

**Conference Theme:**

The industry development of knowledge value refilling and digital content

**Types of Submissions:** Parallel session

**Presentation Topic:**

Reviewing the Open Access Policy of Theses and Dissertations in Taiwan: A study through business model comparison of international database companies

**The Speaker:**

Prof. Jeong-yeou Chiu

Graduate Institute of Library, Information and Archival Studies

National Chengchi University, Taiwan

**Summary:**

## I. Introduction

The trend of “Open Access” (OA) in the academia has been going on for many years. In order to curb the monopoly of academic resources by a few giant database publishers (or aggregators) which results in a sharp increase in library procurement funds and the damage to scholars’ research rights, the European and American governments and the academia have jointly promoted many famous motions or boycotts. These initiatives have created tremendous pressure on public opinion from scholars, which have led the publishers/aggregators to adopt some kind of compromises and even plan new business models, such as “Hybrid OA” and so on. However, “academic information” is not always public information, let alone “public good”. In recent years, the only approximate reasonable claim of rights comes from a kind of thinking: academic information derived from the name of public sector funds has its legitimacy and relevance for being “free and open”. In addition to academic journals, as one of the major academic information resources, it is difficult for theses and dissertations to avoid from the controversy. At present, Taiwan is caught in such a myth. Are theses and dissertation from public (or private) universities alike born to be a free, open objects and even be a compulsory licensing to government?

This study will start from the market situation of Taiwan’s thesis/ dissertation database, and explore and compare the business model, service content and domestic university library subscriptions between the domestic and foreign database. The comparison subjects include full-text database companies, China National Knowledge Infrastructure (CNKI), the well-known American theses and dissertations full-text database (ProQuest), and Airiti Inc..

## II. Taiwan market and mechanism of thesis and dissertation database

Among the three dissertation databases, CNKI was initiated by Tsinghua University and Tsinghua Tongfang in 1999, and with the great support of the official, it has become one of the largest knowledge dissemination and digital learning platforms in China. Its dissertation database was founded in 2002 and it has accumulated more than 3 million full texts.<sup>1</sup> ProQuest Inc. of the United States has been established in 1996 and has a world-renowned

#####

<sup>1</sup>中國知網，「博碩士」，

<http://kns.cnki.net/kns/brief/result.aspx?dbPrefix=CDMD>

theses and dissertations full text database (PQDT-FT). The database now contains 4 million dissertations. While it is available to more than 3,000 universities and research institutes under the user charge mode, it grows at an annual rate of 130,000.<sup>2</sup> Today, the Library of Congress even regards it as an institution that is backed up in different places. The Airiti Inc. theses and dissertations database contains graduation papers from dozens of colleges and universities in Taiwan from 2004, with a total of about 200,000 full texts.<sup>3</sup>

This study investigates the website information of libraries in Taiwan's colleges and universities, and finds that the market share of ProQuest, CNKI, and Airiti's theses and dissertation database in Taiwan's colleges and universities is 76 in ProQuest, followed by Airiti 69 and CNKI 28. The details are as follows in [Table 1]. Further, with the purchase amount of each database displayed in the government procurement network, the estimated amount of Taiwan's annual procurement of ProQuest, CNKI and Airiti theses and dissertations database is about NT\$35 million, 13 million and 10 million respectively.<sup>4</sup> According to the public information of "Government Procurement Network" in 2018, the CNKI database is sold in the form of annual buyouts. If all the contents from the year 2000 to the present are purchased, the quotation exceeds NT\$ 21 million; if articles from all categories are purchased in 2017 or 2018, it costs NT\$ 1.49 million and 1.55 million respectively. At the same time, according to the same quotation information, the database has a fixed rise of stock of 4% in the past 10 years. Most schools choose to subscribe in specific areas under the consideration of funding. The ProQuest database shows that the sales price of the "Government Procurement Network" falls between NT\$290,000 and 750,000, and most colleges and universities in Taiwan pursue preferential treatments by purchasing the whole database or bundling them with the journal database of the provider. The price of the latter falls between NT\$980,000 and 1.38 million.<sup>5</sup> Returning to Taiwan's current Airiti database, according to the interview, its pricing falls between NT\$90,000 and 230,000.<sup>6</sup>

[Table 1] Taiwan university and college academic papers database using survey form

Unit: Number of institutions

Type	The total amount	Successfully investigated	ProQuest dissertations	Airiti dissertations	CNKI dissertations
Public university	33	26	23	15	13
Public vocational school	17	16	3	8	2
Public others	11	6	0	3	1
Private university	37	28	1	8	6
Private vocational school	70	57	31	20	0
Private others	5	4	3	1	0
Total	173	137	60	55	22
Estimated actual number of schools			76	69	28

Under the real-life situation that the funding for higher education is shrinking and in the

#####

<sup>2</sup> ProQuest, "ProQuest Dissertations & Theses,"

<https://www.proquest.com/products-services/dissertations/>

<sup>3</sup>統計自華藝線上圖書館,「Airiti Theses」, <http://www.airitilibrary.com/Search/alThesisbrowse>

