

# Emerging Trends in Open Educational Resource Studies in China (2001-2019)

Jin Zhu\*

Open University of China, Beijing, 100039, China

**Abstract:** OER have played a key role in the development of distance education, and even the whole education field in China in the past 20 years. Thus, the papers and the research findings on OER in China, as a part of distance education studies, can show the situation of OER and also can show the situation of distance education in China in the past 20 years.

This research uses Cite Space, an information visualization tool, to present and analyze the emerging trends in OER studies in China from 2001 to 2019. 563 papers are identified as the reference source from CNKI, the most important academic database in China. Eventually, the author comes up with the following findings: There are still lots of undeveloped land in OER study in China; Distance education institutions are the closest friends with OER studies; OER study is a good breakthrough point for pedagogy marching from macroscopic to microscopic; OER study started early in China; The studies about its development and evolution are abundant; OER studies are not specific and deep enough in China; Most of the researchers are from pedagogy; There should be more researchers from other disciplines, computer and economics for example.

**Keywords:** OER studies, China, Cite Space, Mapping Knowledge Domains

**Publication date:** November, 2019

**Publication online:** 30 November 2019

**\*Corresponding author:** Jin Zhu, zhujin@ouchn.edu.cn

## 1 Background and research question

In the year of 2001, MIT launched the “OCW” plan<sup>[1,2]</sup>. In 2002, UNESCO held “OER In Developing Countries Forum”, which made the year of 2002 become Year One of OER(Open Educational Resource). More than 20 countries including China joined the OER movement<sup>[3-5]</sup>.

OER have played a key role in the development of distance education, and even the whole education field in China in the past 20 years. Thus, the papers and the research findings on OER in China, as a part of distance education studies, can show the situation of OER and also the situation of distance education in China in the past 20 years. So the research question is: Emerging Trends in OER studies in China (2001-2019).

## 2 Data collection and methodology

All the data is collected from two kinds of database of CNKI: periodical database and doctor and master thesis database.

Statistical tool Excel2007 and information visualization tool Cite Space are used in this research. Cite space is a mapping knowledge domains tool, which is developed by Chaomei Chen, a vice professor in Drexel University, Philadelphia, USA. It's a dynamic complex network analysis and can help the researcher to get the hotspots and fronts of the research.

Based on the primary analytical method Cite Space, the research question is divided into three research directions: (1) Trace back the number and growth of OER studies, and then reveal their basic characteristics (literature statistics); (2) Show the development of OER studies by analyzing the changes in the publications;(the number of publications, total citation frequency, average citation frequency of different institutions and authors, the keywords with different frequency of occurrence, different keywords, etc.) (literature analysis); (3) Pick up the core author groups and core research contents by the perspective of cluster, to show the changes of the research frontiers, evolution paths and research contents of different stages.

## 3 Research finding

### 3.1 Core research group

About the core author:

Authors, who started publishing between 2001 and 2011, account for 88% of the total number of core authors and 94% of the total number of core paper authors in the first ten years (2001-2011). However, the numbers of emerging core research authors and their papers are less than 10% of the total in the second ten years (2011-Now). So, we can say in the past 20 years, the number of core authors and their papers are growing. But after 2011, the new core papers disappeared. It means the core authors shifted their focus.

About the core organization:

The top 5 research Institutions(universities) are: Open University of Shantou(32), Institute of Education Nanjing University(10), School of Education Science Nantong University(9), Open University of China(9, OUC) and Open University of Shanghai(7).

The first ten years, 2001-2011, is the period of sprout and prosper. The organizations are a few in number. The contents of the papers are mainly about the introduction of the OER and are lack of specific research. The second ten years, 2011-Now, is the period of sustained development. There are more new star organizations and the papers from some star organizations formed clusters.

### 3.2 Research characteristics

About the frequency of the research topics:

The highest frequency research topics are OER(Chinese), OER(English), open education and distance education. The second frequency topics are the main organizations who run OER, OUC for example. The third are the forms of OER, MOOC for example. The fourth are the related topics about OER, talent cultivation model for example.

About the methodology of the papers:

Interview, literature, concept introduction, status introduction and status analysis are used mostly to introduce the advanced ideas about OER abroad and explain the general situation of the Chinese OER development. Meanwhile, there are a few of empirical analysis and teaching model introductions, which are used to evaluate the validity, judge the factors of the influence and develop the Chinese previous theories and methods in China's conditions based on the foreign theories and methods.

About the top5 key words:

The top 5 key words about the 563 papers' titles are OER(Chinese), lifelong education system, open education, OUC and radio&TV university. There are 4 hot points(4 crosses) in this chart. The biggest one is OER in 2007, and the three others are open education in 2001, 2008 and 2013.

OER appeared in the research as a topic from 2001, and it turned in a hot topic in 2007. OER study achieved its peak from 2007 to 2013 and OER study began to decrease gradually after 2013.

### 3.3 Core papers

This research defines that the number of the silhouette is bigger than 0.5 means core paper, so only 2 papers are collected as core papers. They are: "New Dynamics of Higher Education and Distance Education", Stamenka Uvalic-Trumbic, chief of section for reform, Innovation and quality assurance, UNESCO, Sir John, President of Commonwealth of Learning, 2010; "The Future of the Higher Continuing Education from OUC Perspective", Daoka Ge, president of OUC, 2009. Both of 2 papers are the introduction of the general situation. Both of them are macroscopic and from officers but not researchers.

The number of the high quality papers is few and is increasing slowly and there is no core paper from 2001-2008 and 2011-now.

## 4 Conclusion

After the study, we can get the following conclusions: (1) here are still lots of undeveloped land in OER study in China (quantity and quality). (2) Distance education institutions are the closest friends with OER studies. (3) ER study is a good breakthrough point for pedagogy marching from macroscopic to microscopic. (4) OER study started early in China. (5) The studies about its development and evolution are abundant. (6) OER studies are not specific and deep enough in China. (7) Most of the researchers are from pedagogy. (8) There should be more researchers from other disciplines, computer and economics for example (multi-interdisciplinary research).

## References

- [1] Tang YE, Liu ZS. Comparison of MIT OCW project and the construction concept and operation mechanism of national high-quality courses[J]. Research on modern distance education, 2011(03):54-9.
- [2] Wang JB. Transnational higher education theory and China's practice[D]. East China normal university, 2004.
- [3] Shen LY, Zhao AJ, Dong R. A look at the new stage of China's open education from the development of high-quality courses to high-quality video open courses[J]. Modern education technology, 2012, 22(11):62-7.
- [4] Dong J. Development status of MOOC and its impact on higher education[D]. Shandong Normal University, 2015.
- [5] Yuan SH, Liu X. MOOC practice status and common problems of Chinese universities - from MOOC practice report of Chinese universities[J]. Modern distance education research, 2014(04):3-12, 22.