORDS

Higher education partnerships; engagement; stakeholder and university partnerships

Introduction

Throughout history, universities have been credited as the repositories and generators of knowledge in society. The substantive mission of a university has been to create, disseminate, and utilise knowledge, delivering excellent education and research servicing society and the community. Contemporary university missions are often based on the triad (20th-century) mission of the university including: (1) Research, (2) Teaching and Learning, and (3) Service (Scott, 2006).

In recent decades, megatrends (e.g. momentous technological, global, environmental, and social shifts) have reshaped society dramatically, influencing the workforce and impacting the knowledge and skills needed of workers in the technological age. Recent internal and external market demands have reframed the professed value of university activities and practices. Pressures have been exerted on higher education institutions to

CONTACT Amanda S. Gutierrez amanda.gutierrez@acu.edu.au Faculty of Education and Arts, Australian Catholic University, 1100 Nudgee Rd, Banyo, QLD 4014, Australia

equip future employees with appropriate and transferrable skills for economic and labour market priorities (Teichler, 2009) and remain crucial in 'equipping students with the skills they need to succeed in the workplace of the twenty-first century' (Akour & Alenezi, 2022, p. 2). The alignment between university and industry needs and wants has intensified. Whilst the need for research and knowledge creation that supports the successful development of economies remains, industry demands have also become a significant driver and influencer.

To remain relevant and respond to contemporary community and global needs, higher education institutes have had to strengthen and diversify how they engage with and serve the needs of society, stakeholders, partners, and the community (Boland, 2011). Universities are being asked to consider their role in society and evaluate their relationships and engagement with their constituencies, stakeholders, and communities (Kromydas, 2017). These challenges demand a significant shift in strategy for institutions with the concept of partnership becoming central to the ongoing success of higher education institutes and featuring prominently in university strategic plans (Fox & Diezmann, 2020). It is now universally agreed that universities cannot survive independently but must build networks that support changing agendas aligning with society's goals, businesses and workforces, and government (Ingleby, 2015).

This study uses a systematic literature review to explore and provide an initial scoping of the types of stakeholder partnerships universities engage in. The systematic literature review method was chosen to best identify, appraise and collate all relevant evidence of the breadth of partnership engagement in universities. This methodology generated robust, empirically derived data needed to examine the following research questions:

(1) How do publications about university and stakeholder partnerships thematically align with the university pillars of Teaching and Learning, Research, and Service?
(2) Which discipline and/or fields research and report on partnerships between universities and stakeholders?
(3) Which journals (and journal rankings) are publishing papers on partnerships between universities and stakeholders?
(4) What is the global reach of research about university and stakeholder partnerships?
(5) Are there any evident trends from the literature about universities and stakeholder partnerships?

Defining university and stakeholder partnerships

Universities participate in activities with a range of stakeholders, and collaborations between university and industry partnerships are rapidly becoming a common practice worldwide. In recent decades partnerships and engagements have been acknowledged and embedded in many universities' operations, functions, and missions (Rybnicek & Königsgruber, 2019). Partnerships have been defined as 'a deliberately designed, collaborative arrangement between different institutions, working together to advance self-interest and solve common problems' (Goodlad, 1988, p. 13). Other broad definitions suggest that partnerships are considered a 'collaborative between two or more institutions of higher education, businesses, or social agencies, with the goal of obtaining a shared objective' (Eddy, 2010, p. 10).

These joint ventures are referred to by many other terms, including collaborations, strategic alliances, joint ventures (Eddy, 2010), and academic engagements (Perkmann & Salter, 2012). For the purpose of this research, the term partnership will be used to represent engagements and collaborations, and the word 'stakeholder' will be used to represent the communities and constituencies that universities engage with in partnerships.

There are many positive benefits in forming partnerships for universities and industry alike (Atta-Owusu et al., 2021). Partnerships can support innovative teaching (Mamdani, 2016); increase funding (Chapleo & Simms, 2010); contribute to research, teaching, and infrastructural development, and build knowledge transfer (Freeman et al., 2017). For industry, partnerships can aid future recruitment; provide access to new thinking and ideas, emerging research and practice; and leverage internal research capabilities (Rybnicek & Königsgruber, 2019). The benefits documented in the literature include mutual economic and research benefits, increased collaboration and bridging the gap between theory and practice (Bodas & Verspagen, 2017; Falqueto et al., 2020; Ferns et al., 2019; Grudnoff et al., 2017; Harms et al., 2017; Law et al., 2021).

Whilst there are many benefits to partaking in a partnership, there are also some common barriers experienced in partnerships. These include a lack of clear purpose or inconsistent understanding of purpose; unequal and/or unacceptable balance of power and control; inadequate understanding of roles and responsibilities; and financial and time commitments that may outweigh potential benefits (Anderson-Butcher et al., 2022; Ćudić et al., 2022). Sustainability of partnerships is an important concept in partnership literature (for example, see Herbert et al., 2018; le Cornu, 2015) and a serious concern for those individual academics who are manage these complex spaces with university pressure to create sustainable models (Gutierrez, 2024). This concern is especially pertinent when universities, governments, and systems appear to put much emphasis on ideals of partnerships on paper, however then 'sub-optimally allocate[ing] their scarce human and physical capital' (Jongbloed et al., 2008, p. 304) to this space.

