Current Trends and Issues of Open Access Activities in Korea

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I. Research Environment
II. Open Access Initiatives in Korea
III. OAK: Open Access Korea
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I

Research Environment

1. Continuous Waves
2. Research Environment Changes
3. Towards a Global Korea
4. Korea’s Academic Competitiveness
5. Dependence on Overseas Information
Continuous Waves to Scholarly Communication

Open Innovation
- Google Ecosystem
- Clouds Computing
- Open Science
- Big Data
- Visualization
- Personalization

Open Access
- Copyleft
- Copyright
- Wikis
- Sharing
- Tagging
- BioWeb
- Digital Preservation
- Data.gov
- Big Deal

Digital Convergence/Divergence
- Social Network
- Sustainability
- E-journal

Interactive Journal
- Interaction Web
- Speaking Web
- Web 2.0
- Collaboration
- Semantic Web

Article Evolution!
Research Environment: Changes

Open Data Movement

4th R&D Paradigm

Mobile Computing
Social Networking
Cloud Services
Personalization

Data.gov
Science.gov
Towards a Global Korea

GDP rank 15th
IMD(22th, 2012)

Step up Smart Korea, Global Korea
Korea’s Academic Competitiveness

SCI Papers 39,843, world rank 11th (2010)
Technology/Science Competitiveness
5th/14th (2011, 2012)
Dependence of Overseas Information

High Dependence of Overseas Publication
Citation rate: 70~95%

Times Cited 30th (2006~2010)

Major S&T Information dependence, 80%

Need for Globalization of Korean Journal
II

Open Access Initiatives in Korea

1. Why Open Access in Korea?
2. Open Access Initiatives
3. Korea Science
4. KoreaMed/Synapse
5. dCollection
6. Academic Society Village
Why Open Access in Korea?

Need for Activation of Knowledge Ecosystem

I can’t subscribe to the journal in which my paper is published.. God!!

Is there any way to manage the my digital contents?

Is there any way to manage the research output of the scientists efficiently at my organization, and promote them world-wide?

Is there any way to increase the visibility of Korean researchers globally?

Why can we read about government funded research output only through foreign publishers demand subscription?

Let our academic society have wide access to research papers via Open Access
Current Status of Open Access

University (Repository)
- KOASAS in KAIST (2007)
  - to assist self archiving of professor research output
  - type: articles, working papers
- S-space in SNU/ Inha Univ (2008~2009)
  - to collect, preserve, share academic information produced in university
  - type: proceedings, research data, project report, lecture note

Research Inst. (Integration)
- KISTI (2009~)
  - Leading OA initiative and OA system development with MCST
  - Development of Institutional Repository
  - Publishing open access journal
- KERIS
  - Development of Institutional Repository and distribution
  - Assist universities for OA initiative

Academic Society (Open access journal)
- KOFST2010~)
  - OA support of excellent journal as globalization project of academic society: 3 Societies including System biology (2009)
  - Publishing first OA journal in Korea
- KAMJE (2007)
  - KoreaMed Synaps: XML full text 학술논문 서비스
a Global gateway to korean scientific and technical information providing metadata and full-texts. It also provides other scientific information such as news, events and links in Korea.

http://koreascience.kr

As of March 7, 2013, there are 291 journals/21 SCI, 34 Scopus Journals
As of March 7, 2013, there are 198 journals.

Korea Academy of Medical Sciences

A request was made to the Ministry of Health and Welfare calling for legislation of a law, including Open Access publishing cost, by applying the U.S. NIH model.
institutional repository system operated by KERIS. It has been implemented to over 200 colleges in Korea

**dCollection Status : colleges**

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As of December, 2012, there are 1,070,000 domestic theses
Academic Society Village

a Korean scientific and technical information portal service operated by KISTI. It provides fulltext papers and metadata published by Korean Academic Societies mostly in fields of science and technology.

As of March 2013, 727 societies participated and 1,221,145 articles provided.

http://society.kisti.re.kr
OAK: Open Access Korea

1. OAK: What is?
2. OAK: Major Activities
3. OAK Publishing
4. OAK Central
5. OAK Repository
6. OAK Portal Service
7. OAK Governance
8. OAK Promotion & Cooperation
OAK: What is it?

