

Skill Up or Fall Behind: A Global Bibliometric Review of Employability in Accounting Education

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Abstract: This study conducts a comprehensive bibliometric analysis of global research on employability in accounting education from 2000 to 2025. Based on 422 documents retrieved from the Scopus database, it maps the scholarly landscape using citation analysis, authorship trends, source journals, keyword co-occurrences, and geographic and disciplinary distribution. The findings reveal a significant rise in research output since 2015, driven by growing concerns over graduate employability amid rapid technological change. The United States, Australia, and the United Kingdom are the most prolific contributors, with key journals including *Accounting Education* and *Journal of Accounting Education*. Frequently cited studies focus on curriculum alignment, soft skills development, and digital competency integration. The analysis underscores a global shift toward future-ready curricula while identifying underexplored areas in developing regions. These insights provide valuable guidance for educators, curriculum developers, and policymakers seeking to improve employability outcomes in accounting education.

Keywords: *Employability, accounting education, bibliometric analysis, graduate attributes, curriculum reform, soft skills, digital competencies.*

1. Introduction

In an increasingly dynamic and technology-driven global economy, the employability of accounting graduates has become a critical concern for higher education institutions, employers, and policymakers alike. As the accounting profession undergoes rapid transformation due to automation, artificial intelligence, and evolving regulatory environments, the expectations placed on graduates have expanded beyond technical proficiency to include a wide range of soft skills and digital competencies. Consequently, accounting education must adapt to ensure that graduates are equipped not only with domain-specific knowledge but also with transferable skills that enhance their readiness for the workforce. Over the past two decades, academic research has increasingly focused on the alignment between accounting curricula and employability outcomes. Numerous studies have explored employer expectations, student perceptions, curriculum reforms, and skill gaps (Kavanagh & Drennan, 2008; Jackling & De Lange, 2009; Lawson et al., 2014). However, despite this growing body of work, a systematic synthesis of the literature is needed to understand the field's development, key contributors, dominant themes, and emerging trends.

Bibliometric analysis provides a powerful methodology for mapping the intellectual structure and evolution of a research domain. By quantitatively assessing publication patterns, citation impact, authorship, and thematic concentrations, bibliometric studies offer evidence-based insights into the strengths, gaps, and trajectories of academic discourse. In this context, the present study seeks to conduct a bibliometric review of employability research in accounting education from 2000 to 2025, using data extracted from the Scopus database.

The objectives of this study are fourfold:

- To identify publication trends and growth patterns in the field.
- To highlight the most influential authors, documents, and journals.
- To analyze the thematic focus through author keywords and co-occurrence mapping; and
- To reveal geographic and disciplinary contributions to the field.

By synthesizing and visualizing two and a half decades of research output, this study contributes to the understanding of how accounting education is evolving to meet the demands of a rapidly changing employment landscape.

2. Literature Review

The concept of employability has gained significant interest in higher education literature over the past two decades, particularly in professional programs such as accounting. Defined by Yorke (2006) as "a set of achievements, skills, understandings and personal attributes that make graduates more likely to gain employment and be successful in their chosen occupations," employability encompasses more than academic qualifications alone. It involves the development of a broad set of competencies including technical, cognitive, interpersonal, and increasing digital skills that allow graduates to navigate dynamic and competitive labor markets. This holistic view of employability has become particularly critical in accounting, where the professional landscape is evolving rapidly due to technological disruptions, globalization, and changing stakeholder expectations.

Numerous studies have documented a persistent and global disconnect between the skills accounting graduates possess and those required by employers. Kavanagh & Drennan (2008), in a widely cited study, revealed that employers value soft skills such as teamwork, communication, and adaptability as highly as technical expertise. However, many graduates overestimate the importance of their technical training while underestimating the interpersonal and professional attributes needed in the workplace. Jackling & De Lange (2009) reinforced this skills mismatch by demonstrating that graduate self-perceptions often diverge from employer expectations, particularly about problem-solving and critical thinking abilities. This gap has been identified not only in Western contexts but also in emerging economies such as Malaysia, Indonesia, and China, where mass expansion of higher education has intensified the challenge of ensuring graduate employability.

The growing importance of soft skills has led to a paradigm shift in accounting education with increasing emphasis on the development of graduate attributes that go beyond disciplinary knowledge. These include communication skills, emotional intelligence, cultural awareness, ethical reasoning, and leadership potential. Studies by Rebele & St. Pierre (2019) and Dolce et al. (2020) have pointed out that while educators and employers recognize the importance of these attributes, students often remain unaware of their value until they enter the workforce. The gap in perceptions further complicates efforts to design effective curricula. Educators have responded by advocating for pedagogical reforms that promote active learning such as simulations, case-based learning, internships, and collaborative projects (Levant et al., 2016; Wells et al., 2009). These approaches aim to replicate real-world conditions and develop the soft skills employers seek, thus enhancing graduates' readiness for employment.

At the same time, accounting education is undergoing a profound transformation driven by technological advances. The emergence of the Fourth Industrial Revolution has introduced complex challenges for accounting professionals who are now expected to operate alongside digital tools such as artificial intelligence, blockchain, data analytics, and robotic process automation. As noted by Sledgianowski et al., (2017), and later by Dzuránin et al., (2018), there is an urgent need to incorporate digital competencies into accounting education to ensure that graduates remain relevant and competitive. Qasim & Kharbat (2020) argue that future accountants must not only understand how these technologies work but also be capable of leveraging them strategically to drive organizational value. This shift has led to calls for accounting programs to embed digital literacy and data analytics across all levels of instruction from foundational courses to capstone projects.

Responding to these demands, several scholars have proposed comprehensive frameworks to guide curriculum development. Lawson et al. (2014) introduced a competency-based accounting curriculum model that integrates professional skills, ethical values, and lifelong learning objectives. Their framework emphasizes the importance of aligning educational outcomes with long-term career success rather than short-term technical proficiency. Other researchers such as Mohamed & Lashine (2003) and Pan & Seow (2016) have advocated for the internationalization of accounting curricula, arguing that global business environments require intercultural competence and international knowledge. Accreditation agencies such as the International Federation of Accountants, the Association to Advance Collegiate Schools of Business, and CPA Australia have similarly emphasized the integration of employability skills and digital acumen into accreditation standards, reinforcing the imperative for curriculum reform.

