

Efforts to Produce and Disseminate Reliable National Education Statistics

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<http://kess.kedi.re.kr>

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Vision, Organization, and Manpower**
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- IV. Service & Analysis Using the Educational Statistics:
Efforts to Disseminate Reliable Data**



I. OVERVIEW OF CENTER FOR EDUCATIONAL STATISTICS



1. **M**ission
2. **O**rganization
3. **H**istory

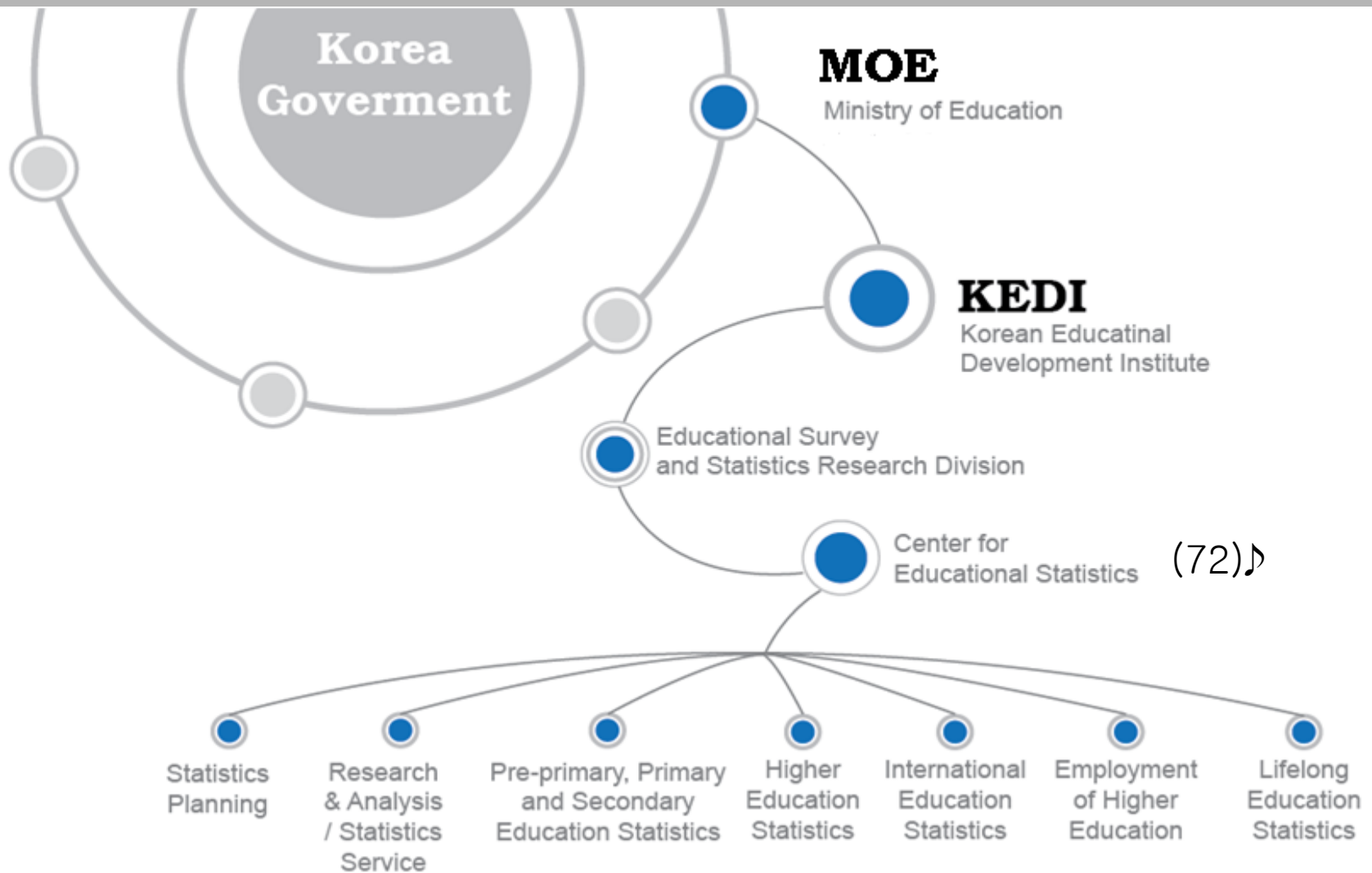
VISION

- **To produce reliable educational statistics & disseminate high-quality statistics**
- To produce and disseminate reliable statistics that can be bases for scientific, educational policy-making and research
- To raise the level of international reliability and cooperation through promoting various statistical projects with international organizations

