

Functions and Roles of Education Research Institute: Research Process in KEDI

From Planning through Evaluation to Dissemination

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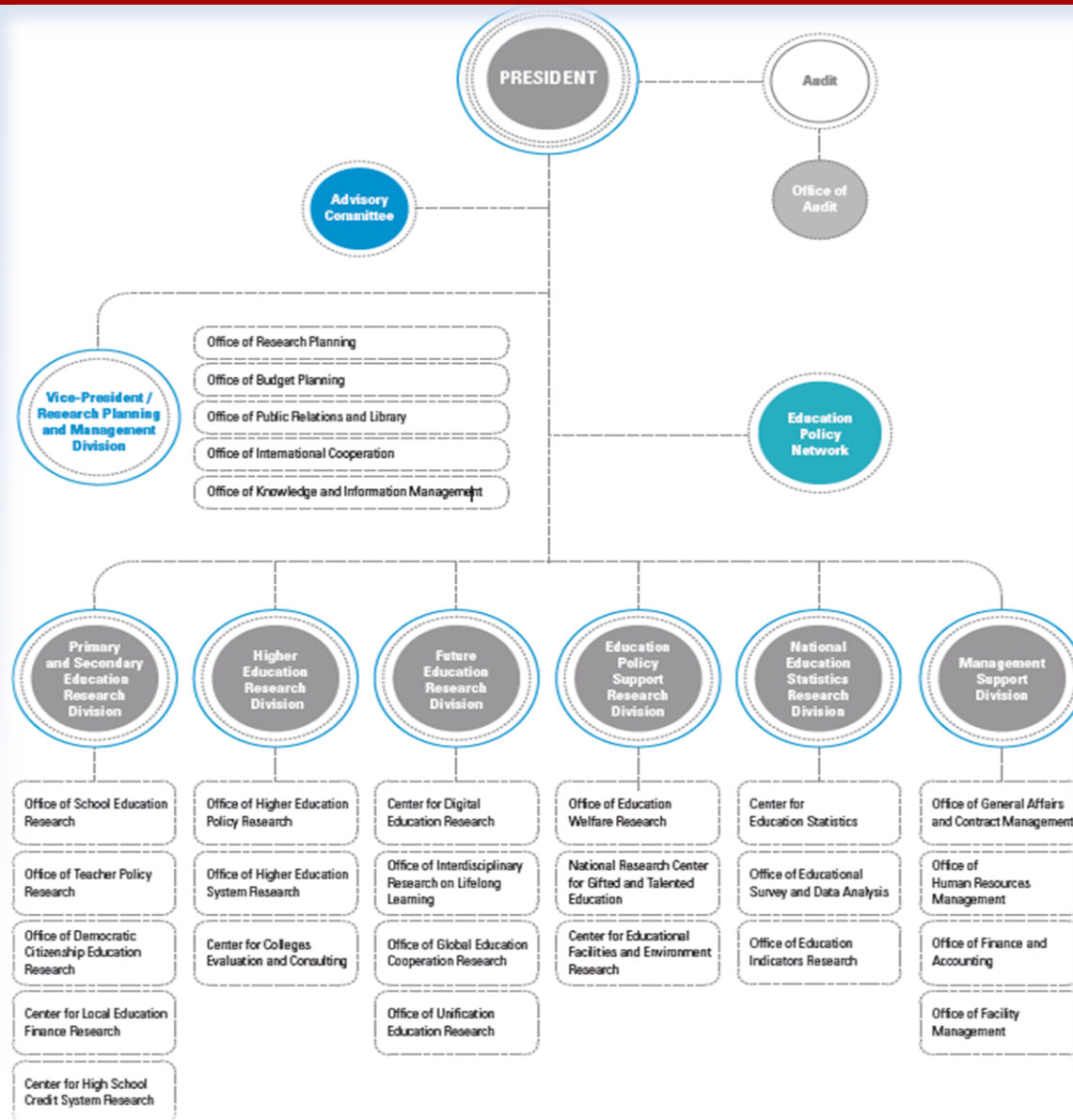
➤ KEDI Goal: Establishment Purpose

Contributing to improving **‘the quality of life of the people’** and **‘national development’** **through education** by conducting comprehensive and scientific **research** for solving problems facing Korean education and developing an innovative education system