Universities' partnerships with stakeholders are often connected to the missions of a university – Research, Teaching and Learning, and Service. Research partnerships support the commercialisation of academic knowledge, involving the patenting and licencing of inventions, academic entrepreneurship, and the creation and distribution of knowledge (Eddy, 2010). These types of partnerships are avenues for industry and government to gain access to, and benefit from, the skills and expertise of researchers and students. Teaching and Learning partnerships support teaching and curriculum agendas to ensure that graduates are work-ready and are prepared to contribute to the social and economic prosperity of the nation. Partnerships are developed to support program development, delivery, work-integrated learning, service to students and industry, and quality learning programs (Christensen & Eyring, 2011). Universities engage in partnerships that serve the community locally and nationally. These connections with the community aim to enhance expertise across economic, social, educational, health, and quality of life societal concerns (Fitzgerald et al., 2012). Given the complexity, variety, and growing importance of partnerships, it is timely to consider research conducted about partnerships within higher education to inform future research, policy, and processes in this field.

Methods

The systematic review utilised in this study was an integrative literature review (Torraco, 2016; Whittemore & Knafl, 2005). This style of literature review uses an integrated approach to reviewing, critiquing, and synthesising the literature on a particular topic employing rigorous processes in the selection of literature, analysis, and presentation of results. As Torraco (2016) argues, integrative literature reviews allow holistic conceptualisation and synthesis of literature in mature, new or emerging topics. While universities have been engaged in partnership work for decades (mature topic), it is not always in a balanced way across disciplines or mission priorities (Atta-Owusu et al., 2021). This review includes a meta-analysis due to the large dataset to assist with conceptual/thematic representation of the data, and synthesises this dataset to answer specific research questions.

A specific process was followed to identify important key variables when categorising the literature. Due to the extensive literature base, the researchers focused on abstracts rather than full papers to allow a larger field of literature to be reviewed and categorised. They were informed by the works of Fox and Diezmann (2017) and Mercer-Mapstone et al. (2017).

Phase 1: Identification of literature

To determine the dataset for the literature review, three stages were undertaken. Stage 1 involved identifying the broad literature pool, including setting up the key concepts and identifying suitable databases relating to the topic. A research assistant with significant experience in systematic reviews was employed to ensure a rigorous dataset was obtained. The parameters were set in consultation with this research assistant, including limiting the databases to ERIC (Education Resources Information Centre) and Informit. These databases were chosen because they are comprehensive and extensive, which ensured the literature search accessed peer-reviewed publications from different fields of study.

Stage 2 entailed choosing intercepting concepts: education with partnerships or collaboration with higher education or universit*, commercial* or industry, work integrated learning or placements, professional experience, clinical practice, research collaborations, community engagement, and synonyms with the assistance of the ERIC thesaurus. A timeframe was also applied to limit the period for the search to 10 years (2008–2018). The total number from the initial search was 1725. Endnote and Covidence were used to remove duplicates, which decreased the number to 1105.

Stage 3 imposed three exclusion criteria to confirm a rigorous and correct dataset was obtained. A manual review by the authors removed abstracts that met the following exclusion criteria:

(1) Papers that were not from a peer-reviewed journal. Including only peer-reviewed journals ensures that the interests and values of mainstream research communities have a degree of quality control and credibility through a peer-review process. This quality check was essential, considering only the abstracts were being reviewed.
(2) Abstracts outside the 2008–2018 date range.

(3) Papers that did not reflect a university partnership or collaboration or did not meet the definition of a partnership as outlined in the literature review.

This analysis removed a further 354 papers, taking the final number to 751 abstracts for analysis. These 751 abstracts were sourced from 377 journals. From these 377 journals, 14 stood out as publishing the highest number of papers. Further insight into the academic status of the publications was obtained by investigating the journal impact factor and H index sourced from Scimago Journal and country rank, and the Web of Science database.

Phase 2: Stages of analysis

After the data set was established, the researchers used a framework analysis (Ritchie & Spencer, 1994) which involved: (1) familiarization with the data, (2) identification of themes/codes, (3) indexing or categorization of themes/codes, (4) charting of data in tabular or graphical formats, and (5) mapping and interpretation of data into an excel framework (Fox & Diezmann, 2020).

