Research Trends on Recognition of Prior Learning Policy; Bibliometric Analysis

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Abstract. Recognition of Prior Learning (RPL) is the keyword for realizing lifelong learning. RPL policy research has been carried out a lot, but it is necessary to understand existing trends and mapping predictive trends. The specific objectives of this study are to analyze publication trends, document type, contribution of countries, journals, institutions, authors, top cited articles, and keyword analysis. The metadata used is the Scopus database and a mapping application using R-Studio and VOSviewer with 73 documents. The results show that during the last decade, there has been significant growth in publications. The most research subject area is social sciences. Australia's most productive country and the most productive institution is Texas State University. The most common types of documents are articles and International Journal of Lifelong Education's most sources impact. For the top-cited author is Andersson, P. Mapping of research trends shows with keyword analysis in the last ten years are: (1) about policy; process, implementation, to policy evaluation (2) about RPL; lifelong education, adult education, informal education, vocational education.

Keywords: *Policy, RPL, bibliometric, learning, education.*

1   Introduction

Policy Recognition of Prior Learning (RPL) has become a significant research topic in the field of education and training. RPL is an approach in which knowledge, skills, and competencies that have been acquired by individuals through prior experience are recognized and valued in official government or educational institution policies. This concept provides an opportunity for individuals to gain recognition for the learning they have experienced outside the formal environment of the institution, such as work experience, non-formal training, volunteer activities, or informal formal education.

Research on Policy Recognition of Prior Learning (RPL) has been conducted by many experts and educational institutions to explore various aspects and implications of this policy. As one of the main references, the "UNESCO Guidelines for the Recognition, Validation and Accreditation of the Outcomes of Non-Formal and Informal Learning" published by UNESCO in 2012 provides a framework and guidelines for countries to implement RPL policies effectively and sustainably [1].

The OECD has also conducted research on RPL policies and published a report titled "Recognising non-formal and informal learning: Outcomes, policies and practices" in 2015. This report discusses various policies related to the recognition of non-formal and informal learning in various OECD member countries [2].

Research on Policy Recognition of Prior Learning (RPL) has also been conducted at the regional level, such as the "Validation of Non-formal and Informal Learning: State of the Art Report" published by the European Commission in 2012 [3]. This report presents an in-depth overview of the current status of non-formal and informal learning recognition policies in various EU member states.

Some educational institutions in certain countries have also contributed research on RPL policies. For example, the Australian Qualifications Framework Council published its "Recognition of Prior Learning (RPL) Guide for Practitioners" in 2012 [4]. This guide provides practical guidance for education practitioners in implementing RPL policies. In New Zealand, the New Zealand Qualifications Authority has issued the updated "Recognition of Prior Learning (RPL) Assessment Guidelines" in 2021. These guidelines provide a clear framework for assessing and acknowledging prior learning.

Academic research on Policy Recognition of Prior Learning (RPL) has also been conducted by scientists and researchers. For example, the article "The boundaryless career: A competency-based perspective" by DeFillippi and Arthur (1994) discusses unlimited careers based on a competency-based perspective [5].

The issue of diversity in the RPL Policy has also become the focus of research. An article by Lavoie (2004) entitled "Recognition of prior learning: Addressing diversity in Canadian post-secondary education" investigates how to address diversity issues in previous learning recognition policies [6]. In their article titled "Engaging with learning: A critical perspective on recognition of prior learning," Colley, James, and Diment (2003) present a critical view of RPL policy and the challenges of recognizing prior learning [7]. The book "Recognition of Prior Learning in Higher Education: A Comparative Policy Analysis" edited by Harris (2016) provides a comparative analysis of RPL policies in different countries and their impact in higher education systems [8].

Research on the benefits of Policy RPL has also been conducted. Schuetze and Slowey (2002) examined who benefits from prior learning recognition policies in their book "Who benefits from the recognition of prior learning?: Findings from the Canadian RPL Research Project [9]." The article "Recognition of prior learning as an effective pedagogy for future-focused education" by McKenzie and Cooper (2017) discusses the effectiveness of RPL policies as a learning approach to face a technology-oriented future [10]. In their article entitled "Competencies and workplace learning: Some reflections on the rhetoric and the reality," Garavan and McGuire (2001) discuss competencies and learning in the workplace [11].