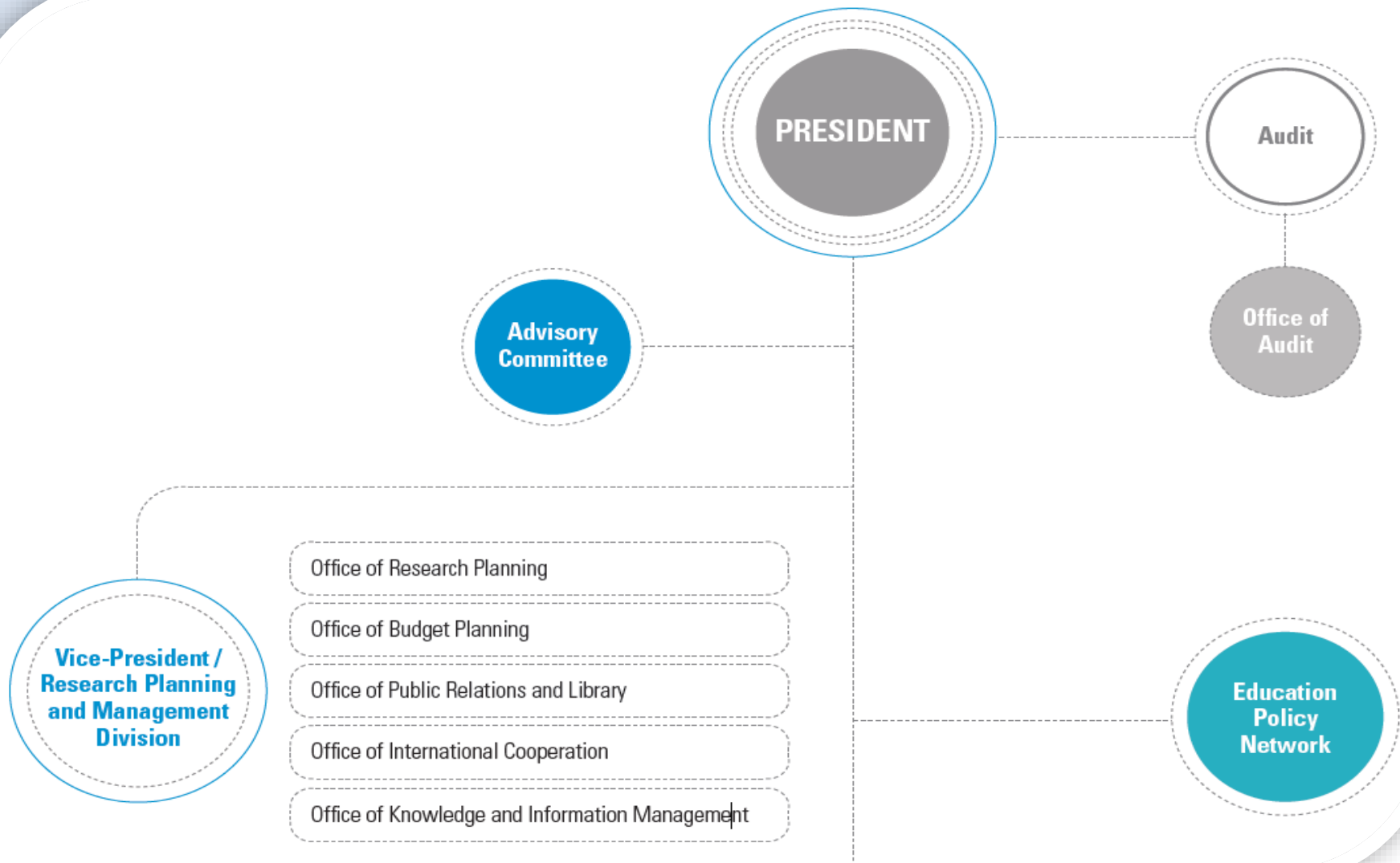
➤ KEDI Functions

- ① Comprehensive research and development on preschool, elementary and secondary education, higher education, and lifelong **education policy**
- ② Research and development on **teacher, education finance, educational facilities and environment**
- ③ Research and development on **distance education**
- ④ Research and development on **global educational cooperation**
- ⑤ Research and development on **gifted education**
- ⑥ Research and development on **education statistics**

➤ KEDI Organization



➤ KEDI Organization



➤ KEDI Organization



➤ Types of Research Projects

■ Types by Fund

Government funded, directly from MOEF

Consigned/commissioned research/non-research projects from MOE and other non-profit research institutes

Overhead income from consigned/commissioned projects

➤ Types of Research Projects

■ Types by Purpose

Policy research focused on policy contribution

Academic research focused on academic contribution

- ✓ Academic research less than 30% of the total research budget

➤ Types of Research Projects

■ Types by Period

Long term, 10~12-month research projects (planned in the previous year)

Short-term, not more than 6-month Research projects (needs-based in the current year)

- ✓ Short-term research projects less than 30% of the total research budget

➤ Research Budgets

- Types by fund

Government funded
(36 projects)