I. OVERVIEW OF CENTER FOR EDUCATIONAL STATISTICS

2. Organization

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I. OVERVIEW OF CENTER FOR EDUCATIONAL STATISTICS

3. History

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- 1962 Began publication of 'Statistical Yearbook of Education' by National Board of Educational Evaluation
- 1995 Ministry of Education designated Korean Educational Development Institute as National Coordinator for OECD Indicators for Educational System project
- 1998 Placed the educational statistics project under the authority of Korean Educational Development Institute
- 1999 Developed homepage for web-based educational statistics system
- 2004 Launched survey on employment status of higher education degree-holders
- 2007 Launched lifelong education statistics survey
- 2010 Launched school statistics linked with National Education Information System(NEIS) and employment statistics survey connected with Health Insurance Database
- 2011 Conducted the second half year survey on higher educational institutions' faculty and additional survey on employment statistics linked with National Tax Database.
- 2014 Began educational statistics service on mobile

II. EDUCATIONAL STATISTICS SURVEY PROCESS : LINKAGE WITH OTHER SYSTEMS

- 1. Pre-primary, Primary and Secondary Education**
- 2. Higher Education**
- 3. Employment of Higher Education Degree-Holders**
- 4. Lifelong Learning**
- 5. International Education**
- 6. Process to Produce Reliable Educational Statistics**