(1) *Familiarization with the Data*: The categorisation process was completed by two researchers, discussing several abstracts to ensure mutual agreement. Additional discussions occurred on abstracts that the researchers deemed ambiguous. On many occasions the full paper was reviewed to ensure robust evidence was obtained to ensure correct categorisation.
(2) *Identification of themes/codes*: The themes/codes were based on the aims of the research which included understanding how partnerships aligned (or otherwise) with university business, categorisations of Research, Teaching and Learning and Service, and the structural demarcation of fields/disciplines. Identifying patterns in the types of journals, and any geographical patterns of significance, were also of interest.
(3) *Indexing or categorization of themes/codes*: The first theme/code investigated was the three pillars of university business. The researchers used colour coding to allocate each abstract into three pillars of university business: Research, Teaching and Learning, or Service. As part of this discussion, the researchers defined the three pillars in the following ways:
    - Research: Abstracts that mentioned research outcomes, grants, commercialisation, or products.
    - Teaching and Learning: Abstracts that focussed on strategies, approaches, models, or policies used to improve learning outcomes for cohorts of students.
    - Service: Abstracts that discussed programs/activities/processes intended to improve society and serve socio-economic, climate, political, and/or cultural needs (often labelled community engagement).

There were a small handful of abstracts that, after robust discussion by the researchers, were allocated to multiple pillars due to equal focus on more than one pillar. These were placed in a combined category (2% of the papers).

The second coding completed was based on disciplines/fields. Debates exist around the categorisation of disciplines or fields of study (Tight, 2020). To support this process, the researchers turned to other classification systems, specifically the 'fields of research' to classify research outputs and grant applications (e.g. The Australian and New Zealand Standard Research Classification (ANZSRC) released by the Australian Bureau of Statistics (ABS) the UK Research and Innovation Classifications2, Clarivate, such as Web of Science. The categories and conceptual thinking around fields and disciplines influenced the categorisation of the abstracts for this systematic review. Table 1 outlines the major fields and a sample of discipline areas to illustrate the categorisation of the abstracts which were mostly based on the ANZSRC classifications, unless there was a significant field, for example, 'community engagement'. This field is important in the area of partnership research and had significant publications, hence validating the need for a separate category beyond established classifications.

The third code tracked noted the journals in which the abstracts were published. Specifically, journal name, impact factor, and H Index (as of 2021) were noted. This information was sourced from Scimago Journal, Country Rank, and the Web of Science database. The journals that published more than five abstracts (total of 20 journals) were documented and presented for analysis and cross-tabulated with the pillars to gain an understanding of relationships and themes.

The final coding recorded the contributing countries in the abstracts; 488 abstracts, or 65% included this information. While this data is incomplete, it provided an indication of dominant countries publishing research on partnerships and any patterns in specific country that were heavily featured. While a range of countries were represented, including from Europe and Asia, the dominant countries were English-speaking nations.

(4) *Charting of data in tabular or graphical formats, and*
(5) *Mapping and interpretation of data into an excel framework*: After the initial categorisation using the abstracts in paper format, data was entered into an excel

Table 1. Major disciplines/fields.

Major Field	Sample Disciplines/Abstract Foci
Agriculture	Agriculture and Farm Management
Commerce, Management, Tourism and Services	Hospitality, Economics, Business
Community Engagement	Main focus on Community Engagement, including whole campus approaches
Creative Arts and Writing	Animation, Drama, Digital Media, Fashion, Game Design, Visual Arts, Music, Journalism
Education	Adult Education, Curriculum, Distance Education, Diversity, Early Childhood, English as Additional Language, Initial Teacher Education including professional experience, Library, School Counselling Schooling, Teacher Professional Development, Youth Mentoring
Health	Child Welfare, Dental, Drug Industry, Gerontology, Health Education, Medicine, Nursing, Pharmaceutical, Health industry work-integrated learning, Psychology, Social work
Higher Education	Governance, Higher Education Operational, Intellectual Property, Work-Integrated Learning from a whole of university perspective
Industry Engagement	General links between Industry and University
Law	Law firms, Law studies
Science	STEM, Sustainability, Engineering, Earth sciences, Biological sciences
Social Sciences	Anthropology, Geography, Politics, Sociology
Technology and ITC	Technology, Information systems, ICT studies, Licencing and patents

framework, and specific codes and language were inserted to allow future analysis. This process enabled the researchers to search for and identify specific themes or components (Stober, 1997) and apply descriptive statistics (Witte & Witte, 2016) to the frequency of variables. This analysis enabled a holistic picture of university partnerships as represented across the 751 abstracts. The descriptive statistics were applied to the variables that aligned with the research questions, including: (1) university pillars, (2) disciplines/fields, (3) journals and metrics, and (4) countries/regions of abstract origin. This data is represented numerically as percentages and presented visually in tables or pie charts to compare frequency data.

Results

Research question 1: Paper abstract alignment with the university pillars of teaching and learning, research, and service

Across the pillars of Teaching and Learning, Research, and Service (and those that sat evenly between), the most dominant pillar in the partnership literature was Teaching and Learning with 367 abstracts, equating to almost half the total number of abstracts (49%). The field of Research accounted for 167 abstracts (22%), Service 206 (27%), and combined pillars totalled 11 abstracts (2%).