\$ 2,166,827

Consigned/commissioned

\$ 46,577,274*

Overhead income
(9 projects)

\$ 281,256

*including non-research projects, mostly occupied

➤ Research Budgets

- Types by Purpose

Policy research
(33 projects)

\$ 1,521,716

Academic research
(12 projects)

\$ 645,201

*excluding consigned/commissioned research

➤ Research Budgets

- Types by Period

Long-term research
(35 projects)

\$ 1,969,226

Short-term
(10 projects)

\$ 197,601

*excluding consigned/commissioned projects

➤ Research Planning

Goal	<ul style="list-style-type: none">• Strengthening the role and responsibility (R&R) as a national research institute by presenting policy alternatives to reasonably solve the pending issues
Direction	<ul style="list-style-type: none">• Mediating [Policy Design & Making → Field Implementation and Settlement] and [Field Request → Policy Design]• Contributing to the design of the national education system to respond and lead the post-corona future society
Strategies	<ul style="list-style-type: none">• An institute-wide research planning system led by Research Planning Office & Research Project Review Committee• Comprehensive internal and external policy environment and government policy task analysis• Expansion and systematization of diversified demand surveys targeting policy consumers• Facilitating proposals from researchers based on policy demand• Institutionalization of participation in research planning by outside experts in various academic fields

➤ Research Planning

■ Procedures

Step 1

- Analysis of internal and external policy environment

Step 2

- Identification of national-social pending issues

Step 3

- Setting key agenda for derivation of research projects

Step 4

- Proposals of research projects based on policy demand

Step 5

- Selection of research projects

➤ Research Planning

■ Procedures

Step 1

- Analysis of internal and external policy environment

- ✓ Analysis of future prospects and current status in relation to education
- ✓ Analysis of the major national tasks in the field of education, the Ministry of Education and the National Education Council's major policy tasks and agenda

➤ Research Planning

■ Procedures

Step 2

- Identification of national-social pending issues

- ✓ (Top-Down) Policy Research Council with participations of Government, national-level committee, National Assembly, city and provincial offices of education to analyze pending issues
- ✓ (Bottom-Up) Analysis of pending issues at the level of divisions and offices/centers inside

➤ Research Planning

■ Procedures

Step 3

- Setting Direction for derivation of research projects

- ✓ Based on the results of analysis of policy environment and pending issues, establish a direction for research in line with the purpose and role of the institution
- ✓ Reflecting the results of consultation with outside experts (Research Planning Advisory Committee) on the research direction

➤ Research Planning

■ Procedures

Step 4

- Derivation and open proposal of research projects based on policy demand

- ✓ Identifying potential research projects through demand surveys targeting policy consumers (government, provincial offices of education, teachers and students, and the public)
- ✓ Inside research project competition based on the results of policy environment analysis and policy consumer participation

➤ Research Planning

■ Procedures

Step 5

• Selection of research projects

- ✓ Selection of research projects through a multi-level process of collecting internal and external opinions
- ✓ ① Review of proposals → ② Presentation of proposals → ③ Final selection of projects
- ✓ Consultation by the Research Planning Advisory Committee on the proposed project in terms of the importance and urgency of the research project

➤ Research Implementation

- Research Project Management System
 - Establishment of the basis for full-cycle management of research project planning, conducting, evaluation, and feedback through the research project management system (information system)

The entire process of research project operation is systematically managed with an information system to improve the systemicity of conducting research projects

Improve research management efficiency through integration and linkage between research and administration

Support continuous management of policy/academic contributions after the end of the research as well as the process of conducting research through the management of the history and output of each research project

➤ Research Implementation

- Research Project Review/deliberation
 - Full-cycle research management through the operation of a three-stage review system of 「Implementation Plan review-Interim review-Final review」

At each stage of review, the designated review committee members and the general review committee members participate in in-depth discussion by research project

Two of the designated review members, including government officials, are required to participate in all three stages to maintain continuity of research management

➤ Research Implementation

■ Research Ethics Review

- Establishment of review and management procedures for each stage of research to comply with research ethics

Start	<ul style="list-style-type: none">• Conduct research ethics education for researchers• Commitment to comply with research ethics when participating in a research project (specify consent items in the research project participation agreement)
Interim	<ul style="list-style-type: none">• Interim review for compliance with research ethics during interim review• Compliance with less than 10% plagiarism rate as a result of Copy Killer inspection• A list of references and the original should be submitted
End	<ul style="list-style-type: none">• Written review of research ethics by the Research Ethics Inspection Team on the evaluation report• The final result of the Copy Killer inspection and the confirmation of research ethics compliance are submitted.

