学科智库理念下的机构知识库建设

Institutional Repository (IR)
Construction under the
concept of subject think tank

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引言 The introduction

中国政府高度重视智库建设,提出要"重点建设一批具有较大影响和国际影响力的高端智库,重视专业化智库建设"

2015年国务院《统筹推进世界一流大学和一流学科建设总体方案》,指出"到2020年,若干所大学和一批学科进入世界一流行列,若干学科进入世界一流学科前列",学科建设得到了各高校的高度重视。

在上述两个背景下提出了"学科智库"的概念,学科智库是专业化智库建设的重要组成部分,是促进学科建设的重要抓手,为高校的学科建设提供智力支持。

The Chinese government attaches great importance to the construction of think tank, raising the initiative of "primarily building a batch of high-end think-tank which has a great influence and international influence and paying attention to the construction of specialized think-tank"

In 2015, the state council worked out the overall scheme "to promote the world first-class university and the first-class discipline construction", pointing out that "by 2020, a number of universities and a number of disciplines into a world-class ranks, a number of disciplines into the world's top discipline", the subject construction has been paid much attentions by many universities.

As an important part of the construction of specialized thinktank, the concept of "subject think tank" is put forward under the background above. subject think tank is one of the important gripper to promote the discipline construction and provide intellectual support for universities.

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1.学科智库理念下机构知识库的功能定位 Function orientation

2016年9月22日由CALIS发起的中国高校机构知识库联盟成立,旨在共同合作、探索机构知识库建设这一重要课题。

机构知识库以学术产出成果为主,外部资源为辅,是体现学科建设水平的重要平台。

本文提出面向学科智库理念的机构知识库建设,是以机构知识库建设的数据源和技术为基础,通过功能的重新设计,实现服务于学科发展的决策支持功能。

By CALIS initiating, Chinese universities institutional repository alliance established on September 22,2016, aiming to work together and probe the issues about how to promote the institutional repository construction topics.

Institutional repository given priority to academic output results and supplemented by external resources. It is an important platform reflecting discipline construction level.

The construction of IR under the conception of subject think tank which is based on the data sources and technology is mainly to realize the function of serving for the subject decision-making by redesigning the function of IR

1.学科智库理念下机构知识库的功能定位 Function orientation

动态性

dynamic



1.学科智库理念下机构知识库的功能定位 Function orientation

能够较准确地为学科的发展提供前瞻性预测和警戒,实时化地报道学科发展最新动态,客观地评价学科和人才发展现状以及提供个性化的深层次学科领域分析报告。

It can accurately provide prospective forecast and warning for the development of the discipline and real-time report of the latest trends of the discipline's development, also it can objectively evaluate the subject and talent development under current circumstances as well as provide deeply personalized field analysis report.

2.学科智库理念下机构知识库功能模块设计 Function module Design

根据上述对学科智库理念下机构知识库功能与任务定位,将机构知识库设计为四个模块:

- 1. 学科危机预警模块
- 2. 学科竞争力评价模块
- 3. 学科贡献度分析模块
- 4. 学科情报服务模块

According to the function and task orientation of the institutional repository based on the concept of the subject think tank, the institutional repository is designed into four modules:

- Disciplinary crisis warning module
- Discipline competitiveness evaluation module
- Academic contribution analysis module
- Subject intelligence service module

2.学科智库理念下机构知识库功能模块设计 Function Design

学科危机预警 Crisis warning 学科竞争力评价 Competitive assessment

学科贡献度分析 Contribution analysis

学科情报服务 Intelligence service

应用层 The application layer



聚合层 The aggregation layer



数据层 The date layer 通过数据检索、数据可视化、趋势分析等技术实现机构知识库的增值应用。

对各种异构数据源进行聚合,采用云计算和关联数据等技术实现信息资源的聚合与处理。

数据来自购买数据库(CNKI、WOS、SCOPUS、CSSCI等)+外部数据资源(包括大学排行,学科评估及教学成果、人才资料等。

通过建立基于不同方法 (如定标比超、SWOT分析、 趋势外推法、回归分析法、灰 色理论等方法)的学科危机预 警模型来检测学科发展状况, 进行预测并适时发出警报。 Through establishing disciplinary crisis warning models based on the different methods (such as benchmarking, SWOT analysis, trend extrapolation, regression analysis, gray theory method and so on) to examine the development of the discipline, forecasting, and timely alarm.