Research on the development of RPL Policy in various countries has also been conducted. For example, the book "Competence-based VET in Europe: Inventory of current developments in competency-based vocational education and training" by Mulder (2008) discusses the development of competency-based VET in Europe [12]. The article "The hidden costs of recognition of prior learning (RPL)" by Ahlström and Sandberg (2011) delves into the hidden costs of acknowledging prior learning [13].

Research on out-of-school skills has also been conducted. Kuczera and Field (2013) present an overview of out-of-school skills in the United States in their report entitled

"A skills beyond school review of the United States." [14]. Rubenson (2006) investigates rhetoric and reality in RPL in his article entitled "Recognition of prior learning: From rhetoric to reality." [15]. In his article entitled "The biographical approach to adult education: About routes to meaning, learner identity and emotion," Alheit (2010) discusses the biographical approach in adult education [16]. In the work report "Adults' informal learning: Definitions, findings, gaps, and future research." and Livingstone (2001) presents the results of research on informal adult learning [17].

Based on some of the data above, this study aims to analyze the trend of Policy Recognition of Prior Learning (RPL) research to be more detailed and supported by credible sources. This diverse research and views provide deep insights into RPL and its impact on education and training systems at different levels and countries.

2   Method

This research design is a literature-based descriptive study involving bibliometric analysis. The data used is related to the publication of past learning recognition policies sourced from the Scopus database. The Scopus database is one of the optimal databases that can be used for bibliometric analysis because it can provide and include results from more published journal sources (Purnell, 2022). The keyword used in data search is "*policy "recognition of prior learning"*". The search results resulted in 73 published publications related to the issue of policy recognition of prior learning. Data on articles, authors, journals, and characteristics of documents were analyzed using VOSViewer and Biblioshiny applications in RStudio. Bibliometric analysis is performed to describe the articles, authors, journals, institutions, and countries depicted by showing an overview of each of the 10 most relevant ones.

The study was conducted via online search on August 9, 2023. The steps in this study are illustrated in Fig. 1.
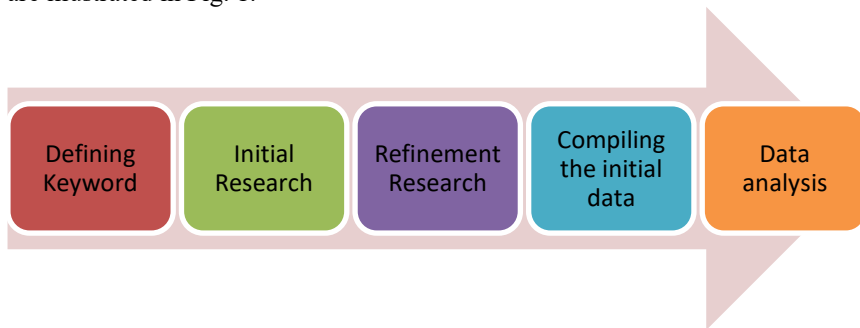

Fig. 1. Five steps in bibliometric analysis.

3   Results and Discussion

3.1   *Trend Research and subject document*

The results showed that there were 73 documents related to the recognition of prior learning (RPL) policy in the scopus data with the keyword "recognition of prior

learning" policy from 1998-2023. There are 115 authors with 58 sources and 2586 references.

Table 1. Main data information.

Description	Results
MAIN INFORMATION ABOUT DATA	
Timespan	1998:2023
Sources (Journals, Books, etc)	58
Documents	73
Annual Growth Rate %	7,43
Document Average Age	7,1
Average citations per doc	4,644
References	2586
DOCUMENT CONTENTS	
Keywords Plus (ID)	99
Author's Keywords (DE)	207
AUTHORS	
Authors	115
Authors of single-authored docs	24
AUTHORS COLLABORATION	
Single-authored docs	32
Co-Authors per Doc	1,97
International co-authorships %	12,33
DOCUMENT TYPES	
article	47
book	1
book chapter	17
conference paper	6
review	2

Research on past learning recognition policies by year began in 1998 under the title "Workers' Experiences of RPL in South Africa: some implications for redress, equity and transformation" by Legg, et al. The number of documents related to RPL Policy from the beginning to the end of this data taken continues to increase, although it fluctuates in the duration of 2012-2022, but the trend has increased in 5 decades. It can be predicted that the number of articles in 2024-2027 will increase dramatically. This can be seen in Fig. 2.