Despite the growing volume of literature on employability and accounting education, the field remains fragmented. Studies vary in their methodological approaches, geographic coverage, and conceptual frameworks, making it difficult to develop a unified understanding of how employability has been conceptualized, measured, and implemented over time. Furthermore, while individual countries have conducted national-level evaluations of graduate outcomes, there has been limited effort to synthesize these findings at a global level. In this context, bibliometric analysis offers a powerful method to map the structure, growth, and intellectual evolution of the field. As shown by Donthu et al. (2021) and Zupic & Cater (2015), bibliometric techniques can identify leading contributors, core journals, thematic clusters, and emerging research trends. Zakaria et al. (2021) applied such techniques to visualize the landscape of honey research, demonstrating how co-occurrence analysis and network mapping can uncover hidden patterns in academic literature.

In sum, the literature on employability in accounting education reflects a broad consensus on the need to integrate soft skills, digital competencies, and industry engagement into accounting curricula. However, there remains a lack of systematic, global-scale analysis of how this body of research has developed over time. This study addresses this gap by conducting a bibliometric review of 422 publications from 2000 to 2025, with the aim of mapping research productivity, identifying key themes and contributors, and providing direction for future inquiry and policy reform in accounting education.

3. Methodology

Search Strategy

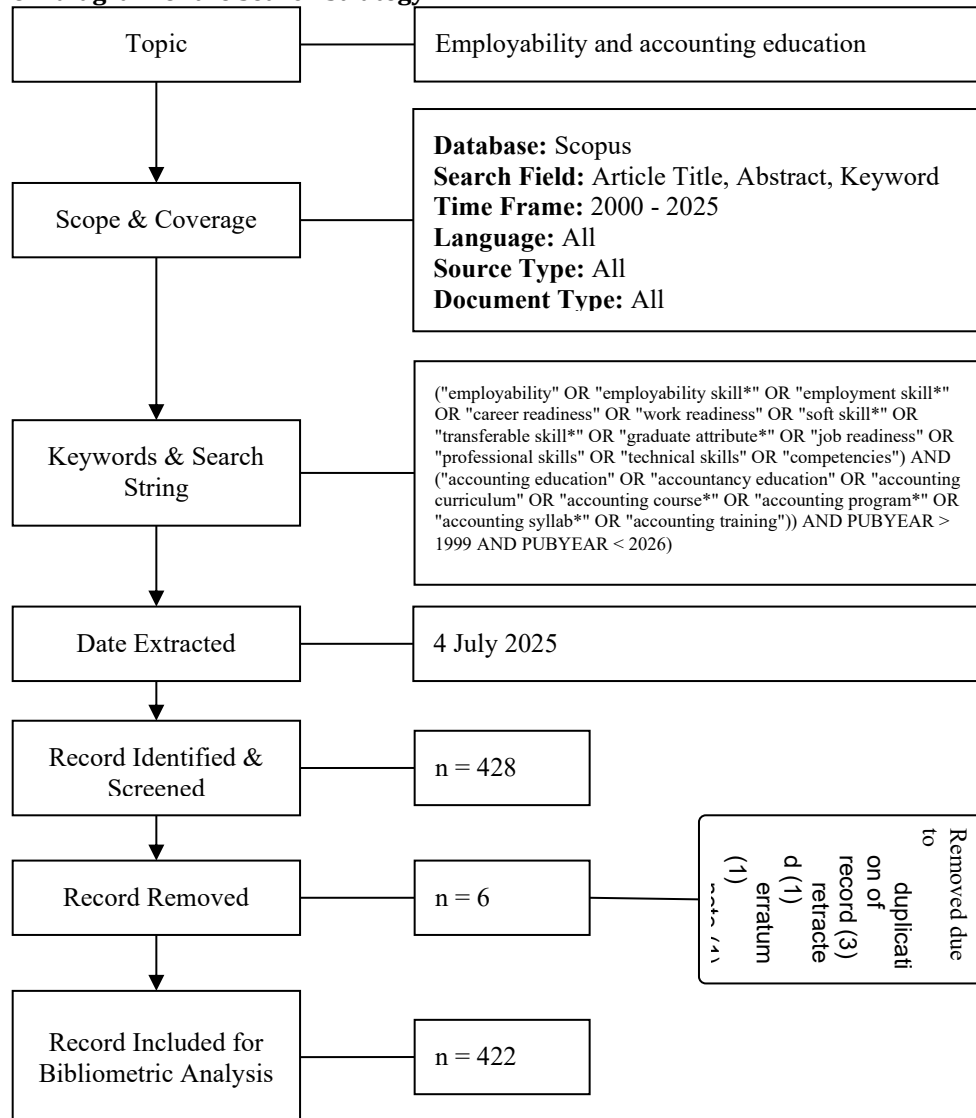
This study employed a bibliometric analysis approach to explore the landscape of scholarly publications on employability in accounting education. The bibliometric method enables systematic quantification of publication patterns, citation metrics, and thematic structures within a specific research domain. The Scopus database was selected for data extraction due to its comprehensive coverage of peer-reviewed journals, conference proceedings, and scholarly books across multiple disciplines. The search was performed on 4 July 2025 using the following Boolean query: ("employability" OR "employability skill*" OR "employment skill*" OR "career readiness" OR "work readiness" OR "soft skill*" OR "transferable skill*" OR "graduate attribute*" OR "job readiness" OR "professional skills" OR "technical skills" OR "competencies") AND ("accounting education" OR "accountancy education" OR "accounting curriculum" OR "accounting course*" OR "accounting program*" OR "accounting syllab*" OR "accounting training") AND PUBYEAR > 1999 AND PUBYEAR < 2026. The search was applied to the Title, Abstract, and Keywords fields. All document types and languages were included.

This section presents the bibliometric analysis of the scientific research findings on Employability in Accounting Education. This study focuses on documents published in the Scopus database between 2000 and 2025, for which the initial search yielded a total of 428 records. Records were screened manually and refined based on the following exclusion criteria:

- Duplicates: 3 records
- Retracted articles: 1 record
- Errata: 1 record
- Non-scholarly notes: 1 record

After screening, 422 records remained for analysis. Of these, 6 documents were selected for focused thematic review, while the remaining 416 documents contributed to overall bibliometric mapping. The final dataset was analyzed using biblioMagika® (Ahmi, 2024) to generate descriptive statistics, citation metrics, and publication trends. VOSviewer (Van Eck & Waltman, 2014) was used to visualize co-authorship networks, keyword co-occurrence maps, and thematic clusters. The data collection and screening process adhered to the PRISMA flowchart protocol for systematic reviews. Figure 1 summarizes the search and screening process.