<sup>4</sup>經清查台灣各大學圖書館網站,得致各校資料庫使用清單;並以資料庫採購家數乘以政府採購網資料庫單價而計算之。政府電子採購網見

<http://webtest.pcc.gov.tw/pis/main/pis/client/index.do>

<sup>5</sup>採購網見 <http://webtest.pcc.gov.tw/pis/main/pis/client/index.do>

<sup>6</sup>業者華藝公司訪談資料,2018年6月29日。

view of the “academic publishing market monopoly” or database price disputes in Europe, America and China, we really need to be cautious in responding to the market ecology of Taiwan’s academic resources. The open and free resources that are established by National Library have naturally become the solutions advocated by many scholars in Taiwan. However, although the establishment of free resources directly removes the barriers to knowledge access, it also inevitably inhibits the opportunities for the academic publishing industry to thrive. It is more likely to lead to waste of resources or loss of academic output promotion motive due to a lack of competitive environment. For example, according to the National Library’s budget data (including system maintenance, functional expansion, equipment, personnel, business, etc.) in 2018, the expense used for “National Digital Library of Theses and Dissertations in Taiwan” and “Taiwan Citation Index – Humanities and Social Sciences” cost more than NT\$25 million.<sup>7</sup> Its expenditure is second only to the sales of the ProQuest paper database in Taiwan.

This shows that the complete “free & open” policy on degree papers is not necessarily the most effective development model. In the case of limited resources, academic resources cannot always rely on government subsidies. The reasonable supply and demand structure of various academic resources and the price range issue are also topics that should be explored by the public sector and the academia. How to develop a knowledge economy system with a sustainable business model will also be a guiding principle that must be seriously considered and tried by higher education policies. In this part, we can get a glimpse of the feedback mode of each provider. Through investigation, ProQuest paper database can be authorized by traditional business mechanism or OA; however, each article requires an additional fee for listing. The traditional licensor charges US\$25 per article, while OA licensor charges US\$ 120 per article. It is worth emphasizing that through the commercial mechanism authorization the provider to give back 10% of the revenue to each author as a premium.<sup>8</sup> In contrast, CNKI provides one-off remuneration. The author of a doctoral dissertation receives a RMB\$400 database universal inquiry reading card and a RMB\$100 cash remuneration; the author of a master’s thesis receives RMB\$ 60 remuneration and a RMB\$300 reading card.<sup>9</sup> However, under the practical operation, most of the papers come from the cooperation between the database and the school. Under this model, the author may not receive any feedback.<sup>10</sup> Airiti tends to be similar to ProQuest provider in terms of the way the sales amount is commissioned, they reward 25% of revenue as royalty income. However, this part can be flexibly distributed by the institution, the author or even the instructor, and no additional cost is required.<sup>11</sup>

### III. Conclusion: OA is not certainly unconditional

“Master theses and doctoral dissertations” are “government information”? Or does it belong to the “public information” that must be compulsory for free public authorization?

#####

<sup>7</sup>參見 國家圖書館，「中華民國 107 年度中央政府總預算：國家圖書館單位預算」，

<https://nclfile.ncl.edu.tw/files/201803/06cfca18-9a0a-4205-ac84-dd385e983563.pdf>

<sup>8</sup>ProQuest, “Forms & Instructions for Paper Submission of your Doctoral Dissertation or Master’s Thesis,” [https://media2.proquest.com/documents/umi\\_agreement\\_papersub.pdf](https://media2.proquest.com/documents/umi_agreement_papersub.pdf)

<sup>9</sup>中國知網，「關於向中國學術期刊(光盤版)電子雜誌社領取學位論文稿酬的通告」，

<http://www.cnki.net/other/gonggao/GCTG/全国各位研究生敬后 2.html>。

<sup>10</sup>刀背藏身，「学位论文背后的秘密：从一份授权书说起

」 <https://www.weibo.com/ttarticle/p/show?id=2309403992236600728031>

<sup>11</sup>業者華藝公司訪談資料，2018 年 6 月 29 日。

These issues are related to the attributes of a dissertation in a private university or a public university; if we find and care about the academic value and commercial value of the “Scholarly Publishing Industry”, the so-called “output value” is calculated by the total revenue, which comes from the survival of the “industry” and its “survival” benefits the scale of interest and the degree of benefit of the country, universities and users. Can Taiwan, with limited resources, blindly adhere to the OA movement and policies? Similarly, if dissertations are intended to be interpreted as “government information” or “public information”, the considerations are obviously quite contradictory and dangerous.

How to treat the historical development of the international OA movement and the differences in conditions, so that the state can participate in the competition and revitalize the industry while satisfying the public interest and taking into account the practice of copyright property rights and reasonable limits under the spirit of library information services. In Taiwan, we can only introduce more competition, establish a virtuous fairness and a competitive environment with the best benefits, and do not suffer from the competitive disadvantages caused by improper government policy intervention. In other words, neither the public sector nor the private sector monopolizes the market, but bureaucracy does. The scholarly publishing market cannot be a non-equivalent competition between the public and private sectors. It is a fundamental long-term solution for a virtuous cycle of industrial survival and academic development. The government’s thoughtful consideration, good timing for choosing OA, and academic publishing industry policies that receives a wide range of advice are enough to truly achieve the purpose of “promoting the development of national culture” in Article 1 of the Taiwan Copyright Law. It is because the prosperity of “culture” itself relies not only on information service but also on information industry.