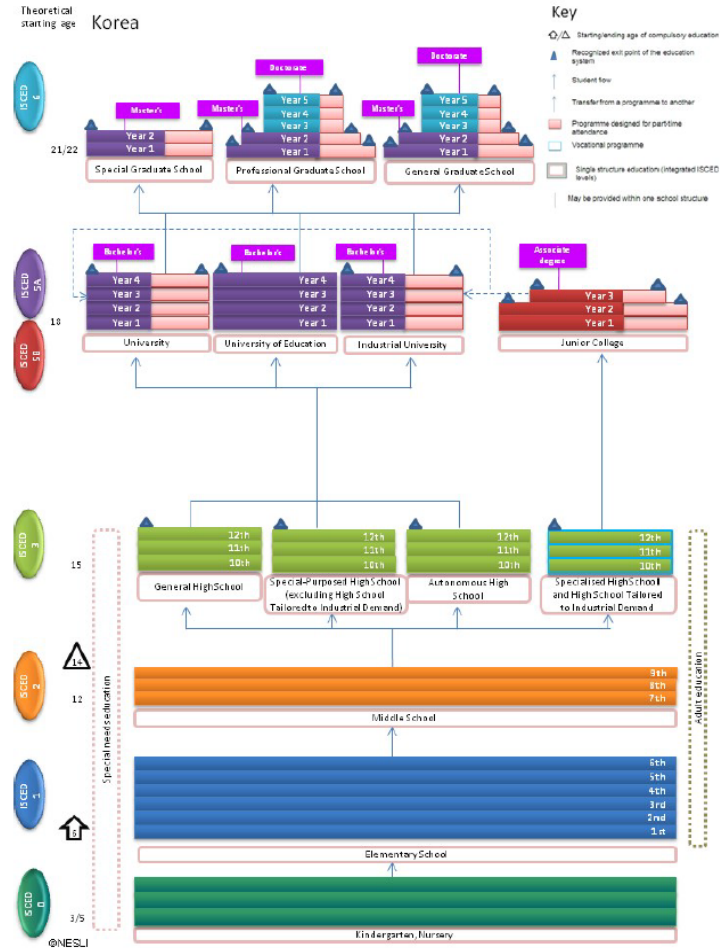


II. Educational Statistics Survey Process

Diagram: Korean educational system 6-3-3

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Diagram of education system



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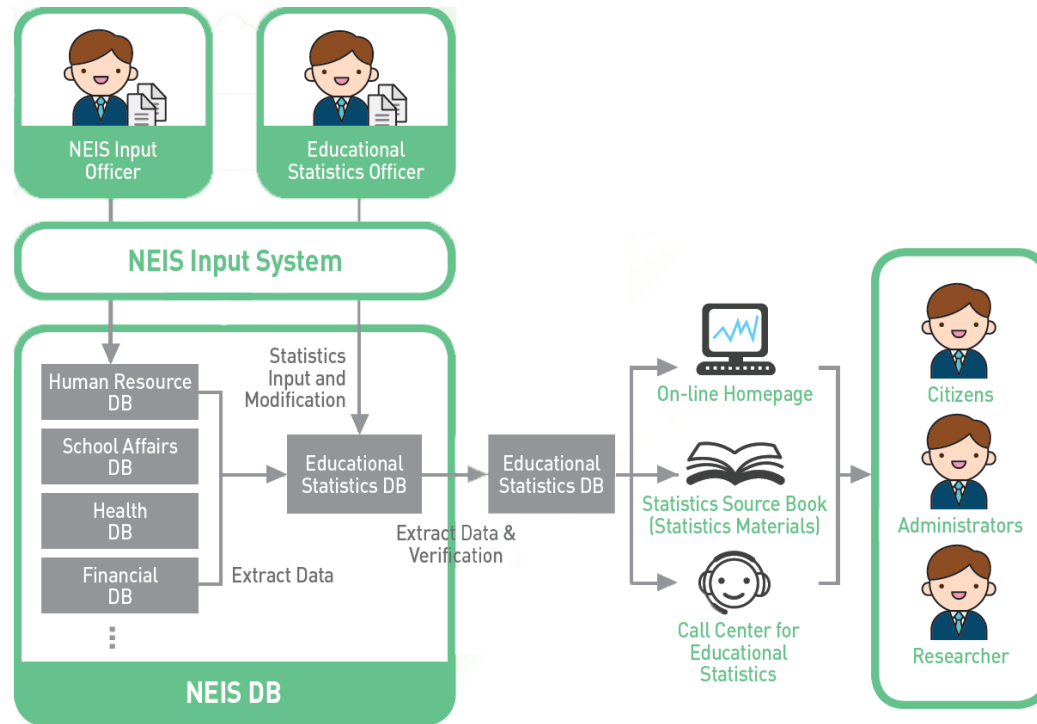
Developed by KEDI/KAC for OECD 2012

II. Educational Statistics Survey Process

1. Pre-primary, Primary and Secondary Educational Statistics Survey

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1) Survey system



- Utilizing source material from National Education Information System(NEIS), input data, verify and aggregate data
- Provide final statistical data, publish materials for statistics.

II. Educational Statistics Survey Process

1. Pre-primary, Primary and Secondary Educational Statistics Survey

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2) Survey subjects and items

- Date of survey : April 1, Oct. 1 on an annual basis
- Subject of survey : 20,792 schools(base year 2015)
 - complete enumeration survey
- Official announcement period: Every September

Classification	Total
Kindergarten	8,930
Primary School	5,978
Middle School	3,204
High School	2,344
Others	273

*Other schools include Special School, Civic & Civic High School, Trade High School, Miscellaneous School, and Air & Correspondence of Middle • High School.

II. Educational Statistics Survey Process

1. Pre-primary, Primary and Secondary Educational Statistics Survey

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2) Survey subjects and items

● Survey items for schools

Classification	Survey items
General	Summary / Teachers / School Site / Buildings / Usage, Cooling & Heating / Quantity of Energy Usage / Sports Facilities / Current Status of Possessed Computer / Libraries / Public Officials / Clerical Staffs
Kindergarten	Children by Age / New Entrants & Children Re-admitted / Finished / Classes by Enrolled Children / Clerical Staffs
Primary & Middle School	Students by Age / Entrants / Pre-school Children / Annual Turnover of Students / Situation after Graduation / Studying Abroad(Returnee) / Multicultural Students / Foreign Students
High School	Department Choice / Students by Age / Freshmen Quota / Annual Turnover of Students / Students on Temporary Leave / Situation after Graduation / Employment by Type of Industry / Entrants and Graduates by Age / Studying Abroad(Returnee) / Scholarships & Tuition Fee Supports / Multicultural Students / Foreign Students
Special, Civic, Civic High, Miscellaneous School	Children by Age / Entrants / Pre-school Children / Situation after Graduation / Admission & Completion by Course / Freshmen Quota / Dropouts / Course Duration / Qualifying Exams for Admission to Advanced Schools / Employment by Type of Industry and Occupation / Department Choice / Course of Study by Department / Multicultural Students