Figure 1: Flow diagram of the search strategy



Source: Zakaria et al. (2021), Moher et al. (2009)

4. Results and Discussion

Documents Profiles

The bibliometric analysis identified a total of 422 publications on employability within accounting education from the year 2000 to 2025, marking a 26-year span of scholarly contributions. These records encompassed various document types including journal articles, conference papers, book chapters, and reviews. These results indicate a moderately high citation impact, with an average of 17.95 citations per paper, and a robust h-index of 45, suggesting a significant portion of papers have been cited at least 45 times. The g-index of 71 and m-index of 1.731 further affirm the consistency and maturity of the field over time. An average of 2.68 authors per paper reflects growing collaboration among researchers in accounting education and employability, and the dataset's breadth—spanning more than a thousand contributing authors—underscores its global academic relevance.

Table 1 summarizes the key citation metrics derived from the dataset.

Table 1: Citation Metrics

Main Information	Data
Publication Years	2000 - 2025
Total Publications	422
Citable Year	26
Number of Contributing Authors	1133
Number of Cited Papers	336
Total Citations	7,573
Citation per Paper	17.95
Citation per Cited Paper	22.54
Citation per Year	302.92
Citation per Author	6.68
Author per Paper	2.68
Citation sums within h-Core	6,901
h-index	45
g-index	71
m-index	1.731

Source: Generated by the author(s) using biblioMagika® (Ahmi, 2024)

Document Types

The dataset comprises a diverse range of scholarly outputs, reflecting the multidisciplinary and evolving nature of research on employability in accounting education. As shown in Table 2, journal articles dominate the publication types, accounting for 81.99% of the total documents, followed by conference papers (7.11%) and book chapters (6.87%). The overwhelming presence of journal articles signifies a strong emphasis on peer-reviewed contributions in this domain. The relatively lower representation of books and reviews suggests that the field is still primarily driven by article-based dissemination, with conference proceedings and book chapters supporting ongoing dialogue and curriculum discussions.

Table 2: Document Type

Document Type	Total Publications	Percentage (%)
Article	346	81.99%
Conference Paper	30	7.11%
Book Chapter	29	6.87%
Review	14	3.32%
Book	2	0.47%
Conference Review	1	0.24%
Total	422	100.00

Source: Generated by the author(s) using biblioMagika® (Ahmi, 2024)

Source Types

The classification of source types offers insights into the platforms through which research on employability and accounting education is disseminated. As detailed in Table 3, journals are the predominant source type, accounting for 83.41% of all publications. This finding reflects the scholarly community's preference for peer-reviewed journal outlets to communicate empirical findings, theoretical frameworks, and curriculum innovations. The prominence of journals underscores their role in shaping discourse and knowledge dissemination in the field. However, the presence of conference proceedings and book series (a combined 12.32%) indicates that conferences and edited volumes also serve as meaningful avenues for presenting emerging trends, preliminary studies, and collaborative research in employability and accounting education.

Table 3: Source Type

Source Type	Total Publications	Percentage (%)
Journal	352	83.41%
Conference Proceeding	27	6.40%
Book Series	25	5.92%

Book	18	4.27%
Total	422	100.00

Source: Generated by the author(s) using biblioMagika® (Ahmi, 2024)

Languages

Language analysis reveals the linguistic accessibility and global reach of scholarly work in the field. As presented in Table 4, the vast majority of the 422 publications were written in English (96.92%), reinforcing English as the dominant language of academic discourse in employability and accounting education. While English dominates, the presence of Spanish, Portuguese, and other European languages suggests a modest degree of regional diversification. This linguistic trend highlights the need for more inclusive research outputs and translations to encourage wider global participation and knowledge exchange in this important area of education.

Table 4: Languages

Language	Total Publications*	Percentage (%)
English	409	96.92%
Spanish	6	1.42%
Portuguese	4	0.95%
Bulgarian	1	0.24%
Polish	1	0.24%
Ukrainian	1	0.24%
Total	422	100.00

Source: Generated by the author(s) using biblioMagika® (Ahmi, 2024)

Subject Areas

The subject area distribution offers a multidisciplinary perspective on how employability in accounting education is researched across academic fields. As shown in Table 5, the majority of publications fall under the categories of Business, Management and Accounting (72.27%) and Social Sciences (66.11%), reflecting the core disciplinary focus of this research domain. These findings highlight the interdisciplinary nature of employability research in accounting education. In addition to traditional business-related disciplines, areas such as computer science, psychology, and decision sciences also contribute, indicating the growing relevance of technological integration, behavioral studies, and analytical decision-making in preparing future-ready accounting graduates.

Table 5: Subject Area

Subject Area	Total Publications	Percentage (%)
Business, Management and Accounting	305	72.27%
Social Sciences	279	66.11%
Economics, Econometrics and Finance	85	20.14%
Computer Science	42	9.95%
Engineering	16	3.79%
Decision Sciences	15	3.55%
Arts and Humanities	13	3.08%
Environmental Science	8	1.90%
Psychology	7	1.66%
Energy	6	1.42%
Multidisciplinary	5	1.18%
Mathematics	3	0.71%
Agricultural and Biological Sciences	3	0.71%
Pharmacology, Toxicology and Pharmaceutics	1	0.24%
Nursing	1	0.24%
Health Professions	1	0.24%

Subject Area	Total Publications	Percentage (%)
Biochemistry, Genetics and Molecular Biology	1	0.24%

Source: Generated by the author(s) using biblioMagika® (Ahmi, 2024)

Publication Trends

Publication Trends by Year

An analysis of annual publication trends provides insights into the evolution and momentum of research interest over time. As depicted in Table 6, research on employability in accounting education experienced a gradual rise in the early 2000s, with a significant surge beginning in 2015. The number of publications peaked in 2024 with 52 papers, reflecting heightened global focus on aligning accounting education with employment demands amid rapid technological and economic shifts. Notes: TP = Total Publications; NCA = Number of Contributing Authors; NCP = Number of Cited Publications; TC = Total Citations; C/P = Citations per Publication; C/CP = Citations per Cited Publication; h = h-index; g = g-index; m = m-index. The overall h-index of 45 and g-index of 71 indicate a strong cumulative impact of publications, particularly after 2010. Citations peaked in earlier years such as 2010 (583 citations) and 2009 (590 citations), demonstrating the enduring influence of foundational studies. The m-index of 1.731 suggests a healthy annual growth in research productivity and impact. This temporal growth corresponds with increased global concern over graduate employability and the digitalization of accounting practices. The upward trend suggests sustained academic attention to bridging the gap between classroom instruction and industry expectations.