Research trends are also seen from the most popular research topic subject, namely social science by 71% (66 documents), the rest is almost evenly distributed in other scientific subjects, such as business management, art, economics, psychology and even energy and health. This can be seen from the following Fig. 3.
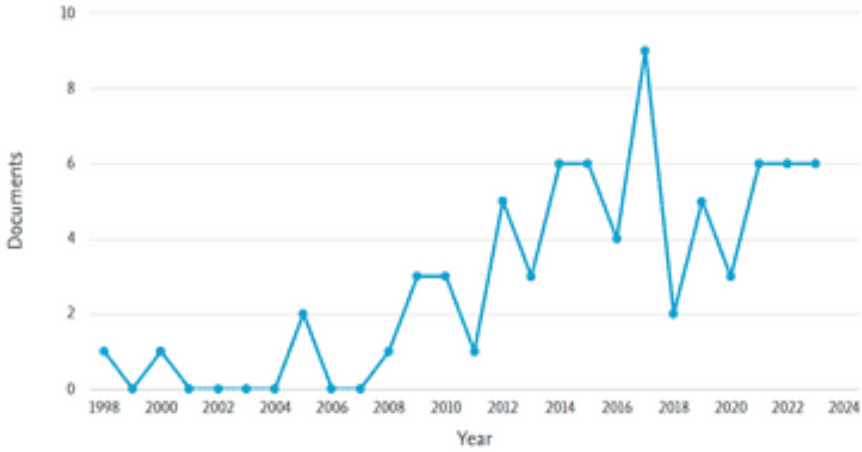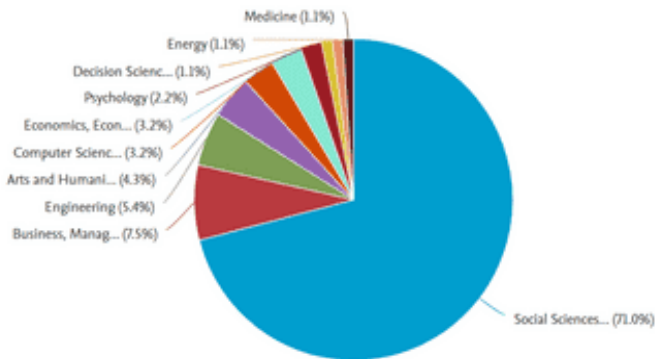
Fig. 2. Trend research.

Fig. 3. Subject area of research.

3.2   Trend Research and Subject Document

Based on the number of cross-border documents, it is clear Australia's dominance with 23 documents until 2023. Countries such as South Africa, France, and Portugal contributed to this topic with 16, 14, and 14 documents, respectively. Meanwhile, with almost the same number of US, Finland, Sweden, UK, and Canada contributing under 10 documents (it can be seen in Fig. 4).
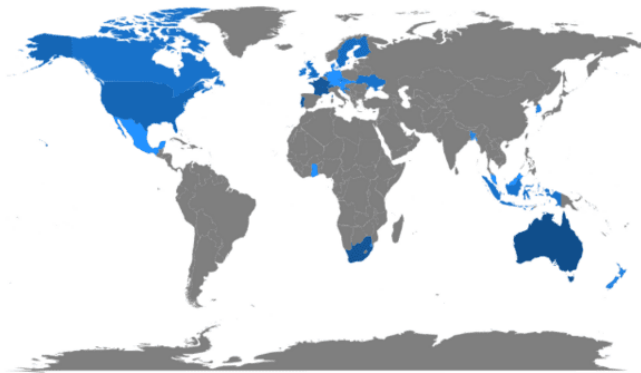
Fig. 4. Most contributing countries.

The cross-institutional RPL policy documents can be seen in Table 2. Texas State University is the institution that contributes the most RPL policy research. After that, several campuses continued with almost a small spread.

Table 2. Cross-institutional RPL policies.

Number	Affiliation	Total
1	Texas State University	6
2	Griffith University	4
3	Linköping University	4
4	Swiss Federal University For Vocational Education And Training	4
5	The University Of Western Australia	4

Meanwhile, the most funding sponsors in research on RPL Policy are given by the European Commission, the University of South Africa, and Vatenskapsradet. This can be seen in Fig. 5.
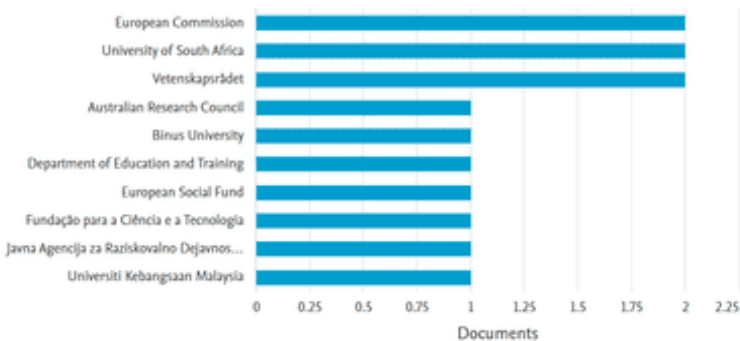

Fig. 5. Funding sponsor.