Excluding the combined results, the smallest group of abstracts pertained to research partnership collaborations (22%). Within the Research category, 35% of the abstracts were related to science-based disciplines, 28% focused on Higher Education partnerships, 12% were related to Education, and 10% to the Commerce field. In the Teaching and Learning category, an overwhelming number of abstracts aligned with the field of Education (57%), and the next largest group was Science related fields with 10%. All other fields had less than 9% of abstracts in this pillar. Finally, in the Service category, 42% of abstracts aligned with Community Engagement activities and policies, 21% Higher Education, and 15% Education. All other areas were less than 4%.

Further exploration of the results suggests Science reports more on research partnerships than any other field, with 59 of the 76 abstracts aligning with science research. Education reports predominantly on Teaching and Learning partnerships (209 from 266 abstracts), and Service partnerships were the focus of the Community Engagement publications (86 from 98 abstracts). Whilst this may seem expected, all Faculties prioritise Research, Teaching and Learning, and Service as pillars in their business. It appears these pillars are enacted differently across Faculties.

Research question 2: Partnerships abstracts categorized by discipline/fields

Across the 751 abstracts, the most dominant discipline/field of study was Education, with 266 papers. The next closest area was Higher Education with half the number of papers (133), followed by Community Engagement (98) and Science (76). All discipline/field areas and their number of abstracts are listed in Table 2.

In reviewing the categorisation of partnerships within the different fields and disciplines, the above data set was extracted, and fields with more than 20 abstracts were analysed further and displayed in Figure 1.

Table 2. Major disciplines/fields.

Major Field	Number of Abstracts
Agriculture	9
Commerce, Management, Tourism and Services	53
Community Engagement	98
Creative Arts and Writing	17
Education	266
Health	46
Higher Education	133
Industry	11
Law	5
Science	76
Social Sciences	11
Technology and ITC	26

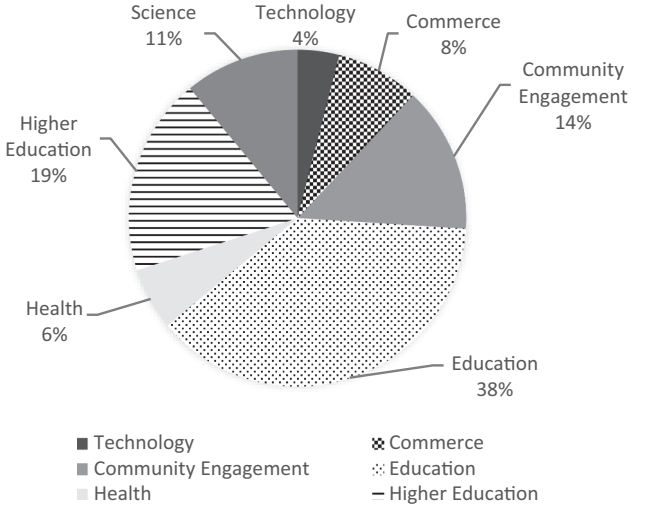

Figure 1. Fields with more than 20 abstracts.

As seen in Figure 1, the field of education dominates the partnership literature space making up 38% of the publications of the fields with more than 20 abstracts. Indeed, when the three highest fields are combined, 58% of abstracts are from education (school-based or higher education).

Research question 3: Journals of significance that feature partnership abstracts

The 751 abstracts were sourced from 377 journals. Journals that had published more than five publications were collated (a total of 20 journals). Data relating to the impact factor and H index was also sourced. This enabled the researchers to assess the academic rigour of the journals. Cross-tabulation with the pillar was conducted to examine any trends between the pillar and the academic value of the journal.

The top two journals that publish articles about university and stakeholder partnerships are not ranked in Scimago Journal, Country Rank, or Web of Science. These two journals were primarily published in the pillars of Teaching and Learning, and Service. In addition, out of the 20 journals, 13 had no impact

factor, and two had low impact factors (0.404; 0.62). From the list of 20 journals, only two were ranked as Q1 journals. As evident from this analysis, the journals that contain partnership research are more likely to be not ranked at all or not ranked highly against current research quality standards. Given the current research metrics of academic institutions, this is significant as the majority of these journals would not meet the higher education metric of a high-quality publication. The two highest-ranking journals (in terms of impact factor) in the analysis were predominantly located with the Research categorised abstracts (13 out of 14 abstracts).

Research question 4: Countries/regions of publication

Another variable statistically tested investigated major contributing countries. From the 65% of papers that included country details, a significant frequency pattern emerged. As can be seen in Figure 2, abstracts published by the United States of America authors dominate the publications, followed by Australia and the UK. It needs to be noted that the journals were in English, hence this excludes many countries.

When these major countries are cross-tabulated with pillars it presents some interesting findings showing each country has different priority areas for partnership publications (see Table 3).