➤ Research Implementation

- Research Ethics Inspection
 - IRB: Bioethics Review Committee
 - Conduct review to secure bioethics and safety for human research projects, such as safety of research subjects and personal information protection measures
 - Secure the ethical and scientific validity of the research, and identify if legitimate research procedures are employed

➤ Research Evaluation

- Research report evaluation and feedback
 - Final evaluation of the research report through an evaluation group composed of 100% external experts
 - Research report evaluation results are notified to the researchers along with specific review opinions.
 - Final revisions and supplements are implemented before the research report is printed.
 - Establish an objection procedure for the evaluation result, and when an objection is filed, the research report is reviewed by the evaluation committee, and when the objection is admitted, it is finally reflected in the evaluation result.

➤ Research Result Dissemination

- Means of disseminating research results
 - Publishing on the KEDI homepage

KEDI 발간물

연구자료

- 연구보고서
- KEDI Brief
- 카드뉴스
- 영상보고서

교육동향

간행물

KEDI 조사자료

OECD 교육정보

KEDI 아이디어뱅크

연구보고서

전체 KEDI 보고서 KEDI 연구자료

yyyy-mm-dd ~ yyyy-mm-dd 분류

* 원문이 공개되지 않은 보고서는 수탁연구과제의 결과물으로써, 수탁기관의 승인 없이 원문을 제공할 수 없습니다.

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연구보고서	보고서분류	출판일자	연구책임자	조회수	파일
「미래사회 대응 고등교육 정책방향 도출 연구(고등교육정책 포럼)」...	수탁연구	2021.03.02	조옥경	167	
「미래사회 대응 고등교육 정책방향 도출 연구(고등교육정책 포럼)」...	수탁연구	2021.02.24	조옥경	107	
「미래사회 대응 고등교육 정책방향 도출 연구(고등교육정책 포럼)」...	수탁연구	2021.01.26	조옥경	105	
2020년 온라인수업 운영 제 2차 시·도교육청 담당자 협의회(CRM202...	수탁연구	2021.01.01	황준성	373	-
한국교육개발원 교육여론조사(KEDI POLL 2020)(RR2020-33)	기본보고	2020.12.31	임소현	736	
사교육 모니터링 체계 구축 방안 연구(RR2020-32)	기본보고	2020.12.31	김혜자	393	
증거기반 교육정책 모니터링 및 이행을 위한 국가교육지표 개발 연...	기본보고	2020.12.31	박성호	339	
개도국 교육지표 개발·협력 사업(V): 신남·북방국가를 중심으로(RR20...	기본보고	2020.12.31	김창환	281	

➤ Research Result Dissemination

- Means of disseminating research results
 - Posting of research results using YouTube(KEDI TV), SNS



➤ Research Result Dissemination

- Means of disseminating research results
 - Press contributions and interviews
 - Hosting forums, seminars, and academic conferences



➤ Research Result Dissemination

- Publication and distribution of various research products
 - Research reports
 - KEDI Brief
 - Collection of policy proposals



■ 보도자료

KEDI, 2020 글로벌코리아 박람회 컨퍼런스서 교육세션 주관
한국교육개발원(KEDI) 현장 반성진은 12월 10일(목)에 「고등교육ACT(성숙 교육 분야 국제협력)를 주제로 '교육세션'을 주관했다. 이번 세션은 경제인문사회연구회를 중심으로 개최하는 2020 글로벌 코리아 박람회(세계의 평화, 번영, 지속가능발전에 기여하는 세계 선도 국가 대한민국)의 일환으로 개최되는 컨퍼런스 내 세션으로 교육을 주제로 진행됐다.



지재희보기

제164차 KEDI 교육정책포럼 '사립대학 재정 운용 현황
및 시뮬레이션' 개최



지재희보기

KEDI BRIEF

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2020 Vol.01

National University Governance: The Concept and Structure¹⁾

Boon, Moon / Office of Higher Education System Research

Summary

Issue Across the world, university governance is an important reform agenda in the field of higher education (OECD, 2014; Lee & Kim, 2011, p. 270). University governance plays a vital role for supporting higher education institutions with education and research activities, as well as operations and planning. The current Korean administration has endeavored to reform university governance to create a more efficient university structure, and increase operational efficiency and transparency within higher education. In particular, the current government administration has endeavored to reform university governance to create a more efficient university structure, and increase operational efficiency and transparency within higher education. In particular, the current government administration has endeavored to reform university governance to create a more efficient university structure, and increase operational efficiency and transparency within higher education.