3.3   Top Authors and Collaboration Network in Research of RPL Policy

In terms of most prolific author, figure 7 shows the top ten authors in researching RPL policies. Maurer, Guimarães, Pitman, Andersson, Barros, Hlongwane, Vidovich, Beaupère, Billett and Fejes were the most prolific authors on this topic.

Based on some of the authors above, judging from the time of publication, Mauren will only be active in 2021-2023. In general, the author's performance is in line with the top citations of articles throughout the year, but not all of them are linear, because Mauren has only written articles these past 2 years. This is as shown in Table 3. Recorded (Andersson and Fejes 2005), (Allais 2012), (Miguel, Ornelas, and Maroco 2016) produced their articles as the top 3 citations [18, 19, 20]. The authors in publishing the results of this RPL Policy research collaborate with each other. The results of the collaboration can be seen in Fig. 7.
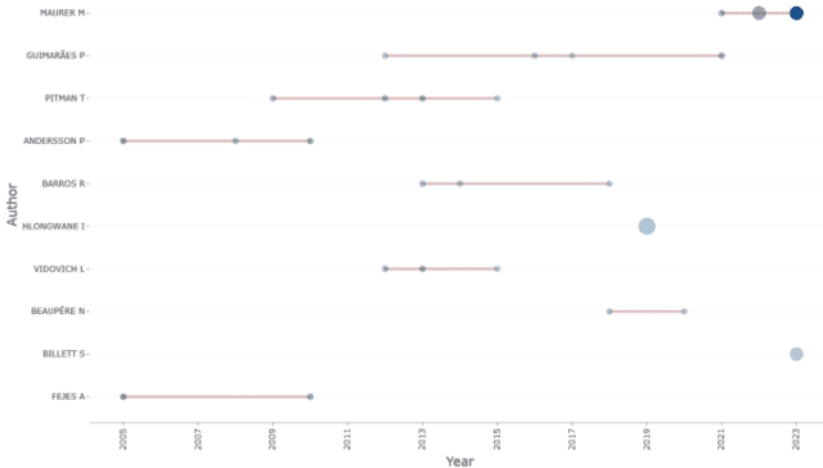

Fig. 6. Top authors in research RPL policy

Table 3. Top citation of articles.

Number	Paper	Total Citations
1	Andersson P, 2005	49
2	Allais S, 2012	29
3	Miguel Mc, 2016	27
4	Andersson P, 2010	24
5	Pitman T, 2013	17
6	Hamer J, 2010	17
7	Bohlinger S, 2017	16
8	Pitman T, 2009	15
9	Lillis F, 2020	14
10	Pitman T, 2012	13

3.4   Publication Patterns: Source Titles and type document

The number of articles by source indicates the dominance of articles in the journal (47 documents). It was followed by a series of books (17) and conference proceedings (6). Reviewed books and journals account for the fewest document sources.