Table 6: Publication by Year

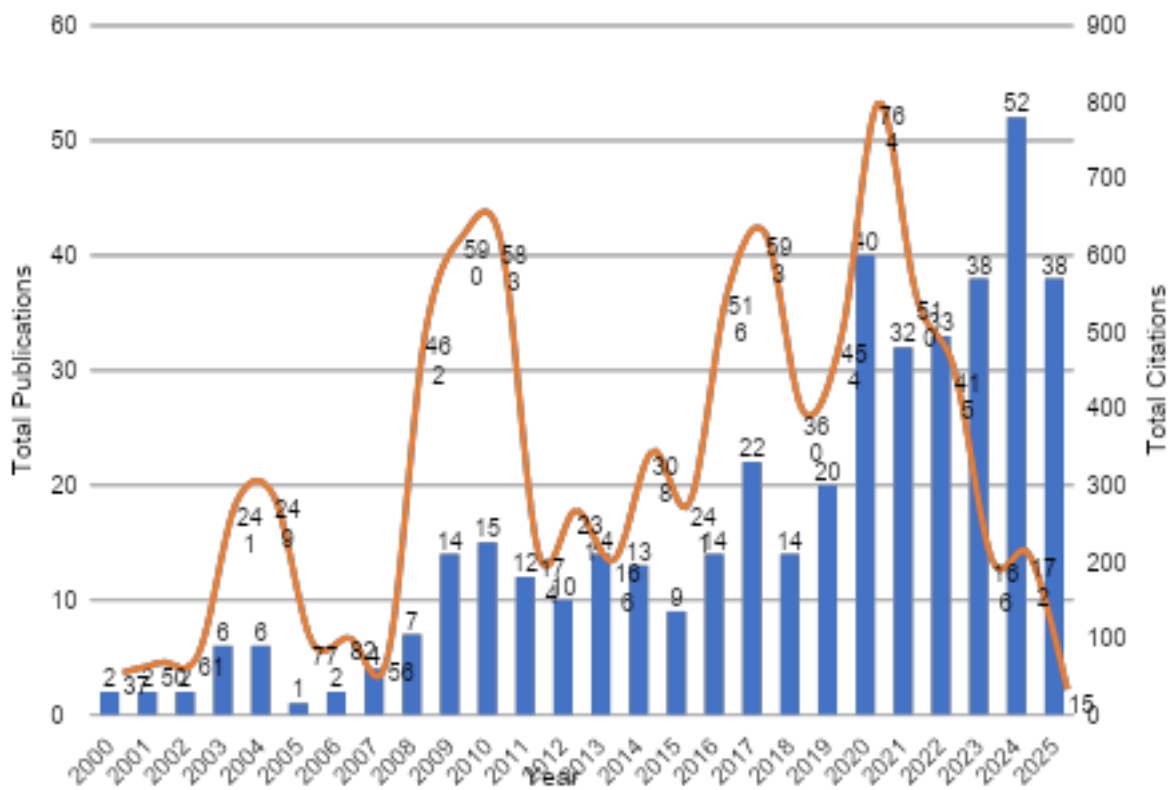
Year	TP	NCA	NCP	TC	C/P	C/CP	h	g	m
2025	38	127	7	15	0.39	2.14	2	2	2.000
2024	52	145	31	172	3.31	5.55	6	11	3.000
2023	38	123	30	166	4.37	5.53	7	9	2.333
2022	33	76	31	415	12.58	13.39	13	19	3.250
2021	32	82	26	510	15.94	19.62	14	22	2.800
2020	40	97	34	764	19.10	22.47	13	27	2.167
2019	20	49	19	454	22.70	23.89	10	20	1.429
2018	14	36	13	360	25.71	27.69	8	14	1.000
2017	22	55	18	593	26.95	32.94	11	22	1.222
2016	14	35	14	516	36.86	36.86	12	14	1.200
2015	9	26	8	241	26.78	30.13	7	9	0.636
2014	13	39	10	308	23.69	30.80	8	13	0.667
2013	14	32	12	166	11.86	13.83	7	12	0.538
2012	10	22	10	231	23.10	23.10	7	10	0.500
2011	12	31	12	174	14.50	14.50	7	12	0.467
2010	15	31	15	583	38.87	38.87	9	15	0.563
2009	14	39	14	590	42.14	42.14	9	14	0.529
2008	7	22	7	462	66.00	66.00	5	7	0.278
2007	4	14	4	56	14.00	14.00	3	4	0.158
2006	2	5	2	82	41.00	41.00	2	2	0.100
2005	1	4	1	77	77.00	77.00	1	1	0.048
2004	6	13	6	249	41.50	41.50	6	6	0.273
2003	6	13	6	241	40.17	40.17	5	6	0.217
2002	2	8	2	61	30.50	30.50	2	2	0.083
2001	2	7	2	50	25.00	25.00	1	2	0.040
2000	2	2	2	37	18.50	18.50	2	2	0.077
Total	422	1133	336	7573	17.95	22.54	45	71	1.731

Notes: TP=total number of publications; NCA=number of contributing authors; NCP=number of cited publications; TC=total citations; C/P=average citations per publication; C/CP=average citations per cited publication; h=h-index; g=g-index; m=m-index.

Source: Generated by the author(s) using biblioMagika® (Ahmi, 2024)

Figure 2 illustrates the annual trends in total publications and citations related to employability in accounting education from 2000 to 2025. The publication trend shows a steady increase over the 25 years, with a notable acceleration in output beginning around 2012. This upward trajectory suggests growing academic interest and recognition of employability as a critical dimension within accounting education. The rise aligns with global efforts to reform higher education curricula and respond to employer demands for work-ready graduates equipped with both technical and soft skills. The citation trend, meanwhile, follows a lagging but complementary pattern, with a noticeable surge in citations beginning around 2015. This suggests that earlier publications have gained influence over time and that recent research is now shaping the scholarly conversation more significantly. The peak in citations in recent years may also reflect the maturation of the field, where foundational studies are being frequently referenced in newer publications. The parallel growth of both publications and citations underscores the expanding relevance and scholarly impact of employability-focused research in the accounting education domain. Overall, the figure confirms that this area of study is not only gaining momentum but also making meaningful contributions to the academic and practical discourse on curriculum design, graduate competencies, and workforce readiness.