II. Educational Statistics Survey Process

1. Pre-primary, Primary and Secondary Educational Statistics Survey

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2) Survey subjects and items

○ Survey items for Regional and Local Offices of Education

Classification	Survey items
General	Summary / Members in Educational Administration / Clerk Staffs / Educational Specialists & Teachers / Native English Teachers
Regional Office of Education	Current Status of Ship Holdings / Teacher Certification Exam / Issuance of Teacher's Certificates / Teacher Training for Certificate / Teacher Training / School Foundations / Qualifying Exams for High School Entrance & Graduation/ Middle & High Schools Attached to Industry / Accredited Lifelong Education Facilities and Schools / Foreign and International Schools / Revenues & Expenditures of Education Budgets (Special Account) / Payment / Budget & Settled Accounts for School Foundation / Details of Expenditures of Private Schools / Revenues & Expenditures of National Public School Budget & Settled Accounts
Local Office of Education	Private Institutes / Reading Rooms / Children for kindergarten by Age
Others	Student Halls / Public Libraries / Education Training Institutes, Education & Science Research Institutes

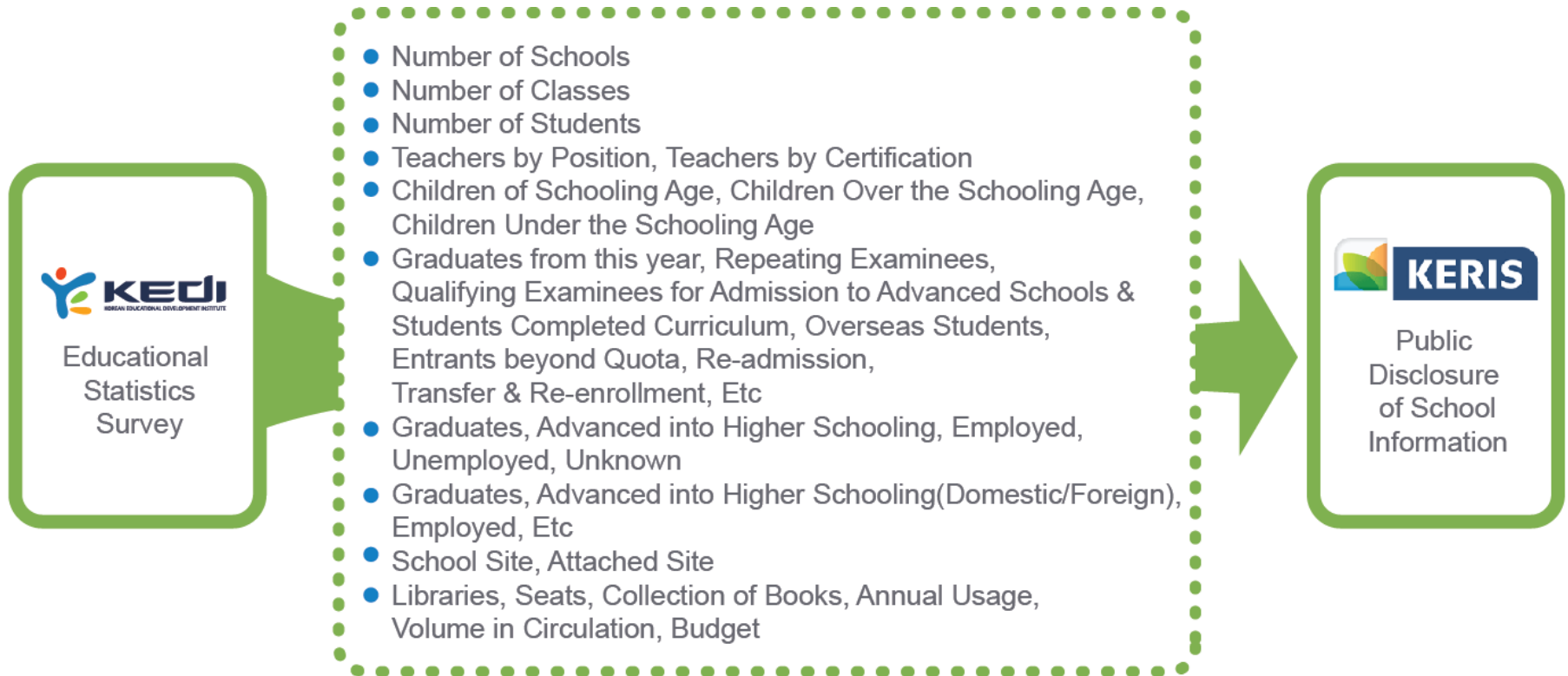
II. Educational Statistics Survey Process