The data suggests publishing papers on partnerships is more valued in the USA, which dominated with 46% of the papers compared to the other major contributing nations. This is further highlighted through the USA journal dedicated to professional development schools (PDS) partnership publications, which enabled 33 publications dedicated to this funded programme (22% of all USA papers and 39% of the Teaching and Learning

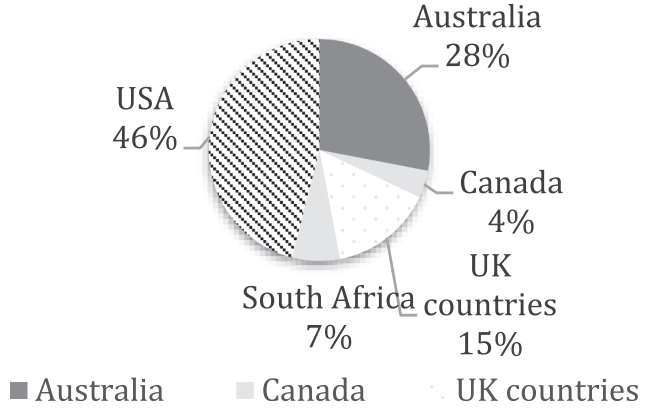

Figure 2. Major contributing countries with greater than 10 abstracts.

Table 3. The top three major countries cross-tabulated with pillars.

Country	Teaching and Learning	Service	Research
USA	84 (56%)	55 (37%)	11 (7%)
Australia	59 (58%)	31 (31%)	11 (11%)
UK	26 (48%)	14 (26%)	14 (26%)

papers). The other major countries' abstracts focused on various partnerships, with no recognisable repetition of overarching projects or programmes.

Research question 5: Evident trends from partnership literature

The findings of the systematic literature review established that authors are publishing about partnerships across all pillars of university business. Three main trends emerge from this literature review that are important for consideration for the future direction of university and stakeholder partnerships.

The first trend is that most publications in the partnership and higher education field align with Teaching and Learning and are published primarily in lower-ranked journals. As the literature review highlighted, partnerships can support future recruitment and are often seen as a way to bridge the theory – practice gap and support student employability (Schulte et al., 2017). The emphasis of publications on stakeholder and university partnerships in this pillar may be due to pressure on universities to increase the employability and skills of their graduates (Ferns et al., 2019; Grudnoff et al., 2017). The priority to improve graduate employability may also account for the overrepresentation of the Education and Community Engagement fields (two of the highest published fields). The Teaching and Learning publications focused on improving curriculum outcomes, teaching and learning programs, and work-integrated learning skills. Service publications focused on improving social outcomes and societal issues. These fields tended to be published in what would be considered lower-ranked journals.

Second, universities' funding and economic imperatives have influenced the partnership field. When considering the economic business of universities, Research relies on grants, commercialisation, and patents (Eddy, 2010); Teaching and Learning rely on student fees; and Service often relies on community grants. The findings indicate partnerships in the Service field do not translate into high research outcomes as these abstracts were least visible in higher-ranked journals. This finding illustrates Jongbloed et al. (2008) and Benneworth and Jongbloed's (2010) findings concerning the value placed on Service-related work and a call for the valorisation of the commercialisation of Humanities, Arts, and Social Sciences, which is lacking. The Research pillar accounts for the least number of abstracts across the three pillars. Still, these are published in higher-ranked journals and are often linked to economic imperatives for universities. Where stakeholder and university research partnerships do feature, it is in the field of Science, and these are published predominately in higher-ranked journals. The publications reviewed report on science-based research outcomes, commercialisation, and patents that were, in the main, linked to industry research grants. When considering the traditional valorisation of university business, the dominance of research and science partnership publications in high-ranking journals places a higher value on economic contributions from commercialisation, grants, income, and patents (Atta-Owusu et al., 2021; Benneworth & Jongbloed, 2010).

Finally, the findings also indicate dominance in the geographical location of publications on partnerships. The USA accounted for almost half of the publications available, followed by Australia. In the USA context, a significant number of publications related to PDS projects, which are partnerships in which schools and universities work together to improve the preparation of quality teachers (Carpenter & Sherretz, 2012). These

partnerships generally have funding, however some publications discuss the challenges when accreditation bodies suggest scaling up, or situations in which funding decreases or disappears (Adair Breault, 2013). While the Research pillar publications, in the most part, appeared to be funded by industry or research grants, funding for Teaching and Learning and Service projects were often raised as issues in the abstracts. A lack of funding impacts academic publishing. The number of PDS publications is an indicator of the impact funding can have on an academic's capacity to share knowledge and theorise partnership work.

Limitations

This review includes abstracts from 2008 to 2018. Due to one of the researchers experiencing a significant illness, the publication of this data was paused. After discussion, the researchers decided the data provided valuable information for the academic world and believed it was still relevant given the continued limited and fragmented research attention given to university partnerships (see Rossoni et al., 2023 discussion on barriers to university collaboration). As recent literature suggests, challenges continue to exist for developing and sustaining university partnerships in relation to resources, higher value on scientific research agendas over social enterprise such as work the Arts (Kottmann & Jongbloed, 2023) as well as the importance of greater theorisation around partnership work (Gutierrez, 2024).