Analysis University governance is an important reform agenda in the field of higher education (OECD, 2014; Lee & Kim, 2011, p. 270). University governance plays a vital role for supporting higher education institutions with education and research activities, as well as operations and planning. The current Korean administration has endeavored to reform university governance to create a more efficient university structure, and increase operational efficiency and transparency within higher education. In particular, the current government administration has endeavored to reform university governance to create a more efficient university structure, and increase operational efficiency and transparency within higher education.

Policy implication When referring the concept of national university governance, there were initial disagreements in defining founding values for the concept of national university governance. We learned that national university founding values are not identical for various national universities. We also learned that although most agree on the need for engaging various groups of internal and external stakeholders in national university education, there were different perspectives on who should be engaged, and what they should do. When establishing national university governance structure, it was evident that national university governance was different from corporate governance, and thus it was necessary to establish a distinct governance structure for national universities. We also found differing perspectives on whether or not to include staff unions, student governments, and the committee on finance as part of the national university governance. The call to establish and maintain a stable national university governance system are to determine the membership, roles, and responsibilities of who should participate in a national university's decision-making process, and the development of a systemic way to make decisions among the members.

1) This brief is developed based on the following KEDI research project: Moon, B. (2019). Policy diagnosis and strategies for higher education innovation (2019-2020) in Korea: Supporting national university governance. Korean Educational Development Institute.



/ 현안보고 OR 2020-08 /

2020 한국교육개발원 정책제안서



한국교육개발원
KOREAN EDUCATIONAL DEVELOPMENT INSTITUTE

Thanks for your time!





Korean Education Statistics at KEDI

Park, Keun-Young (kpark9@kedi.re.kr) – June 15th, 2021

Contents

- Brief History of Education Stat. in Korea
- Introduction of the Center for Education Statistics at KEDI
- Employment Statistics for Higher Education Institution Graduates
- Developing the Employment & Career Information System Using Employment Stat.
- Current Data Issues in Korean Education Statistics
- Challenges and Future Plans for Korean Education Statistics

History of Education Statistics In Korea

1960s and 70s

Paper-based Survey

- 1962 - Launch of the First survey
- Household Visit Survey
- Verification using abacus
- Low Reliability & Applicability of Data

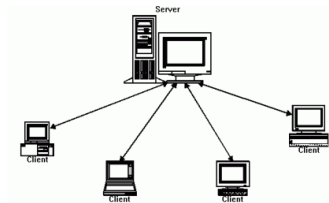


1980s and 90s

Computer-based Survey

- Application of Computers for Collecting and Creating Datasets
- 1998 - Independent C/S Survey System

Client-Server System

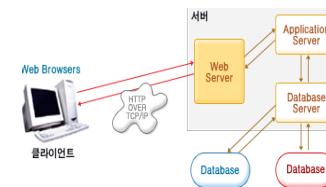


2000s

Web-based Survey

- 2000 - Web-based Survey (Higher Education Stat.)
- 2007 - Web-based Survey (Lifelong Education Stat.)

Web Based System



2010s

DB to DB Linkage

- 2010 - Linked to National Health Insurance Service DB (Employment Stat.)
- 2010 - Linked to NEIS (Primary & Secondary Stat.)
- 2016 - Survey Using Direct Transfer of Raw Data (Higher Education Stat.)



History of Education Statistics In Korea



Statistics Yearbook
of Education

1962



Transferred to
KEDI

1995



Lifelong Education
Statistics

2004



Linked to NEIS
Linked to Health
Insurance DB

2008



Statistics on Employment of
Vocational High School
Graduates

2021



National
Coordinator for
OECD INES



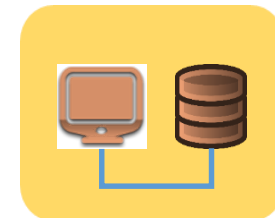
Statistics on
Employment of
Higher Education
Graduates