Figure 2: Total Publications and Citations by Year



Source: Generated by the author(s) using biblioMagika® (Ahmi, 2024)

Publications by Authors

Identifying the most prolific contributors offers valuable insights into the academic leadership shaping research on employability in accounting education. Table 7 lists the top authors based on total publications (TP), citations (TC), and impact indices (h, g, and m-indexes). Others have fewer than three publications. The top contributors are predominantly based in Anglophone countries, particularly the United States, Australia, and Canada. Authors such as Raef Lawson and Beverley Jackling are especially notable for producing highly cited works on competency-based accounting education and employer expectations.

The high citation-per-publication (C/P) values of over 80 for some authors underscore the impactful and influential nature of their contributions, despite relatively modest output. This suggests a focus on quality over quantity in this field, with a small number of well-cited publications shaping academic discourse.

Table 7: Most Productive Authors

Author's Name	Current Affiliation	Country	TP	NCP	TC	C/P	C/CP	<i>h</i>	<i>g</i>	<i>m</i>
Stout, David E.	Stout D.E.	United States	5	5	291	58.20	58.20	3	3	0.136
Sorensen, James E.	Sorensen J.E.	United States	4	4	277	69.25	69.25	3	3	0.250
Jackling, Beverley	Jackling B.	Australia	4	4	326	81.50	81.50	4	4	0.235
Lawson, Raef A.	Lawson R.A.	Jersey	4	4	361	90.25	90.25	3	3	0.250
De Lange, Paul	De Lange P.	Australia	3	3	272	90.67	90.67	3	3	0.176
Montaño, José Luis Arquero	Montaño J.L.A.	Spain	3	3	125	41.67	41.67	3	3	0.115
Schmulian, Astrid	Schmulian A.	South Africa	3	3	73	24.33	24.33	2	2	0.286
Boulianne, Emilio	Boulianne E.	Canada	3	3	65	21.67	21.67	1	1	0.100

Notes: TP=total number of publications; NCA=Number of contributing authors; NCP=number of cited publications; TC=total citations; C/P=average citations per publication; C/CP=average citations per cited publication; *h*=*h*-index; *g*=*g*-index; *m*=*m*-index.

Source: Generated by the author(s) using biblioMagika® (Ahmi, 2024)

Publications by Countries

An analysis of country-level contributions reveals the geographic distribution of scholarly output and highlights regions actively engaged in research on employability in accounting education. As shown in Table 8, the United States leads with 84 publications, followed by Australia with 75 and South Africa with 38. These figures underscore the dominant role of the Anglo-Saxon higher education system, which has traditionally emphasized graduate competence and outcome-based education. While many other countries have contributed fewer than 10 publications, Asia is emerging as a significant research hub, with Malaysia and Indonesia each producing 27 publications. This trend reflects the growing commitment of developing nations to enhance graduate employability through accounting curriculum reform. The strong presence of South Africa in the top three further illustrates its active role in higher education transformation, while contributions from New Zealand and Canada reinforce the global nature of the discourse.

Table 8: The Top 10 Countries contributed to the publications

Country	Continent	TP
United States	North America	84
Australia	Oceania	75
South Africa	Africa	38
United Kingdom	Europe	28
Indonesia	Asia	27
Malaysia	Asia	27
New Zealand	Oceania	26
Canada	North America	23
Portugal	Europe	13
Thailand	Asia	10

Notes: TP = total number of publications

Source: Generated by the author(s) using biblioMagika® (Ahmi, 2024)

Publications by Source Titles

The identification of the most active journals sheds light on the primary publishing venues for research on employability in accounting education and the potential visibility of future contributions. As shown in Table 9, the top source is *Accounting Education*, with 75 publications and 2,619 citations, making it the leading platform for scholarly dialogue in this field. The dominance of *Accounting Education* and *Journal of Accounting Education* confirms these journals as central publication venues for scholarship on curriculum design, graduate competencies, and education policy. Their high citation-per-publication rates also indicate their influence on practice and policy discussions. Moreover, sources such as *Meditari Accountancy Research* and *Higher Education, Skills and Work-based Learning* demonstrate growing contributions to cross-disciplinary conversations, especially concerning digital skills, soft skills, and work-based learning approaches.

Table 9: Most active source titles (Top 10)

Source Title	TP	NCA	NCP	TC	C/P	C/CP	<i>h</i>	<i>g</i>	<i>m</i>
Accounting Education	75	204	72	2619	34.92	36.38	31	50	1.348
Journal of Accounting Education	32	81	30	977	30.53	32.57	14	31	0.583
Issues in Accounting Education	20	64	18	450	22.50	25.00	11	20	0.647
International Journal of Management Education	11	35	9	140	12.73	15.56	6	11	0.462
Advances in Accounting Education: Teaching and Curriculum Innovations	11	27	11	72	6.55	6.55	5	8	0.263
Meditari Accountancy Research	9	26	9	148	16.44	16.44	6	9	0.600
Higher Education, Skills and Work-based Learning	7	21	6	107	15.29	17.83	5	7	0.455
Journal of Higher Education Theory and Practice	7	18	5	15	2.14	3.00	3	3	0.429
Journal of Education for Business	6	10	6	290	48.33	48.33	5	6	0.217
Springer Proceedings in Business and Economics	6	14	1	1	0.17	1.00	1	1	0.167

Notes: TP=total number of publications; NCA=Number of contributing authors; NCP=number of cited publications; TC=total citations; C/P=average citations per publication; C/CP=average citations per cited publication; *h*=*h*-index; *g*=*g*-index; *m*=*m*-index.

Source: Generated by the author(s) using biblioMagika® (Ahmi, 2024)

Highly Cited Documents

Examining the most highly cited publications provides a snapshot of the foundational and transformative works that have significantly shaped the field. As shown in Table 10, the top-cited articles often explore the skills gap between accounting graduates and employer expectations, curriculum reforms, and the integration of technology into accounting education. These highly cited documents serve as cornerstones of academic discussions on employability in accounting education. For instance:

- Kavanagh and Drennan (2008) emphasized discrepancies between students' self-perceptions and employers' expectations regarding required graduate skills.
- Lawson et al. (2014) proposed a widely referenced competency-based curriculum framework, stressing long-term career skills.
- Qasim and Kharbat (2020) illustrated the need to embed emerging technologies such as blockchain and AI into accounting training.

Overall, these studies reinforce the importance of aligning curricula with industry needs, integrating technological fluency, and fostering non-technical competencies to produce work-ready accounting graduates.