The high number of documents in the form of journal articles is because they have more opportunities to be cited/referenced compared to other types of articles, such as proceedings articles, books, and book chapters. Table 4 shows the 5 (five) highest ranking document sources containing lecturer articles. The most documents published in the International Journal of Lifelong Education, reaching 4 documents followed by; Higher Education, Skills And Work-Based Learning, Journal Of Education Policy, Formation Emploi, International Review Of Education. The number of publications in the journal document type is relevant to the distribution based on the source of the document.
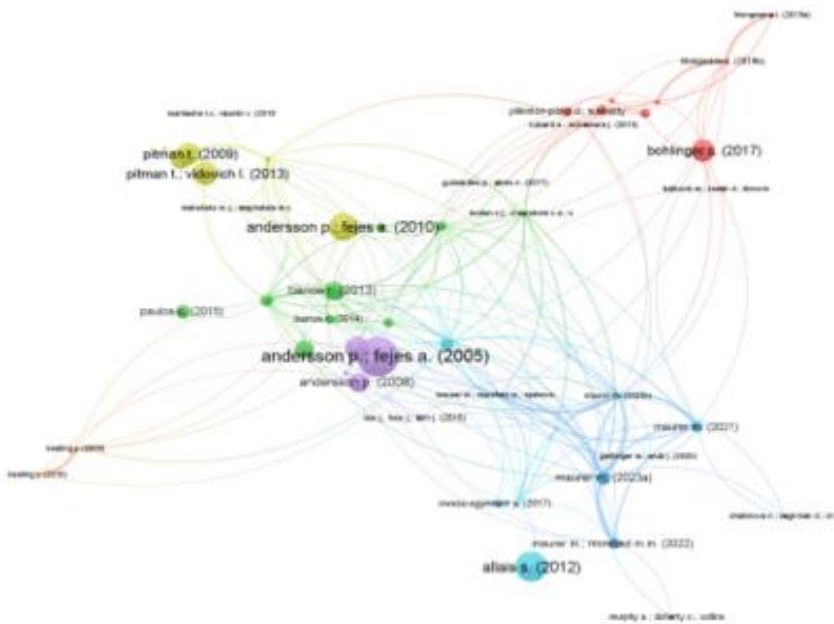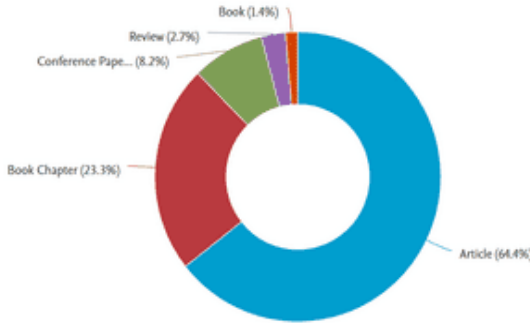

Fig. 7. Collaboration network on authors.

Fig. 8. Type of documents.

Table 4. Publication source titles

Number	Sources	Articles
1	International Journal Of Lifelong Education	4
2	Higher Education, Skills And Work-Based Learning	3
3	Journal Of Education Policy	3
4	Formation Emploi	2
5	International Review Of Education	2

3.5 Mapping visualization and prediction the future of research trends in Policy RPL

The most important thing in bibliometric analysis is the analysis of keywords that appear frequently and their relationship to other keywords. By analyzing this, of course, it will get a picture of the novelty that exists and allow further research to be carried out. Even in the topic of mapping and visiulation, it will be able to reduce the topics that develop in the future. Fig. 9 shows several keywords when discussing RStudion's RPL policy.

Fig. 9. Wordcloud document RPL policy.

After knowing the keywords, then it is necessary to visualize the keywords of RPL policy research trends. Researchers used 2 analytical tools; VOSViewer and RStudio. The mapping results show that there are 4 clusters. The results of VOSViewer visualization in Fig. 10 show that cluster 1 (red color) consists of; *prior learning, analysis, system, case, access, education, competency, idea, vocational education, labour market, qualification, principle, challenge, swaden.* In cluster 2 (blue color) consists of; *rpl, framework, study, approach, sector, equity, work, studi, national qualification framework, implementation, souch Africa, insight, higher education, university, government, quality, evidence.* For cluster 3 (green) consists of; *policy, opportunity, change, research, development, prosess, project, program, model, concern, need, life, model, adult education.* On cluster 4 (yellow color); *learning, knowledge, practice, assessment, use, conceps, informal learning.* Last (purple); *student.*