1. Pre-primary, Primary and Secondary Educational Statistics Survey

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2) Survey subjects and items

- Items linked with Public Disclosure of School Information

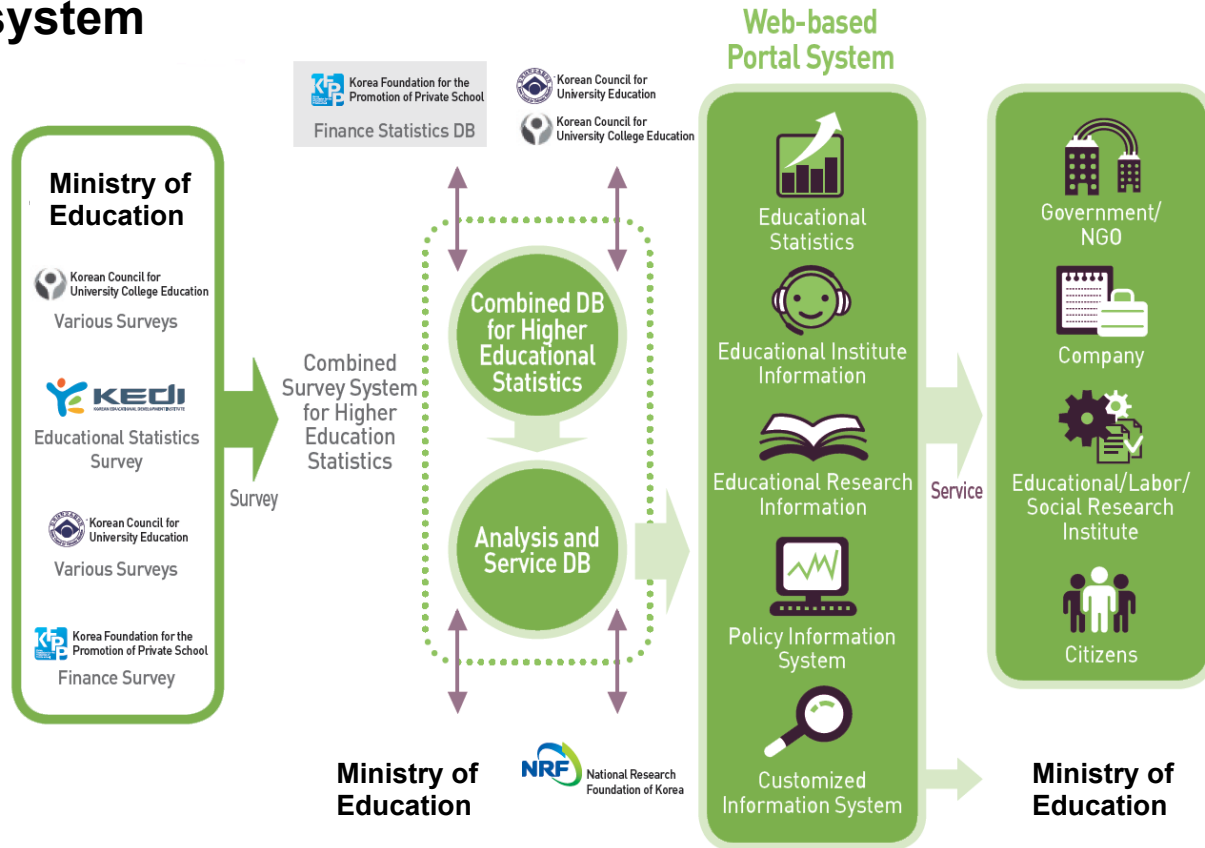


II. Educational Statistics Survey Process

2. Higher Educational Statistics Survey

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1) Survey system



- Staffs for statistics in each college collect, verify and aggregate data through the combined survey system of Higher Educational Statistics and provide the data to Public Disclosure of College Information