Table 10: Top 20 highly cited articles

No.	Authors	Title	Source Title	Cites	Cites per Year
1	Kavanagh M.H.; Drennan L. (2008)	What skills and attributes does an accounting graduate need? Evidence from student perceptions and employer expectations	Accounting and Finance	380	21.11
2	Jackling B.; De Lange P. (2009)	Do accounting graduates' skills meet the expectations of employers? a matter of convergence or divergence	Accounting Education	289	17.00
3	Bui B.; Porter B. (2010)	The expectation-performance gap in accounting education: An exploratory study	Accounting Education	203	12.69
4	Lawson R.A.; Blocher E.J.; Brewer P.C.; Cokins G.; Sorensen J.E.; Stout D.E.; Sundem G.L.; Wolcott S.K.; Wouters M.J.F. (2014)	Focusing accounting curricula on students' long-run careers: Recommendations for an integrated competency-based framework for accounting education	Issues in Accounting Education	176	14.67
5	Sledgianowski D.; Gomaa M.; Tan C. (2017)	Toward integration of Big Data, technology, and information systems competencies into the accounting curriculum	Journal of Accounting Education	144	16.00
6	Qasim A.; Kharbat F.F. (2020)	Blockchain technology, business data analytics, and artificial intelligence: Use in the accounting profession and ideas for inclusion into the accounting curriculum	Journal of Emerging Technologies in Accounting	138	23.00
7	Pincus K.V.; Stout D.E.; Sorensen J.E.; Stocks K.D.; Lawson R.A. (2017)	Forces for change in higher education and implications for the accounting academy	Journal of Accounting Education	125	13.89
8	Rebele J.E.; St. Pierre E.K. (2019)	A commentary on learning objectives for accounting education programs: The importance of soft skills and technical knowledge	Journal of Accounting Education	124	17.71
9	Dolce V.; Emanuel F.; Cisi M.; Ghislieri C. (2020)	The soft skills of accounting graduates: perceptions versus expectations	Accounting Education	122	20.33
10	Tan L.M.; Laswad F. (2018)	Professional skills required of accountants: what do job advertisements tell us?	Accounting Education	112	14.00
11	Dzurinin A.C.; Jones J.R.;	Infusing data analytics into the accounting curriculum: A	Journal of Accounting Education	106	13.25

No.	Authors	Title	Source Title	Cites	Cites per Year
	Olvera R.M. (2018)	framework and insights from faculty			
12	Pan G.; Seow P.-S. (2016)	Preparing accounting graduates for the digital revolution: A critical review of information technology competencies and skills development	Journal of Education for Business	106	10.60
13	Mohamed E.K.A.; Lashine S.H. (2003)	Accounting knowledge and skills and the challenges of a global business environment	Managerial Finance	103	4.48
14	Tsiligiris V.; Bowyer D. (2021)	Exploring the impact of 4IR on skills and personal qualities for future accountants: a proposed conceptual framework for university accounting education	Accounting Education	102	20.40
15	Levant Y.; Coulmont M.; Sandu R. (2016)	Business simulation as an active learning activity for developing soft skills	Accounting Education	91	9.10
16	Blackmore J.; Gribble C.; Rahimi M. (2017)	International education, the formation of capital and graduate employment: Chinese accounting graduates' experiences of the Australian labor market	Critical Studies in Education	88	9.78
17	Palmer K.N.; Ziegenfuss D.E.; Pinsker R.E. (2004)	International knowledge, skills, and abilities of auditors/accountants: Evidence from recent competency studies	Managerial Auditing Journal	86	3.91
18	Wells P.; Gerbic P.; Kranenburg I.; Bygrave J. (2009)	Professional skills and capabilities of accounting graduates: The New Zealand expectation gap?	Accounting Education	85	5.00
19	Kerby D.; Romine J. (2009)	Develop Oral Presentation Skills Through Accounting Curriculum Design and Course-Embedded Assessment	Journal of Education for Business	83	4.88
20	Hassall T.; Joyce J.; Montaña J.L.A.; Anes J.A.D. (2005)	Priorities for the development of vocational skills in management accountants: A European perspective	Accounting Forum	77	3.67

Source: Generated by the author(s) using biblioMagika® (Ahmi, 2024)

Co-occurrence Analysis of Author Keywords

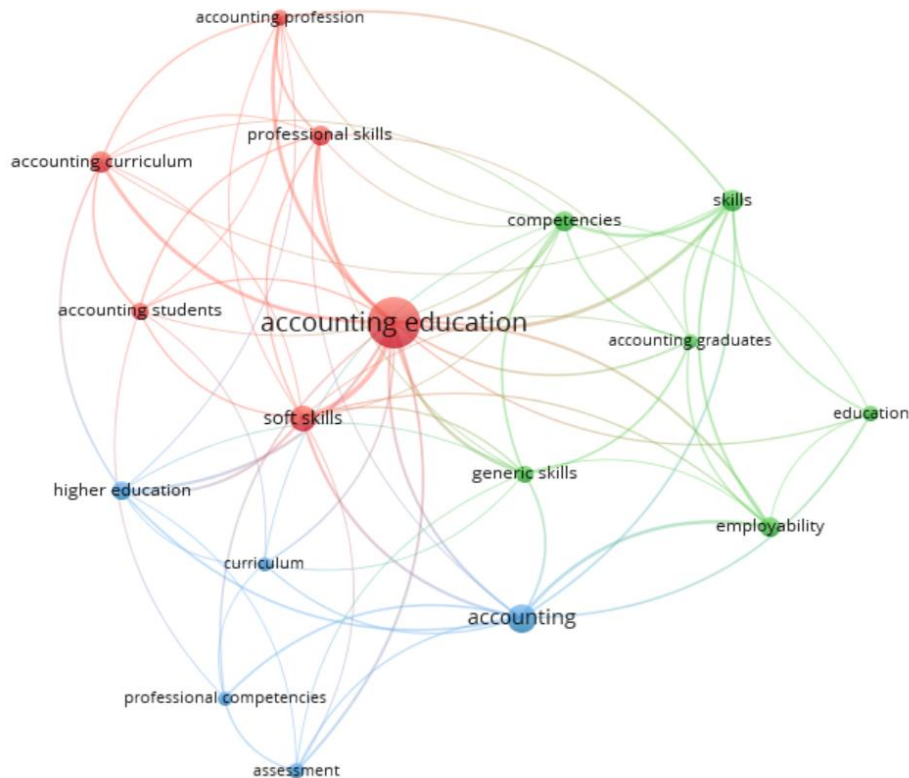
The network visualization in Figure 2, produced using VOSviewer with a minimum co-occurrence threshold of 10, illustrates the dominant research themes in employability and accounting education. By analyzing frequently co-occurring keywords, the map reveals a structured and interconnected research landscape, where key topics are grouped into color-coded clusters representing distinct thematic areas. The largest and most central cluster focuses on employability and skills development, featuring keywords such as *employability*, *soft skills*, *graduate attributes*, and *career readiness*. This reflects the core emphasis of the literature on non-technical competencies that are essential for preparing accounting graduates for today's workforce. The strong

link between *employability* and *soft skills* highlights the consistent recognition of attributes like communication, adaptability, and teamwork.