While in the study using RStudio analysis, it showed that there were 4 clusters (blue, red, purple, and green). This is shown in Fig. 11 cluster 1 (blue) consists of; *prior learning, learning rpl, lifelong learning, rpl practices, education institution, policy makers, learning outcomes, qualification framework, professional education, national qualification, education policy, education institutions, historically disadvantaged, framework nqf, rpl recognition, informal learning, assessment practices, labor market, rpl assessment.* Cluster 2 (red) is top; *South Africa, South African, African Qualification, Learning Program, RPL Implementation, Document Analysis, RPL Policy, SS Schools, RPL Process, Policy Environment.* On cluster 3 (purple); *European union, adult educaters, research project, adult education, adult learners, policy documents, education policy.* Finally, cluster 4 (green) are: *RPL Policies, Limited Trading, Informa UK, UK Limited, Labor Market, and Vocational Education.*
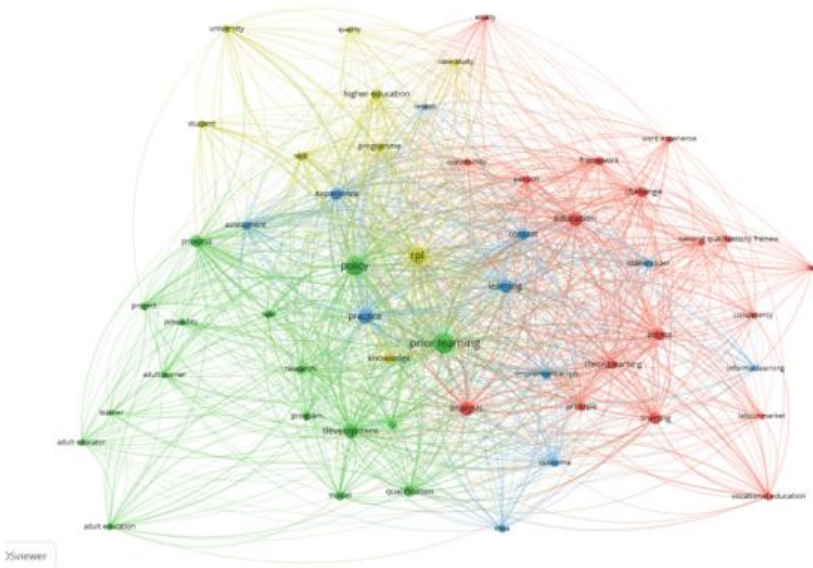

Fig. 10. Mapping visualization VOSViewer.

Fig. 11. Mapping visualization RStudio.

Based on the results of this analysis, in RPL policy research, there are several important and interrelated keywords. The most important keyword for RPL; namely longlife education, adult education, vocational education [21], informal education [22], qualification framework [23]. As for keywords related to RPL policies, namely; RPL policy, RPL implementation, document policy analysis, RPL policy process, RPL assessment policy, and policy environment [24].

In terms of conceptual structure map, it can be mapped that in RPL research there are several elements and keywords that dominate. This was analyzed using the MCA method through the RStudio software. This is shown in Fig. 12.

In addition to related keywords, you can also see some keywords that are still rare or lack research which are symbolized by a dark color. Fig. 13 shows that there are topics that have elements of novelty and need to be researched; These topics are: vocational education, adult education, national qualification framework, and related to equity, quality, and university.

Thus, if future predictions are related to the topic of RPL policy research, then there are several topics that need to be studied and investigated further (Fig. 14). Prior learning, lifelong learning [25], adult education [26], education policy, and adult educators [27] are research themes that have the most relevance opportunities.