II. Educational Statistics Survey Process

2. Higher Educational Statistics Survey

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2) Survey subjects and items

- Date of survey : April 1 and October 1, on an annual basis
- Subject of survey : A complete enumeration survey
 - 433 Institutions(including independent graduate schools, base yr 2015);
1,583 programs(including graduate schools affiliated with universities base year 2015)
- Official announcement period: Every September

Classification	Total
University	189
Univ. of Education	10
Industrial University	2
Junior College	138
Graduate School	<1,150>
Independent Graduate School	47
Others	47

*Others include Air & Correspondence University, Technical College, Miscellaneous (Undergraduate, Junior College), Distance University, Cyber University, College in Company, Specialized College, and Polytechnic College.

II. Educational Statistics Survey Process

2. Higher Educational Statistics Survey

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2) Survey subjects and items

○ Survey items

Classification	Survey items
Summary	General Condition of College
Students	Enrolments / Quota by Department / College Applicants & Entrants / Entrants by Age / Graduation / Graduates by Age / Issuance of Teacher's Certificates / Annual Turnover of Students / Delisted Students / Scholarship Beneficiary / Foreign Students / Foreign Graduates / Joint Curriculum with Foreign Universities / Students Enrolled & Students on Temporary Leave by Course Duration / Doctor's and Honorary Doctor's Degrees Granted / Degree Acquisition & Situation after Degree / Degree Recipient by Age
Faculties	President & Full-time Faculty / Adjunct & Visiting Professor / Others / Part-time Lecturers / Faculty Members / Faculty Research Year / Ratio of Background Universities among Full-time Faculties / Foreign Full-time Faculty / Foreign Part-time Lecturers / Teaching Hours per week / Salary Cost & Teaching Hours / Faculty Educational Training / Clerical Staffs / Staffs Training & Performance / Assessment System for Professor Achievement
Facilities	Continuing Education Academy Affiliated with a College / Attached Facilities

II. Educational Statistics Survey Process

2. Higher Educational Statistics Survey

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2) Survey subjects and items(Con't)

○ Survey items

Classification	Survey items
Administration	Club Activities / Student Unions
Education	Opening & Registration of Liberal Arts, Teaching Courses, Majors, Cyber Lectures / Cross Registration Systems / Industry-Academy Exchange
Research & Industry-Academy Cooperation	Industry-Academy Cooperation(Signed Enterprise, R&D, Profit-Making Business, Consignment Education, Scholarship) / Industry-Academy Cooperation(On-the-Job Training & Employed) / Industry-Academy Cooperation(Personal Exchange) / Industry-Academy Cooperation Performance

II. Educational Statistics Survey Process

2. Higher Educational Statistics Survey

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2) Survey subjects and items