Another significant cluster focuses on accounting education and curriculum reform. Keywords like *curriculum*, *competency-based education*, and *learning outcomes* indicate a research focus on aligning academic programs with industry expectations. This cluster underscores the shift toward outcome-based learning and the integration of employability within curriculum design. A third emerging cluster relates to digital transformation, with terms such as *digital skills*, *data analytics*, and *artificial intelligence*. These indicate a growing focus on equipping graduates with technological capabilities in response to Industry 4.0. In addition, a cluster focusing on *professional development* and *work-based learning* reflects the importance of internships and experiential learning in enhancing workplace readiness.

The interconnectedness of these clusters suggests that employability is being examined through multiple, overlapping lenses—curriculum innovation, digital readiness, and skill development. The visualization confirms that employability is no longer an isolated topic but part of a broader effort to modernize accounting education and better prepare graduates for evolving professional demands.

Figure 3: Network visualization of the authors' keywords

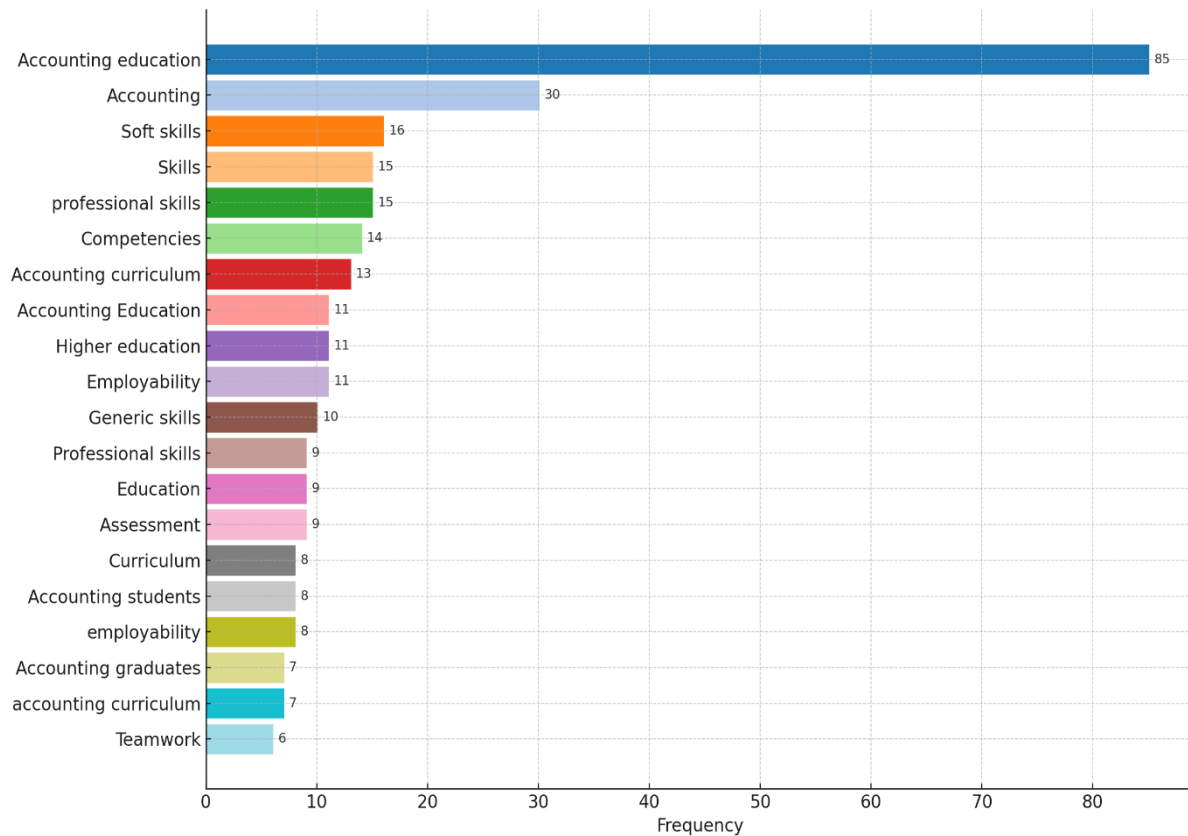


The bar chart in Figure 3, based on the analysis of the top 20 author keywords by document frequency, the term "Employability" was the most frequently used keyword, appearing in 88 documents, underscoring its central role in the research field. "Accounting education" followed closely with 75 occurrences, highlighting the academic context in which employability is often explored. The keyword "Skills" appeared 64 times, reflecting a broad focus on the capabilities required for graduate success. Terms such as "Curriculum" (58), "Graduate employability" (49), and "Soft skills" (42) further indicate a strong emphasis on aligning educational content with workforce needs and enhancing student readiness through targeted competencies. Keywords like "Higher education" (40), "Competency" (38), and "Professional skills" (36) suggest a broader institutional and pedagogical discourse around the preparation of accounting graduates. Meanwhile, the presence of terms such

as "Technology" (30), "Digital skills" (28), and "Industry 4.0" (25) points to a growing concern with digital transformation and the need for graduates to possess technological literacy. Emerging educational strategies are also reflected in keywords such as "Work-integrated learning" (21) and "Experiential learning" (18), which highlight practice-based approaches aimed at improving employability outcomes.

Overall, the frequency distribution of keywords illustrates a thematic convergence on curriculum reform, competency development, and adaptation to digital and professional demands—key priorities in the evolving discourse on employability in accounting education.

Figure 4: Frequency Distribution of Top 20 Author Keywords



5. Conclusion and Recommendations

This bibliometric review offers a comprehensive overview of global research on employability in accounting education, drawing on 422 publications indexed in the Scopus database from 2000 to 2025. The findings reveal a significant and growing body of literature that has evolved from early concerns about skill gaps and curriculum alignment to more recent emphases on digital transformation, technological integration, and graduate readiness in the context of the Fourth Industrial Revolution. Thematic analyses highlight four dominant research clusters: curriculum reform, soft skills development, digital competencies, and alignment between graduate attributes and employer expectations.