Based on some of the mapping analysis above, it needs to be used as a reference and guide in the future for researchers who want to carry out research related to RPL policies, they must raise more topics related to policies, starting from process, implementation, to policy evaluation. Meanwhile, its relation to past learning recognition must be studied more closely related to lifelong education, adult education, informal education, vocational education.
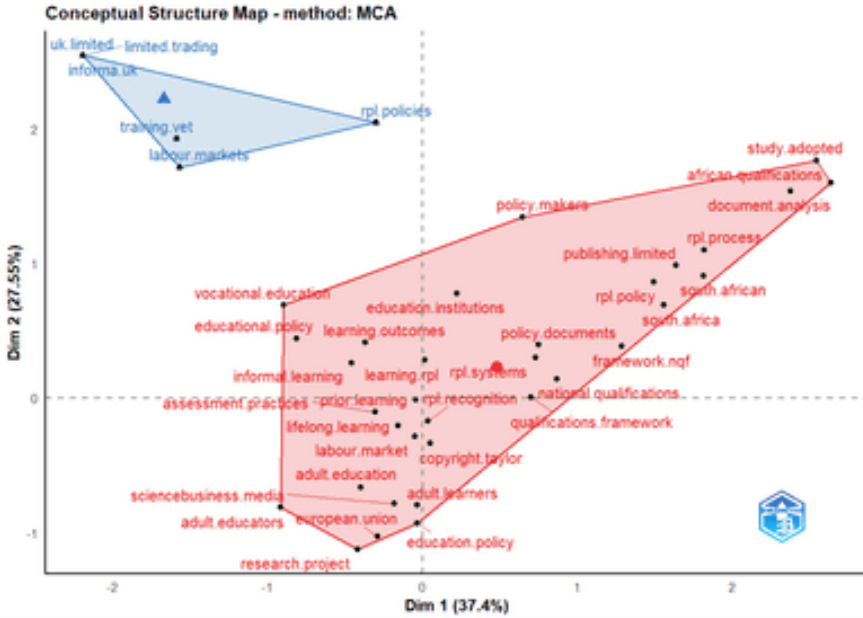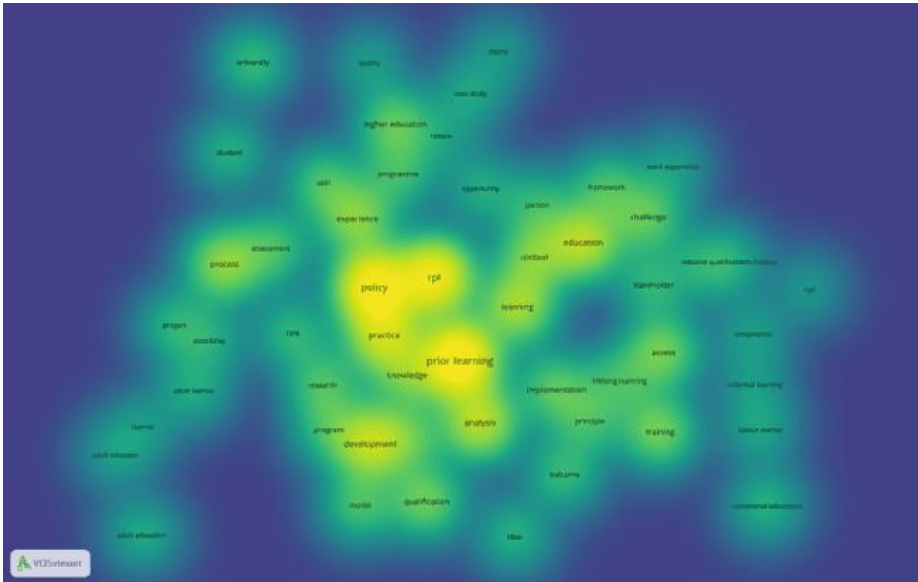
Fig. 12. Conceptual structure map.

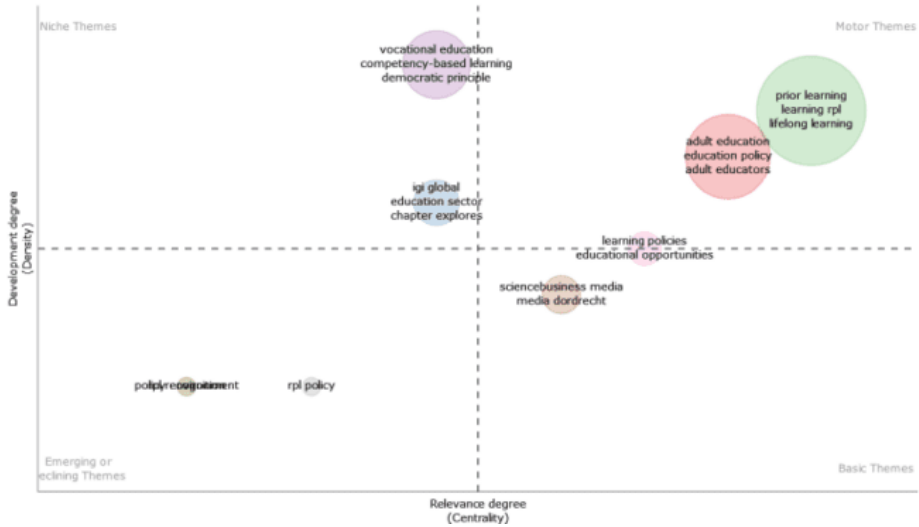**Fig. 13.** Topics that have elements of novelty and need to be researched.

Fig. 14. Thematic evolution.

4   Conclusion

The results show that during the last decade, there has been significant growth in publications. The most research subject area is social sciences. Australia's most productive country and the most productive institution is Texas State University. The most common types of documents are articles and International Journal of Lifelong Education's most sources impact. For the top-cited author is Andersson, P. Mapping of research trends shows with keyword analysis in the last ten years are: (1) about policy; process, implementation, to policy evaluation (2) about RPL; lifelong education, adult education, informal education, vocational education.

Acknowledgments

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