Discussion

This systematic literature review focused on abstracts published about stakeholder and university partnerships. It reviewed 751 abstracts and categorised them to identify findings based on the pillars of the university, discipline/field, journal significance, and global reach of publications. The frequency data and visual representations allow interpretation of types of partnerships that exist across Faculties and their alignment with the university business pillars of Research, Teaching and Learning, and Service. It is universally agreed that higher education needs to create effective and sustainable partnerships with stakeholders to ensure relevance and financial security now and in the future (Ingleby, 2015). This requires recognition that partnerships are important and represented in multiple publication platforms and across all fields. The findings from this systematic literature review highlight a potential devaluing of research into partnerships that align with Teaching and Learning, and Service, as these pillars are often published in lower-ranked journals. This is confirmed by Atta-Owusu et al. (2021), who suggest universities may focus more on their research mission to the detriment of setting up industry partnerships. Jongbloed et al. (2008) also raise issues around the lack of resourcing and valuing of service-based work with communities that focus on social good and do not produce a commercial or research product. To remain relevant and respond to changing government, industry, and community needs, universities must prioritise their business around all core pillars and explore the myriad of ways that these partnerships can be enacted. There is a concern that if partnerships are the future direction and mission of universities, evidence-based decisions on how to achieve successful and sustainable partnerships, best

practices, and lessons learnt are undervalued in the research using current metrics, which often drive grant decision-making processes.

In addition, much could be learned from fields such as Education and Community Engagement (where partnership research dominates) around effective negotiation, development, and management of sustainable partnerships. It may also be worth supporting those in this pillar to theoretically conceptualise partnerships allowing knowledge sharing and research validation of this work. Countries worldwide are beginning to rethink how they fund and value research and are increasingly interested in metrics that demonstrate impact on stakeholders. Notably, universities may wish to reconsider the traditional arbitrary separation of Research, Teaching and Learning, and Service to define their core business and work allocations. As impact and engagement become greater priorities, universities should look to those with expertise in managing and sustaining partnerships and support them to share their knowledge through both traditional internationally accessible research outputs and locally accessible stakeholder reports.

This paper has provided insights into research on university partnerships that can inform future direction. The review demonstrated that this field is complex and underdefined. Given the importance of partnerships in contemporary university missions, there needs to be a concerted effort to encourage those with significant experiential and historical understanding of partnerships to contribute to theorising this important area. Universities and funding bodies should raise the value of stakeholder impact metrics to recognise the impact partnerships have on the end user. This may require changing funding models for internal university business and external grants. It may even require rethinking the categorisation of academic work, traditionally classified against Teaching and Learning, Research, and Service. If we return to the substantive mission of universities, to create, disseminate, and utilise knowledge that services society and community, all university business should prioritise and support partnership work across *all* Faculties to ensure universities represent the needs of those they serve.

Acknowledgments

The authors would like to thank Zeid Ismail for their assistance with the database search.

Disclosure statement

No potential conflict of interest was reported by the author(s).

Notes on contributors

Amanda S. Gutierrez is an Education educator and researcher at the Australian Catholic University. She has developed, coordinated, and learnt from many school-university-system partnership programs including in local and international contexts. She has worked across different jurisdictions negotiating partnership structures with various stakeholders to collaboratively develop partnership models. Dr Gutierrez has won numerous awards and has multiple research grants. She has published in high-ranking journals and chapters with recognised publishers on partnerships.

Jillian Fox has engaged at all levels of the education system – prior-to-school through to postgraduate education for over 30 years nationally and internationally. She has led academic and administrative teams in research and scholarship in professional learning; teacher education; work

integrated learning; policy and government review and higher education partnership initiatives building an extensive knowledge of contemporary influences in higher education. Jillian researches, publishes and presents on topics such as higher education partnerships and graduate skills and employability.

Jennifer Clifton is an experienced educator and researcher. Jen is well renowned for alternative models of professional experience based on school–university partnership, which focuses on shared responsibility and employability of graduates. She has a comprehensive research profile of researching with industry in the fields of work-integrated learning. She is a theme leader for Theme Leader (Educators, teachers, and professionalism) of the Digital Learning for Change (DL4C) Research Group. Jen has a strong background and national standing in initial teacher education.

ORCID

Amanda S. Gutierrez http://orcid.org/0000-0002-4934-0546
Jillian Fox http://orcid.org/0000-0001-7002-5754
Jennifer Clifton http://orcid.org/0000-0002-6997-620X

Author contributions

Amanda Gutierrez and Jillian Fox contributed to the study conception and design. Material preparation and data collection were completed by Amanda Gutierrez and Jillian Fox and analysis were performed by Amanda Gutierrez, Jillian Fox and Jennifer Clifton. The first draft of the manuscript was written by all authors and all authors commented on versions of the manuscript. All authors read and approved the final manuscript.