2004



Linked to Public
Disclosure of
School/College
Information

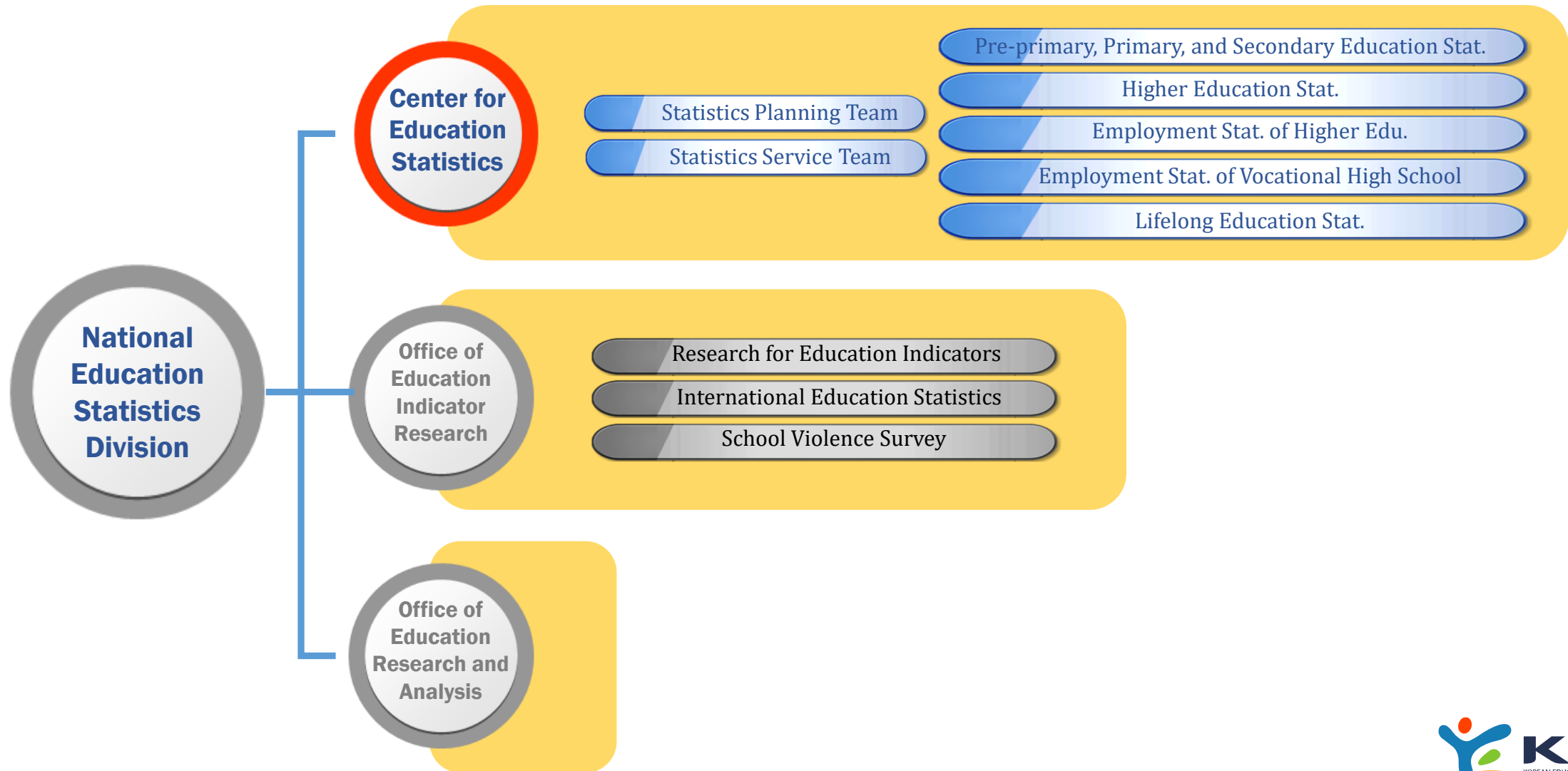
2007



Linked to EduData
System

2012

Org. Structure of KEDI Education Statistics



Major Tasks of Individual Team

+ Approx. Budget for 2020

Pre-primary, Primary and Secondary Education Statistics (\$2,159,000)

- Survey of Pre-primary, Primary and Secondary Education Stat.
- Publishing Various Research Outcomes (Yearbook, etc.)
- Building and Managing Education Statistics DB

Lifelong Education Statistics (\$856,000)

- Survey on Nationwide Lifelong Education Facilities and Participants
- Publishing Various Research Outcomes (Yearbook, etc.)
- Building and Managing Lifelong Education Stat. DB

Employment Stat. of Higher Edu. (\$1,660,000)

- Survey on Graduates from Higher Education Institutions
- Publishing Various Research Outcomes (Yearbook, etc.)
- Building and Managing the Employment Stat. of Higher Edu. DB

Employment Stat. of Vocational High School (\$484,000)

- Survey on Graduates from Vocational High Schools
- Building and Managing the Employment Stat. of Vocational High School DB

Higher Education Statistics (\$1,370,000)

- Survey of Higher Education Statistics
- Publishing Various Research Outcomes (Yearbook, etc.)
- Building and Managing the Higher Education Stat. DB

