



BIBLIOMETRICS STUDY ON 'THE AUSTRALIAN JOURNAL OF TEACHER EDUCATION (2010-2014) - AN ANALYSIS'

Miss. D. Pradeepa Assistant Librarian, Jeppiaar Engineering College. Chennai.

Mr. S.G. Rajasekar Ph.D Scholar, Hindustan University, Chennai.

Dr.K. Nithyanandam Asst. Proff. , Department of computer science, Women's Institute Of Technology,L.N.M.U. Darbhanga

ABSTRACT

The present study belongs to the second level namely, the general scientific level of methodology and is concerned with Bibliometrics analysis of research literature output in Journal of 'The Australian Journal of Teacher Education'. The study covers 445 articles in volumes from 35 to 39 of the journal 'AJTE' published in the years from 2010-2014.

KEYWORDS : Bibliometrics, Teachers Education, Growth Rate.

INTRODUCTION

The evaluation of the use of library collections is a fundamental tool for the development of a relevant and cost effective collection. Bibliometrics offers several methods to measure the level of use of collections. The word Bibliometrics has been coined from two words 'biblio' and 'metrics'. The word biblio is derived from combination of a Latin and Greek word biblio means book, paper and the word 'metrics' indicates the science of metric i.e. measurement.

Bibliometrics is a type of research method used in Library and Information Sciences. It is a quantitative study of various aspects of literature on a topic and is used to identify the pattern of publication, authorship and secondary journal coverage. It helps in getting an insight into the dynamics of growth of knowledge in the area under consideration. In the present day Bibliometrics has attained sophistication and complexity of national, international and interdisciplinary character.

DEFINITION OF BIBLIOMETRICS

According to Alan Pritchard, "it is an application of mathematical and statistical methods to look into other media of communication".

According to D.T. Howkins, "it is a quantitative analysis of the bibliographical features of body of literature".

ABOUT AUSTRALIAN JOURNAL OF TEACHER EDUCATION

Country: [Australia](#)

Subject Area: [Social Sciences](#)

Subject Category: [Education](#)

Publisher: [Social Science Press.](#)

Publication type: Journals.

ISSN: 03135373

Coverage: 1976-2015

H Index: 6

Scope:

The purpose of the Australian Journal of Teacher Education is to enhance the quality of teacher education in Australia through the publication of research reports, learned points of view and commentaries. Contributions may address proposals for, or descriptions of, development in the purpose, structure and methodology of teacher education; curriculum issues; changes in schools; or general social, ideological or political issues relating to teacher education. The Australian Journal of Teacher Education is peer reviewed by Edith Cowan University.

OBJECTIVES OF THE STUDY

The main objectives of the present study are as follows:

1. To find out Distribution Pattern of Contributions In the Australian

2. Journal of Teacher Education
2. To find Year wise Global Distribution of Research Literature in the Australian Journal of Teacher Education
3. To find out Relative Growth Rate of the Australian Journal of Teacher Education: Global Output
4. To identify the Time Series Analysis of the Australian Journal of Teacher Education

Table - 1
Distribution Pattern of Contributions

S. No	Year	Vol.	Issue	Number of the articles/contributions/ Issue No												Total No. of Articles	
				1	2	3	4	5	6	7	8	9	10	11	12		
	2010	35	8	9	6	4	6	6	6	8	6						51
	2011	36	12	6	6	6	6	6	6	6	5	6	6	7	8		74
	2012	37	12	7	8	8	8	8	8	8	8	9	8	8	8		96
	2013	38	12	10	10	10	10	10	10	8	8	8	8	8	8		108
	2014	39	12	10	10	10	10	8	8	10	10	10	10	10	10		116
Total																	445



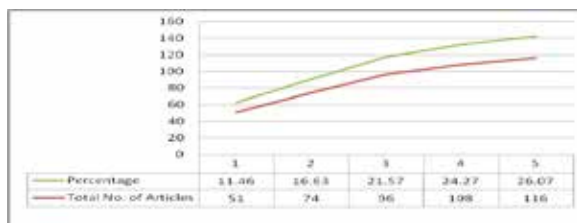
(Figure - 1 Distribution Pattern of Contributions)

The analysis of the distribution pattern of contributions. 445 contributions have been identified for this research project. The above table shows the distribution pattern of contributions and number of contributions for each volume. In the Volume No's 35 to 39 there are 445 contributions. The number of articles is highest in volumes 39 accounting 116 articles in the year 2014. The lowest number of articles is published in the volumes 35 accounting 51 in the year 2010, out of the total contribution during the study period. It can be inferred from the data that most of the volumes have the average number of articles. The number of articles is uniformly increasing. There is no fluctuation in the number of publication during the study period.