Declarations

The authors did not receive support from any organisation for the submitted work.

References

Adair Breault, D. (2013). The challenges of scaling-up and sustaining professional development school partnerships. *Teaching & Teacher Education*, *36*, 92–100. https://doi.org/10.1016/j.tate.2013.07.007

Akour, M., & Alenezi, M. (2022). Higher education future in the era of digital transformation. *Education Sciences*, *12*(11), 1–13. https://doi.org/10.3390/educsci12110784

Anderson-Butcher, D., Bates, S., Lawson, H. A., Childs, T. M., & Iachini, A. L. (2022). The community collaboration model for school improvement: A scoping review. *Education Sciences*, *12*(12), 918. https://doi.org/10.3390/educsci12120918

Atta-Owusu, K., Fitjar, R. D., & Rodríguez-Pose, A. (2021). What drives university–industry collaboration? Research excellence or firm collaboration strategy? *Technological Forecasting & Social Change*, *173*(121084), 1–11. https://doi.org/10.1016/j.techfore.2021.121084

Benneworth, P., & Jongbloed, B. W. (2010). Who matters to universities? A stakeholder perspective on humanities, arts and social sciences valorisation. *Higher Education*, *59*(5), 567–588. https://doi.org/10.1007/s10734-009-9265-2

Bodas, F., & Verspagen, B. (2017). The motivations, institutions and organization of university–industry collaborations in the Netherlands. *Journal of Evolutionary Economics*, *27*(3), 379–412. https://doi.org/10.1007/s00191-017-0495-7

Boland, J. (2011). Positioning civic engagement on the higher education landscape: Insights from a civically engaged pedagogy. *Tertiary Education & Management*, *17*(2), 101–115. https://doi.org/10.1080/13583883.2011.562523

Carpenter, B. D., & Sherretz, C. E. (2012). Professional development school partnerships: An instrument for teacher leadership. *School–University Partnerships*, *5*(1), 89–101.

Chapleo, C., & Simms, C. (2010). Stakeholder analysis in higher education: A case study of the university of Portsmouth. *Perspectives: Policy and Practice in Higher Education*, *14*(1), 12–20. https://doi.org/10.1080/13603100903458034

Christensen, C., & Eyring, H. J. (2011). *The innovative university: Changing the DNA of higher education from the inside out* (1st ed.). Jossey-Bass.

Ćudić, B., Alešnik, P., & Hazemali, D. (2022). Factors impacting university–industry collaboration in European countries. *Journal of Innovation and Entrepreneurship*, *11*(1), 1–24. https://doi.org/10.1186/s13731-022-00226-3

Eddy, P. L. (2010). *Partnerships and collaborations in higher education*. School of Education book chapters. https://scholarworks.wm.edu/cgi/viewcontent.cgi?article=1037&context=educationbookchapters

Falqueto, J. M. Z., Hoffmann, V. E., Gomes, R. C., & Onoyama Mori, S. S. (2020). Strategic planning in higher education institutions: What are the stakeholders' roles in the process? *Higher Education*, *79*(6), 1039–1056. https://doi.org/10.1007/s10734-019-00455-8

Ferns, S., Dawson, V., & Howitt, C. (2019). A collaborative framework for enhancing graduate employability. *International Journal of Work-Integrated Learning*, *20*(2), 99–111.

Fitzgerald, H. E., Bruns, K., Sonka, S. T., Furco, A., & Swanson, L. (2012). Centrality of engagement in higher education. *Journal of Higher Education Outreach and Engagement*, *16*(3), 7–28.

Fox, J., & Diezmann, C. (2017). The Australian early years learning framework and ICT: A part of life or apart from life? In M. Li, J. Fox, & S. Grieshaber (Eds.), *Contemporary issues and challenge in early childhood education in the Asia-Pacific region* (pp. 143–163). Springer.

Fox, J., & Diezmann, C. (2020). An analysis of teaching and learning partnerships in Australian universities: Prevalence, typology and influences. *Journal of Higher Education Policy & Management*, *42*(4), 404–423. https://doi.org/10.1080/1360080X.2020.1783593

Freeman, R. E., Kujala, J., & Sachs, S. (2017). *Stakeholder engagement: Clinical research cases* R. E. Freeman, J. Kujala, & S. Sachs (Eds.) (1st ed.). Springer International Publishing. https://doi.org/10.1007/978-3-319-62785-4

Goodlad, J. (1988). School-university partnerships for educational research: Rationale and concepts. In K. A. Sirotnik & J. Goodlad (Eds.), *School university partnerships in action: Concepts, cases and concerns* (pp. 3–31). Teachers College Press.

Grudnoff, L., Haigh, M., & Mackisack, V. (2017). Re-envisaging and reinvigorating school–university practicum partnerships. *Asia-Pacific Journal of Teacher Education*, *45*(2), 180–193. https://doi.org/10.1080/1359866X.2016.1201043

Gutierrez, A. (2024). Exploring complexity in multi-system partnerships. In C. Green & M. Eady (Eds.), *Creating, sustaining, and enhancing purposeful school-university partnerships: Building connections across diverse educational systems* (pp. 341–358). Springer.