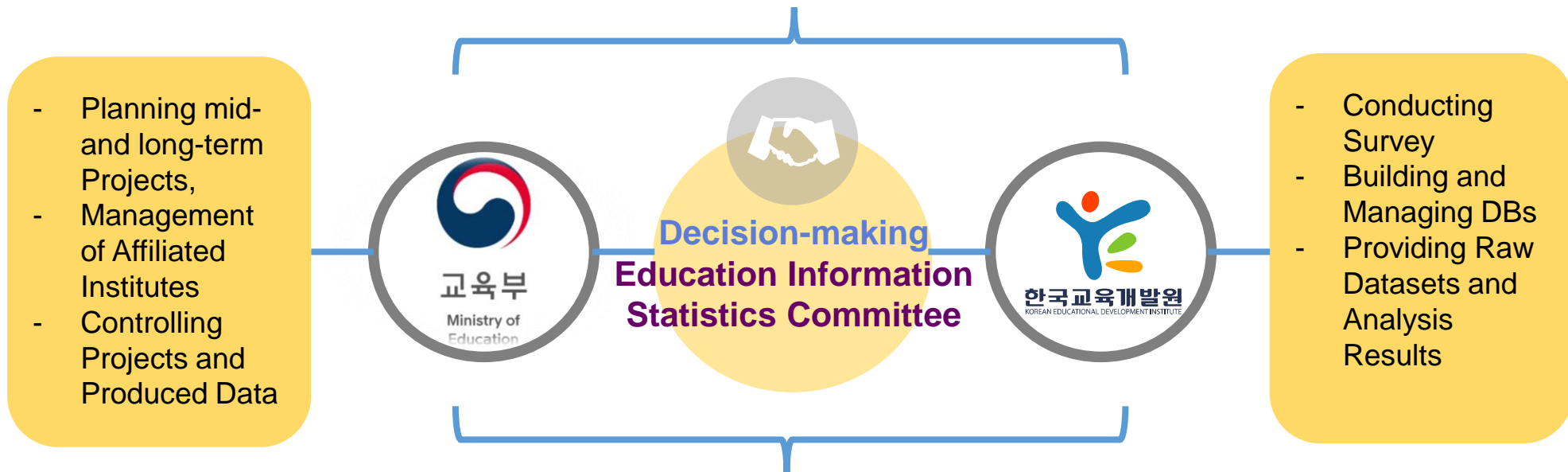
Stat. Planning Team/ Stat. Service Team (\$723,000)

- Setting Project Plans and Responding to External Requests
- Analysis of Descriptive Stat. / Service to General Public and/or Government Agencies
- Managing Internet and Mobile Service Webpages

Cooperation System of Edu. Stat.



- Providing Administrative Advices
- Managing and Evaluating Stat. Qualities



17 Regional
Offices of Edu.



- **What to See:** the Employment Status of Graduates of Higher Education Institutions
- **Target:** All Graduates from Higher Education Institution in a Given Period
- **Main Purpose:** Calculation of **Employment rate** by School
- **Legal Basis:** Article 26-2,3 of 『the Fundamentals of Education Act』

Article 11-3 of the 『Higher Education Act』

- **Type of Stat.:** Processed Statistics Based on Data Linkage
 - Classification of Stat. in Korea
(3 types)

Administrative
Statistics

Survey
Statistics

Processed
Statistics

Employment Stat. of Higher Education Graduates

History

1 Launch of New Data Collection

Building Client/Server System

2004

2

Convert to linked data-based surveys

Linked to DB of National Health Insurance Service

2010

3

Additional Linkage

- Newly Linked to Database of Human Resources Development Service of Korea, National Tax Service
- Increase of Employment Status Checkup to 4 Times

2012/2013

4

Collection of Additional Individual Employment Info.

Company Name, Salary, Scale of Company, etc.