Table - 2
Year wise Global Distribution of Research Literature in the Australian Journal of Teacher Education

S. No	Year	Vol.	Issue	Total No. of Articles	Percentage	Cumulative Percentage
	2010	35	8	51	11.46	11.46
	2011	36	12	74	16.63	28.09
	2012	37	12	96	21.57	49.66
	2013	38	12	108	24.27	73.93
	2014	39	12	116	26.07	100.00
Total				445	100.00	

The above table displays the year-wise global distribution of research productivity in the Australian Journal of Teacher Education for the period of 5 years from 2010 to 2014. The total publication count is found to be 445 and the maximum output occurred in the year 2014 numbering 116 and this formed 26.04 per cent of the total output. The least count of the total output was in the year 2010 with 11.46 per cent. It is inferred that the Australian Journal of Teacher Education oriented articles are slightly increased year by year.



(Figure - 2 Year wise Global Distribution of Research Literature)

Table - 3
Relative Growth Rate of the Australian Journal of Teacher Education: Global Output

S. No	Year	Vol.	Issue	Total No. of Articles	Growth Rate
	2010	35	8	51	
	2011	36	12	74	0.31
	2012	37	12	96	0.23
	2013	38	12	108	0.11
	2014	39	12	116	0.07

The above table displays the annual growth rate of global literature output in the Australian Journal of Teacher Education. It is found that the growth rate was at a maximum in the year 2011 and at its minimum in 2014. Further it is found that the growth rate of research in the Australian Journal of Teacher Education was found to be positive during all the years. In an overall view the average annual growth rate of the Australian Journal of Teacher Education research at the global level was found to be 0.144.

Table - 4
Time Series Analysis

S. No	Year	Articles (Y)	X	X ²	XY
	2010	51	-2	4	-102
	2011	74	-1	1	-74
	2012	96	0	0	0
	2013	108	1	1	108
	2014	116	2	4	232
Total		445	0	10	164

Straight line equation is applied to arrive at projections for future growth under Time Series analysis.

Straight Line equation $Y_c = a + bX$

Since $\sum X = 0$

$a = \sum Y / N = 445 / 5 = 89$; $b = \sum XY / \sum X^2 = 164 / 10 = 16.40$

Estimated literature in 2020 is when $X = 2020 - 2012 = 8$

$= 89 + 16.40 * 8 = 89 + 131.20 = 220.20$

Estimated literature in 2025 is when $X = 2025 - 2012 = 13$

$= 89 + 16.40 * 13 = 89 + 213.20 = 302.20$

On the application of the formula of Time Series Analysis and subsequently, from the results obtained separately for the years 2025 and 2020, it is found that the future trend of growth in the Australian Journal of Teacher Education research output may take an increasing trend during the years to come. The inference is that there is a positive growth at the global level in research literature output in the Australian Journal of Teacher Education.

CONCLUSION

The study revealed a positive growth in the Australian Journal of Teacher Education research in maintaining continuity, though the annual turnover counts seemed small in the context of large Social Science Education system and available vast workforce. It is possible that the overall performance of a country may be better, though it may lose the competition in selective areas. A curiosity, apart from the objectives of the study, persuaded to search and finds a recent source speaking for global performance.

REFERENCES

| 1. Pritchard Alan, "Statistical Bibliography or Bibliometrics", Journal of Documentation 25, 1988, pp.179-191. | 2. Howkins, D.T., "Unvocational Use of Online Information Retrieval System: Online Bibliometric Study", Journal of American Society for Information Science, 28.1 (1981), pp.13-18. | 3. Arunachalam, S. and Gunasekaran, S. (2001). Tuberculosis Research in India and China: From Bibliometrics to Research Policy. Current Science, 82 (8), pp. 933-947. | 4. Source: <http://www.scimagojr.com/journalsearch.php?q=17600155115&tip.> | 5. http://ro.ecu.edu.au/ajte/all_issues.html.