● Items Linked with Public Disclosure of College Information

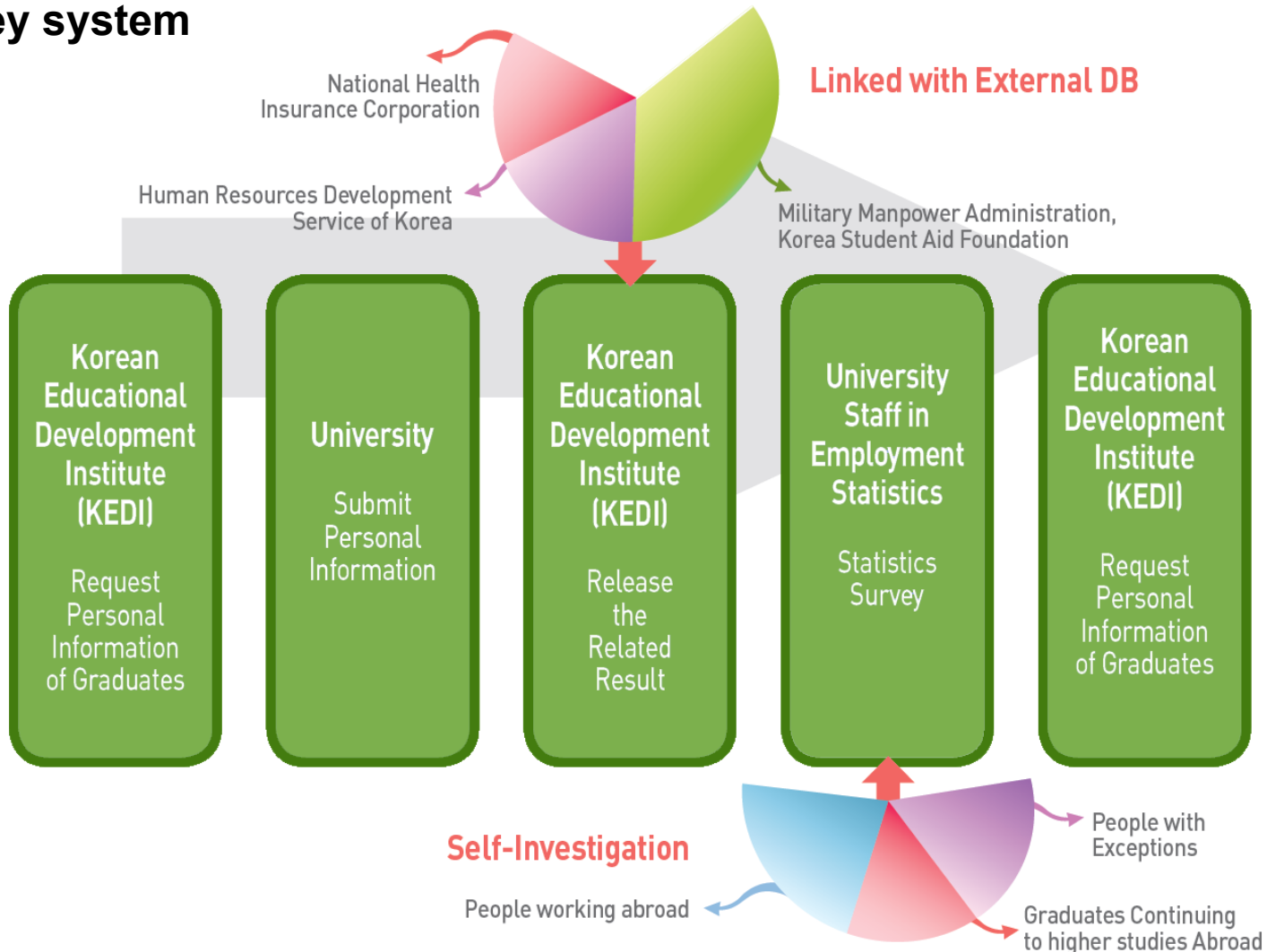


II. Educational Statistics Survey Process

3. Statistics on Employment of Higher Education Degree-Holders

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1) Survey system



II. Educational Statistics Survey Process

3. Statistics on Employment of Higher Education Degree-Holders

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2) Survey subjects and items

- ① Date of survey : June 1 and December 31, on an annual basis
- ① Subject of survey : A complete enumeration survey
 - 680,698 graduates from higher educational institutions(base year 2015) such as University, University of Education, Industrial University, Junior College, Miscellaneous Schools(University and Junior College), Polytechnic College, General Graduate School
- ① Features:
 - Linked with National Health Insurance Database(June 1): Individuals who graduated college in February of current year or August of last year
 - Linked with National Health Insurance and National Tax Database(Dec. 31) : Individuals who graduated college in February of last year or in August of the year before last year
- ① Official announcement period: Every August and November