2017

5

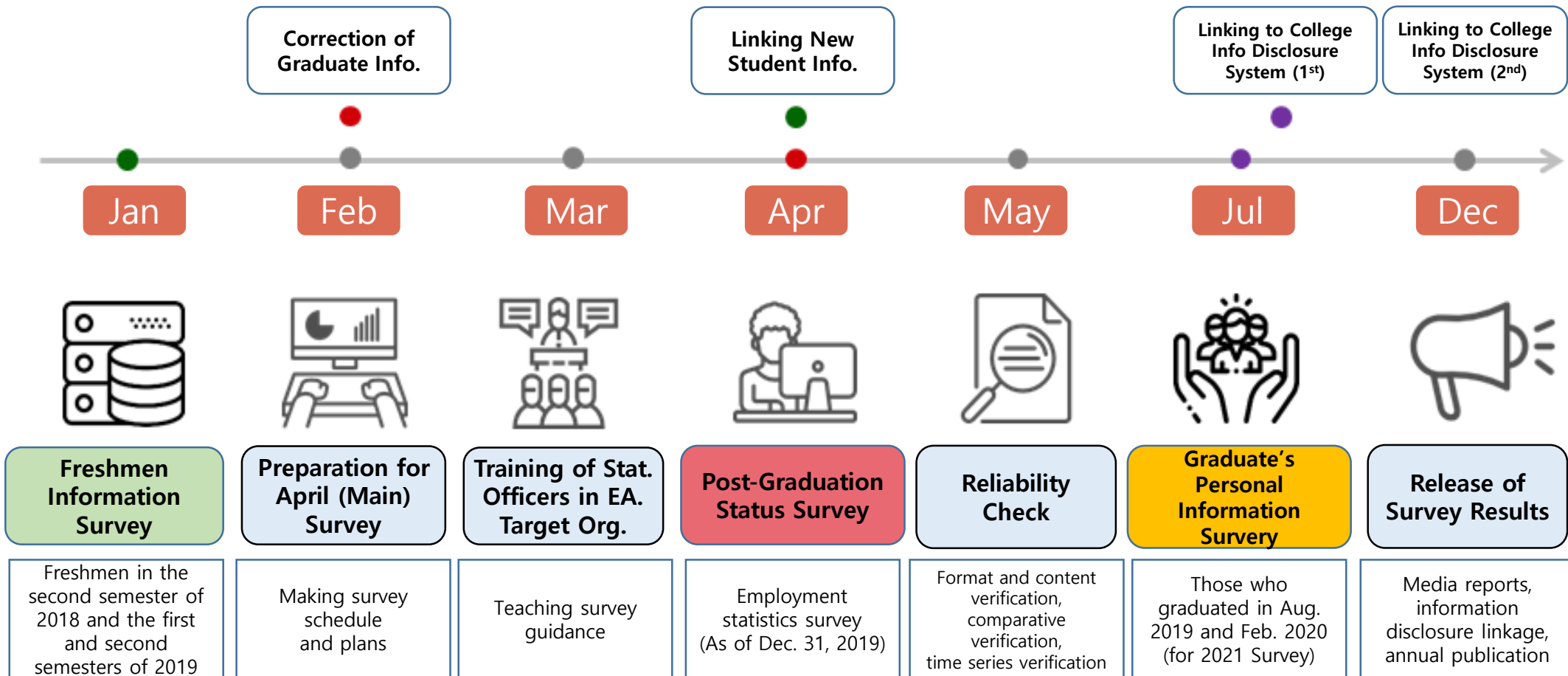
Additional Linkage to DBs of Public Agencies

Linked to DBs of Ministry of Science and ICT, KOICA

2019

Employment Stat. of Higher Education Graduates

Process



- **References** for Student Employment Counseling at Colleges or Universities
- **Data Source** for Administrating Higher education institutions
- **Evidence-based Data** in the Establishment of University Policy by the Ministry of Education
- **Official Criterion** for University Evaluation by the Ministry of Education

■ Backgrounds of Developing the Employment & Career Information System

- Accumulation of about 600,000 graduates' employment information each year → Good enough to create 'Big Data' resources
- Request to develop more practical information system for individual students in Job Search and/or Career Planning
- New information system development project launched in 2019 by virtue of advanced big data analysis algorithms

- Collected Items Lists (as of 2020)
 - In addition to graduate's employment status, personal information items are surveyed (e.g., GPA, official certificate, experience of field practice, TOEIC score, high school graduated)
- For Answering detailed questions in finding jobs and developing careers
 - Using accumulated datasets from Employment stat. of higher education graduates, and applying cutting-edge AI analysis technique, **the Employment & Career Information System** seeks answers to specific questions.



Current Data Issues in Korean Edu. Stat.

- Rapidly changing educational environments & Increased uncertainties
 - Request to utilize high-tech education technology
 - Importance of the fast response to unexpected situations (e.g., pandemic of COVID-19)
- Utilization of Education Data does not meet social needs
 - Plenty of useful data, but fragmented
 - Personal Information Protection Act - obstacles to the free and comprehensive use of data
 - Difficulties in sharing information among data collecting institutes

Challenge and Future Plan for Korean Edu. Stat.

■ A Major Revision of the Personal Information Protection Act

- To open the possibilities for free use of public data containing personal information by converting them into 'anonymous data'

■ Organizing [Education Big Data Committee] by MOE

- Chairman – the Minister of Education / Committee members – the heads of major education data collecting institutes
- Preparing for guidelines on data classification, utilization, public disclosure range, etc.
- Providing the criteria of data compatibility and data merge

■ KEDI's Efforts for Upgrading Education Data Utilization

- Trying to classify and merge internal/external datasets
- Developing new data analysis and service system based on a large scale data

Thank you very !