Harms, L., Naish, K., Stanley, J., Hill, N., Raysmith, H., Thomas, J., & Butera, A. (2017). Bringing business, community and university into partnership: Innovation in field education. *Advances in Social Work & Welfare Education*, *19*(1), 71–79. https://doi.org/10.3316/aeipt.221454

Herbert, S., Redman, C., & Speldewinde, C. (2018). Sustaining school–university partnerships: Threats, challenges and critical success factors. In L. Hobbs, C. Campbell, & M. Jones (Eds.), *School-based partnerships in teacher education* (pp. 169–189). Springer.

Ingleby, E. (2015). The house that Jack built: Neoliberalism, teaching in higher education and the moral objections. *Teaching in Higher Education*, *20*(5), 518–529. https://doi.org/10.1080/13562517.2015.1036729

Jongbloed, B., Enders, J., & Salerno, C. (2008). Higher education and its communities: Interconnections, interdependencies and a research agenda. *Higher Education*, *56*(3), 303–324. https://doi.org/10.1007/s10734-008-9128-2

Kottmann, A., & Jongbloed, B. (2023). *HElnnovate website: Comparative case study*. Technopolis Group.

Kromydas, T. (2017). Rethinking higher education and its relationship with social inequalities: Past knowledge, present state and future potential. *Palgrave Communications*, *3*(1), 3. https://doi.org/10.1057/s41599-017-0001-8

Law, S. F., Cattlin, J., & Locke, W. (2021). *Understanding university engagement: The impact of COVID-19 on collaborations and partnerships*. Melbourne Centre for the Study of Higher Education.

Le Cornu, R. (2015). *Key components of effective professional experience in initial teacher education in Australia*. AITSL.

Mamdani, M. (2016). Between the public intellectual and the scholar: Decolonization and some postindependence initiatives in African higher education. *Inter-Asia Cultural Studies*, *17*(1), 68–83. https://doi.org/10.1080/14649373.2016.1140260

Mercer-Mapstone, L., Dvorakova, L., Matthews, K., Abbot, S., Cheng, B., Felten, P., Knorr, K., Marquis, E., Shammas, R., & Swaim, K. (2017). A systematic literature review of students as partners in higher education. *International Journal for Students as Partners*, *1*(1), 15–37. https://doi.org/10.15173/ijsap.v1i1.3119

Perkmann, M., & Salter, A. (2012). How to create productive partnerships with universities. *MIT Sloan Management Review*, *53*(4), 79–88.

Ritchie, J., & Spencer, L. (1994). Qualitative data analysis for applied policy research. In A. Bryman & R. G. Burgess (Eds.), *Analyzing qualitative data* (pp. 173–194). Routledge.

Rossoni, A. L., de Vasconcellos, E. P. G., & de Castilho Rossoni, R. L. (2023). Barriers and facilitators of university-industry collaboration for research, development and innovation: A systematic review. *Management Review Quarterly*, 1–37. https://doi.org/10.1007/s11301-023-00349-1

Rybnicek, R., & Königsgruber, R. (2019). What makes industry–university collaboration succeed? A systematic review of the literature. *Journal of Business Economics*, *89*(2), 221–250. https://doi.org/10.1007/s11573-018-0916-6

Schulte, M., Custard, H., Cunningham, M., Major, D., Murray, A. P., & Stone, A. (2017). The career pathways landscape: Policy, partnership, and association impact in higher education. *Journal of Continuing Higher Education*, *65*(1), 64–69. https://doi.org/10.1080/07377363.2017.1274621

Scott, J. C. (2006). The mission of the university: Medieval to postmodern transformations. *The Journal of Higher Education (Columbus)*, *77*(1), 1–39. https://doi.org/10.1080/00221546.2006.11778917

Stober, S. S. (1997). *A content analysis of college and university mission statements* (Doctoral dissertation). Temple University.

Teichler, U. (2009). *Higher education and the world of work. Conceptual frameworks, comparative perspectives, empirical findings*. Sense Publishers.

Tight, M. (2020). Higher education: Discipline or field of study? *Tertiary Education & Management*, *26*(4), 415–428. https://doi.org/10.1007/s11233-020-09060-2

Torraco, R. J. (2016). Writing integrative literature reviews: Using the past and present to explore the future. *Human Resource Development Review*, *15*(4), 404–428. https://doi.org/10.1177/1534484316671606

Whittemore, R., & Knafl, K. (2005). The integrative review: Updated methodology. *Journal of Advanced Nursing*, *52*(5), 546–553. https://doi.org/10.1111/j.1365-2648.2005.03621.x

Witte, R., & Witte, J. (2016). *Statistics* (11th ed.). John Wiley & Sons Inc.