• Knowledge cooperative leading to open access and knowledge information
  – a knowledge cooperative consisting of industries, universities, research institutes, and experts.
  – **Anyone can join**, including the government, private organizations, researchers, academic societies, libraries and research institutes.
OAK: Major Activities

- Development and Distribution of Repositories
- Publication of Open Access Journals
- Open Access Information Integration Service
- Domestic/Global Promotion and Cooperation

Implemented through a project for “creative management and spread of knowledge contents at national libraries” conducted by the Ministry of Culture, Sports and Tourism (2009 - present)
Construction of World-class Korean-style Open Access Academic Journals and Establishment of Electronic Publishing Service
Collecting OA Journals→XML DB→Distribution

Collecting Qualified OA Journals

- 14 jrl. (2011)
- 6 jrl. (2012)
- 25 (2013)

Efficient XML DB

- 935 건 (2011년)
- 1,835 건 (2012년)
- 2,735 건 (2013년)

[OAJ numbers]

[XML 누적 구축량]

XML Full-text Publishing

- PMC XML DTD 3.0
- XML Workbench
- XML Creation/Validation

Korean OA Journal

- XML full-text 밑입기

Archive (PMC DTD 3.0 format)

future e-journal (New Journal Layouts)

OAJ metadata distributor (OAI-PMH standard)

promotion
distribution
OAK Central

OAK Central Service (http://central.oak.go.kr)

- Archive of domestic open access academic journals
- XML fulltext of major Korean research papers
- Search of Korean open access publications
- Value-added service, including images and tables

“New interaction to paper by improving online paper delivery method

1) Providing new journal layout reflecting logic structure (abstract, text, ref, table, figure..) of academic papers
2) Providing article navigator for direct move to desired section
3) High value-added service, including images and table search thru deep indexing and reference linking
OAK Repository

Open Access repository modified to fit Korea’s search environment based on Dspace

- Support of diverse types of data format
- Easy for global dissemination through search portals such as Google
- Supports All in-One platform

http://repository.oak.go.kr
OAK Portal Service

Archiving, Sharing and Disseminating Process

construct

OAK Repository

Preservation and Management

OAK Portal

Integrated Search Service

OA Metadata Harvest
Integrated Search
Sort/Filter/Analysis/
Monitoring/Link
Semantic Search

National Repository

Disseminate

Global Dissemination of Korean OA Information

25 inst., 192,000 contents
OAK Portal Service

OAK Portal Service (http://portal.oak.go.kr)

- One-stop service of various OA contents
  - Integrated search based on standard format
- Reliable information with confirmed quality
  - Current information through close cooperation
- Gateway linked to OA channel worldwide
  - Gateway for spreading domestic OA information worldwide
- High value-added service
  - User access channel expansion through cooperation with commercial portals
OAK Governance

Spread and Promotion of Open Access Movement through Encouraging Participation of Various Stakeholders

Strategy

OA Governance Support
- Cooperation through OA expert forum
- Activation of OA movement

Participation of Global OA Governance
- SCOAP3 & UNESCO
- Global service of Korean OA contents

Research on OA policy
- Projects on OA policy and system
- Public access policy about public-funded research output

Spread of R&D Output
- Publishing and dissemination of repository
- Hosting and attending international conferences
OAK: Promotion and Cooperation

Cooperation Activities for Open Access

- Promotion and increased awareness of domestic Open Access
- Identification of measures for cooperation with related organizations (National Library of Korea, KERIS, KOFST..)
- Participation in Open Access Week events
- Use of experts for analysis of publication and circulation trends of domestic academic organizations

Experts’ Advice and Business Promotion

- Survey of OA cases by Korea Association
- Survey of Open Access Cases at IBC (POSTECH)
- Experts’ meeting for establishment of OA governance
- Announcement of Korean-style
- Open Access at Open Knowledge Forum
- Business promotion and lecture at the national convention of libraries
- Promotion and spread of Open Access programs
- Experts’ meeting for construction of OA cooperation system
- Advice on OAK-IR and validation of its utility
- Demonstration and demand survey of OAK-IR
- Establishment of guidelines and plan for introduction of OAK Repository
- Public Access policy on research achievements made with public funds
- International Open Access conference
Future Remarks
Future Remarks

• KISTI promotes globalization of Korean S&T information continuously through Open KISTI, Open Service.

  – provides sustainable access to national STI

  – supports an open access spirits and help korean academic societies, researchers and users to be visible worldwide
Boosting S&T Knowledge Ecosystem

Policy & Plan, Knowledge Infrastructure, Sustainable Support
National Knowledge Ecosystem
Open KISTI, Open Service

O² Provider of Korea National S&T Ecosystem

NTIS
OK Central
NDSL
Science Data
KSCD
Science village2
Korea Science
ACOMS
Paper
Report
Standard
Trend
Patent
OAK Central
OAK Portal
OAK Repository
KOSEN
Go with OAK for Open Access

Thank you!