在机构知识库的应用层利用预测模型对某高校目前的学科实力(学术产出、科研经费、科研人员构成等)以及未来的人才规划进行分析,预测未来成果产出能力(预测值),与目标值(该校十三五规划的目标值和阶段成果目标)对比,如果预测值低于目标值,则发出预警通知。

In the application layer of institutional repository using the prediction model to integrate a university current disciplinary power (academic production, scientific research, scientific research personnel constitution, etc.) and the future talent planning to predict the future results output capacity (predicted value), and compare with the target value (in 13th Five-Year Plan the school planning target value and stage achievement goals), if the predicted value were lower than the target value, the warning would be sent out.



省内主要竞争对手分析

Competitor analysis in the province

国内主要竞争对手分析

Domestic competitor analysis

优势学科竞争对手分析

Superiority disciplines competitive analysis

大学排行榜主要指标分析

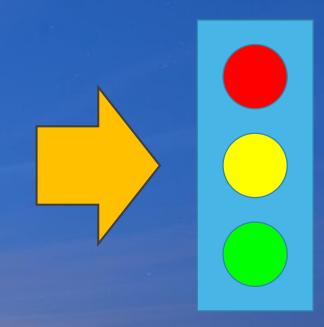
Analysis of the main indicators of University Rankings

中国自然指数排名分析

Analysis of China natural index ranking

预期 目标

Expected target



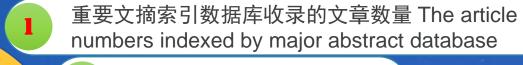
对自身机构内不同学科未来发展水平的合理预测和对学科在重要指标中所处位置的研判,继而根据目标值做出预警。

The function of this module is to conduct a reasonable prediction to the development level and an assessment of different disciplines in the important indexes and to make a further warning according to the target value.

2.2学科竞争力评价模块 Discipline competitiveness evaluation module



2.2学科竞争力评价模块 Discipline competitiveness evaluation module



学术影响力

Academic influence

2 被引用次数 Cited numbers

- 学科规范化的引文影响力 Subject standardization of cited influence
- 4 高产作者的数量 The number of prolific authors
- 5 学科H指数 Discipline H index
- 6 学术新星的数量 The number of academic stars





2.2学科竞争力评价模块 Discipline competitiveness evaluation module

通过建立面向不同学科的可选的评价指标体系,并赋予面向不同学科的指标权重,对学科竞争力做出评价。学科竞争力评价模块主要实现的功能有:优势学科和潜力学科挖掘,综合评价学科竞争力。

Through establishing optional evaluation index system for different disciplines, and giving index weights respectively to different disciplines, this module evaluates discipline competitiveness. The main functions of which are: advantage and potential disciplines mining, comprehensive evaluation of competitiveness.

The function orientation

2.3学科贡献度分析模块 Academic contribution analysis module



学科贡献度测量指标 Academic contribution Measurement index.

作者被引量/学科总被引量 The amount of author's article cited / Subject total cited 作者发文量/学科总发文量 author 's article numbers/Subject total article numbers 作者在学科重要期刊或报纸发文量/重要期刊或报纸学科发文总量 author 's article numbers in Newspapers

and periodicals/total numbers in Newspapers and periodicals

作者的学科规范化引文影响力 The author's subject standardization citations influence 作者的高被引用论文百分比 Highly cited papers percentage

2.3学科贡献度分析模块 Academic contribution analysis module

学科贡献度分析模块具体实现的功能是促进人才梯队搭建和人才引进以及团队和学科机构的调整。

The function of academic contribution analysis module is to promote the construction of talent team and the enrollment of talents, as well as the adjustment of team and discipline structures.

