

## Chapter 10

# The Construction and Development of Academic Library Digital Special Subject Databases

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### ABSTRACT

*One important component of digital academic library construction is to sort out the unique or rare resources from academic institutions by digitalizing and organizing them by themes. Building special subject databases is an important sub-project under CALIS. Throughout the continued construction and development of Phases I, II and III, a large number of special subject databases have been built. These databases are not only important digital resources that strengthen discipline development, but they are also rich special data resources of digital libraries for higher education in China. By reviewing the development path of the CALIS Special Subject Collection, this chapter will cover the management mechanism, technical platform, standards, social benefits, and philosophy behind it.*

### THE ORIGIN OF CALIS SPECIAL SUBJECT DATABASES

Looking at the collection and subject characteristics of academic libraries nationwide, an important part of Chinese academic library digital resource construction involves fully exploring, processing, and releasing the unique or rare resources of colleges and universities in constructing a digital special subject database. CALIS Special Subject Databases is an important sub-project of the China Academic Library & Information System (CALIS). Throughout the continued construction and development of Phases I, II and III, a large number of special subject databases have been built. These databases, which are convenient, practical, and advanced in technology, have distinct subject characteristics, local characteristics,

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and national characteristics, and they facilitate research, teaching, and national economic development. These databases are not only important resources for colleges and universities in supporting the development of key disciplines, but they have also formed unique digitized special subject collections for China's higher education.

In January 1999, the CALIS Special Subject Databases project was officially launched in order to facilitate the construction of key disciplines, and to explore digital resources construction in academic libraries. The principles of the project include: instilling Chinese characteristics, regional characteristics, and specialties of higher education; keeping close relations with disciplines construction of Project 211, which is a project of National Key Universities and Colleges, initiated in 1995 by the Ministry of Education of the People's Republic of China with the intent of raising the research standards of high-level universities and cultivating strategies for socio-economic development (Wikipedia, 2015); promoting teaching, scientific research, and the development of national economy; and constructing the Special Subject Databases with a standard work basis, scale, and amount of data. The specific goal of building 25 special subject databases was established in April of that year. As of November 2000, those 25 special subject databases began to take shape, and online services became available. The project provided significant practical experience, established a number of construction specifications and technical standards, set up the initial framework and platform of the entire system, and allowed for the exploration of carrying out the construction of digital special subject resources on a national scale. Thus, the enthusiasm of domestic academic libraries to carry out database construction is at an unprecedented high, and the concept of co-construction and the sharing of resources of digital special subject databases is deeply rooted in the project (Zhou, Xie, Hong, Rao, & Liu, 2006).

## **CONSTRUCTION SCHEME AND MANAGEMENT MECHANISMS OF CALIS SPECIAL SUBJECT DATABASES**

### **Construction Scheme**

The fundamental purpose of the CALIS project is to use advanced techniques to create and integrate global academic information resources based on the guiding ideology of co-construction and sharing, and to promote extensive utilization of these resources. Based on this guiding ideology, the CALIS Special Subject Databases project established the construction principles of scattered construction, unified retrieval, resource sharing, and national service. Academic libraries with discipline advantage and characteristic resources are encouraged to be actively involved. Standard and function requirements are unified, and a unified platform will be built for public retrieval. Full texts without intellectual property rights are required for all cooperative-building databases. The contents protected by intellectual property rights are required to provide full texts through document delivery service.

The construction of CALIS Phases I and II mainly focuses on discipline characteristics, including required information for interdisciplinary and frontier subjects of certain key subjects or particular projects, or resources able to reflect the characteristics of higher education; local characteristics, including resources with certain regional and historical characteristics, or closely related with local politics, economy, and cultural development; and collection features, including unique collections or scattered resources that are difficult to use.

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