The concentration of research in English-speaking countries, particularly the United States, Australia, and the United Kingdom, demonstrates academic leadership in this domain. However, emerging contributions from developing nations such as Malaysia and Indonesia indicate increasing global engagement. Highly cited authors and journals, especially *Accounting Education* and the *Journal of Accounting Education*, play a central role in

shaping the discourse, reflecting the field's growing maturity through structured competency frameworks and empirical assessments.

These findings confirm that employability is no longer treated as a supplementary aspect of accounting education but rather as a core educational outcome. The increasing co-occurrence of keywords related to technology, skills, and curriculum innovation further supports the view that accounting education must adapt to meet the changing needs of the professional environment.

In light of these insights, several key recommendations can be made. First, curriculum designers should give priority to the integration of soft skills and digital competencies alongside technical accounting knowledge. Embedding experiential learning, data analytics, and ethical reasoning into learning activities will help prepare graduates for complex and technologically advanced workplaces. Second, institutions and policymakers should encourage international collaboration and comparative studies, especially as more developing countries begin to contribute meaningfully to the field. Lastly, researchers are encouraged to undertake longitudinal studies to evaluate the impact of employability-focused curriculum reforms and explore regional needs and innovations through cross-cultural inquiry.

Overall, this study provides a valuable foundation for advancing both scholarly research and practical reforms in accounting education. It calls for a future-oriented, skills-based approach that ensures accounting graduates are not only technically proficient but also adaptable, digitally fluent, and prepared for the evolving demands of the global workforce.

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References

- Ahmi, A. (2024). biblioMagika. available from <https://bibliomagika.com>
- De Villiers, R. (2010). The incorporation of soft skills into accounting curricula: Preparing accounting graduates for their unpredictable futures. *Meditari Accountancy Research*, 18(2), 1–22. <https://doi.org/10.1108/10222529201000007>
- Dolce, V., Emanuel, F., Cisi, M., & Ghislieri, C. (2020). The soft skills of accounting graduates: Perceptions versus expectations. *Accounting Education*, 29(1), 57–76. <https://doi.org/10.1080/09639284.2019.1697937>
- Donthu, N., Kumar, S., Mukherjee, D., Pandey, N., & Lim, W. M. (2021). How to conduct a bibliometric analysis: An overview and guidelines. *Journal of Business Research*, 133, 285–296. <https://doi.org/10.1016/j.jbusres.2021.04.070>
- Dzuranin, A. C., Jones, J. R., & Olvera, R. M. (2018). Infusing data analytics into the accounting curriculum: A framework and insights from faculty. *Journal of Accounting Education*, 44, 24–39. <https://doi.org/10.1016/j.jaccedu.2018.02.002>
- Jackling, B., & De Lange, P. (2009). Do accounting graduates' skills meet the expectations of employers? A matter of convergence or divergence. *Accounting Education*, 18(4–5), 369–385. <https://doi.org/10.1080/09639280902719341>
- Kavanagh, M. H., & Drennan, L. (2008). What skills and attributes does an accounting graduate need? Evidence from student perceptions and employer expectations. *Accounting & Finance*, 48(2), 279–300. <https://doi.org/10.1111/j.1467-629X.2007.00245.x>
- Lawson, R. A., Blocher, E. J., Brewer, P. C., Cokins, G., Sorensen, J. E., Stout, D. E., Sundem, G. L., Wolcott, S. K., & Wouters, M. J. F. (2014). Focusing accounting curricula on students' long-run careers: Recommendations for an integrated competency-based framework. *Issues in Accounting Education*, 29(2), 295–317. <https://doi.org/10.2308/iace-50673>
- Levant, Y., Coulmont, M., & Sandu, R. (2016). Business simulation as an active learning activity for developing soft skills. *Accounting Education*, 25(4), 368–395. <https://doi.org/10.1080/09639284.2016.1191272>

- Moher, D., Liberati, A., Tetzlaff, J., Altman, D. G., & PRISMA Group. (2009). Preferred reporting items for systematic reviews and meta-analyses: the PRISMA statement. *BMJ (Clinical Research Ed.)*, 339(jul21 1), b2535. <https://doi.org/10.1136/bmj.b2535>
- Mohamed, E. K. A., & Lashine, S. H. (2003). Accounting knowledge and skills and the challenges of a global business environment. *Managerial Finance*, 29(7), 3–16. <https://doi.org/10.1108/03074350310768319>
- Pan, G., & Seow, P.-S. (2016). Preparing accounting graduates for the digital revolution: A critical review of information technology competencies and skills development. *Journal of Education for Business*, 91(3), 166–175. <https://doi.org/10.1080/08832323.2016.1145622>
- Qasim, A., & Kharbat, F. F. (2020). Blockchain technology, business data analytics, and artificial intelligence: Use in the accounting profession and ideas for inclusion into the accounting curriculum. *Journal of Emerging Technologies in Accounting*, 17(1), 107–117. <https://doi.org/10.2308/jeta-52649>
- Rebele, J. E., & St. Pierre, E. K. (2019). A commentary on learning objectives for accounting education programs: The importance of soft skills and technical knowledge. *Journal of Accounting Education*, 48, 71–79. <https://doi.org/10.1016/j.jaccedu.2019.07.002>
- Sledgianowski, D., Gomaa, M., & Tan, C. (2017). Toward integration of Big Data, technology and information systems competencies into the accounting curriculum. *Journal of Accounting Education*, 38, 81–93. <https://doi.org/10.1016/j.jaccedu.2016.12.008>
- Van Eck, N. J., & Waltman, L. (2014). Visualizing bibliometric networks. In Y. Ding, R. Rousseau, & D. Wolfram (Eds.), *Measuring scholarly impact* (pp. 285–320). Springer. https://doi.org/10.1007/978-3-319-10377-8_13
- Yorke, M. (2006). Employability in higher education: What it is – what it is not. *The Higher Education Academy*. https://www.heacademy.ac.uk/system/files/id116_employability_in_higher_education_336.pdf
- Zakaria, R., Ahmi, A., Ahmad, A. H., Othman, Z., Azman, K. F., Ab Aziz, C. B., Ismail, C. A. N., & Shafin, N. (2021). Visualizing and mapping a decade of literature on honey research: A bibliometric analysis from 2011 to 2020. *Journal of Apicultural Research*, 60(3), 359–368. <https://doi.org/10.1080/00218839.2021.1898789>
- Zupic, I., & Čater, T. (2015). Bibliometric methods in management and organization. *Organizational Research Methods*, 18(3), 429–472. <https://doi.org/10.1177/1094428114562629>