The function orientation

2.4学科情报服务模块 Subject intelligence service module



基于机构知识库的数据和资源以及分析平台,通过在机构知识库中设置权限管理

Based on the data and resources as well as the analysis platform of institutional repository, through set authority management in institutional repository

2.4学科情报服务模块 Subject intelligence service module

耳目 Eyes and ears 学科 快报 Discipline letters 动态跟踪,包括学科成果被重要文摘索引数据库(如WOS 、SCOPUS、CSSCI等)收录引用通知,在重要专业媒体和综合媒体中的报道等

Dynamic tracking, including subject results, is cited by important abstract index databases (eg WOS, SCOPUS, CSSCI, etc.), reports in key professional media and comprehensive media, etc.

机构知识库 Institutional repository

尖兵 pioneer 学科 态势 Discipline situational 领域深度分析报告等 Profound field analysis report

参谋 advisor 情报 决策 Intelligence decision-making 通过挖掘分析提供个性化情报服务

Providing personalized information service through the analysis of the mining

3 机构知识库联盟建设对于区域学科智库的推动作用

Institutional repository alliance for the promotion of regional subject think tank

- 1、机构知识库联盟作为加强学科建设的重要渠道,丰富了学科智库的内容和渠道;
- 2、机构知识库联盟相对于单体高校机构知识库来讲,其对学科智库作用的贡献度远远大于后者;
- 3、机构知识库联盟有助于推进学科智库服务区域教育、科研等有关方面工作乃至全局工作的宏观决策水平;
- 4、机构知识库联盟作为协同创新组成的知识库群,有利于提升区域学科智库的创新水平与可持续发展。

- 1, As an important channel to strengthen discipline construction, institutional repository alliance has enriched the contents and channels of the subject think tank;
- 2, The contributions of The institutional repository alliance is far greater than that of single Institutional Repository;
- 3, The institutional repository alliance helps to promote the academic think tank service in the area of education, research and other related work as well as macro decision-making level for the overall work;
- 4, The institutional repository alliance as the knowledge base group composed of collaborative innovation, is conducive to enhancing regional think-tank levels of innovation and sustainable development.

学科智库理念下的机构知识库建设

Institutional Repository (IR) Construction based on the concept of subject think tank

本文探讨了学科智库理念下机构知识库建设的思路与办法,并对机构知识库的功能模块进行了初步设计,赋予了机构知识库建设新的使命与内涵,指出了机构知识库联盟建设对学科智库所具有的重大作用。

推进一流学科建设,需要高水平的学科智库提供指导和服务,建设高水平的学科智库客观上要求我们进一步重视机构知识库与机构知识库联盟建设,把这项工作探索好、规划好、发展好。

This paper discusses the ideas and methods of the construction of the institutional repository based on the concept of subject think tank, it also gives a preliminary design of the functional modules of the institutional repository, and gives a new mission and meaning to the construction of the institutional repository, pointing out that the institutional repository alliance construction play a significant role in subject think tank.

To promote the construction of the first-class discipline requires a high level of discipline think-tank to provide guidance and services, which objectively requires us to pay more attention to the construction of institutional repository alliance and institutional repository to explore this job well, plan well and develop well.

山东师范大学坐落在历史文化名城济南。建校66年来,学校植根齐鲁文化沃土,汲取泉城人文灵韵,秉承"尊贤尚功、奋发有为"的校园精神和"弘德明志、博学笃行"的校训,自觉传承创新齐鲁文化,努力彰显教师教育特色,目前已发展成为一所学科专业齐全、学位体系完备、师资人才充沛、社会声誉优良的综合性高等师范院校









博学写行





长清湖校区图书馆建筑面积50934.67平方米, 地上9层,半地下1层,建筑高度46.7米,于2015 年6月投入使用。主体建筑呈"八本书"造型,为 学校八大景观之一,被誉为"天地书声"。为学 校信息资源中心、读者学习中心和学术与文化交 流中心。 千佛山校区图书馆于1986年建成使用,建筑面积13400平方米,设总服务台、教育资料中心、电子阅览室、综合书库、教育图书阅览室、化学化工图书阅览室、生命科学图书阅览室、文学理论图书阅览室、特藏阅览室、中外文现/过刊阅览室、报纸阅览室、教师研修区、图书漂流与学习共享空间等。计1400多个阅览座。



















The End Thanks

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