II. Educational Statistics Survey Process

3. Statistics on Employment of Higher Education Degree-Holders

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○ Items of survey

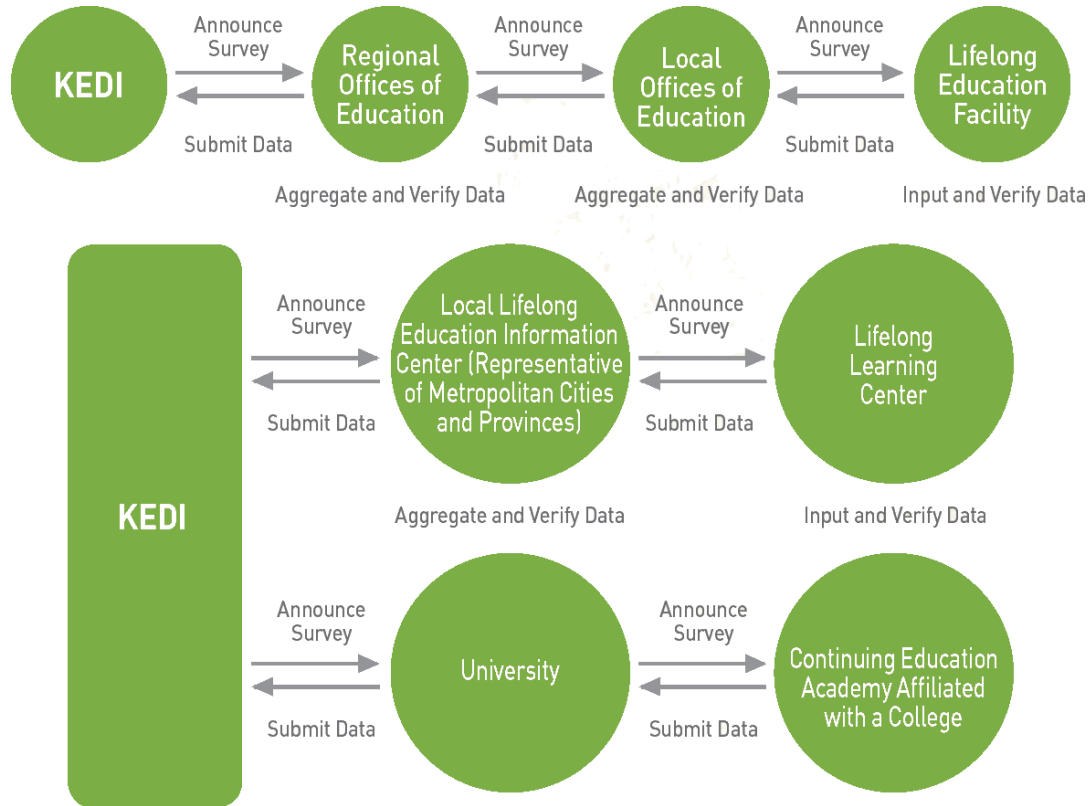
- Employment : people enrolled in health insurance through the work, working abroad, people in agriculture, individual creative work, sole proprietor, and freelancer
- Continue in Higher Education : Domestic and foreign Junior College, University, and Graduate School
- Unable to Work : The deceased, convicted, immigrant, being hospitalized more than six months
- People with Exceptions : People who are eligible for free medical care, female soldiers in the training of new recruits, graduates of religious leaders training major, and trainees of the institution training aircraft pilots

II. Educational Statistics Survey Process

4.1. Lifelong Educational Statistics

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1) Survey system



- According to the types of lifelong educational institutes registered by the Lifelong Education Law, survey announcement, management and supervision are conducted in the following three systems : 1) Local Office of Education 2) Lifelong Learning Center and 3) Continuing Education Academy affiliated with the college.

2) Survey subjects and items

- Date of survey : May 1, on an annual basis
- Subject institutions in survey : 4,342 institutions(in 2014)
 - 393 Lifelong Learning Centers, 411 Continuing Education Academy affiliated with a school, 883 Cyber Lifelong Education Institutions, 392 Affiliated with a company, 556 Affiliated with a NGO, 1038 Affiliated with Mass Media, 669 Type of Knowledge & HRD
- Items of survey
 - Institutions in general : Overview, location, and history
 - Program and learners : Classification, name of program, theme, institution, number of annual training, total hours of education, type of program, etc.
 - Teacher : Name, gender, educational attainment, beginning year and month, number of teaching classes, etc.
 - Staff : Name, gender, educational attainment, lifelong educator certification, type of employment, beginning year and month, etc.
 - Other : Status of training lifelong educators.
- Official announcement period: Every Nov. 30th

II. Educational Statistics Survey Process

4.2. Survey on actual condition of Individual's Lifelong Learning

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1) Survey subjects and items

- Date of survey : July 1, on an annual basis
- Subjects in survey :
 - 9,948 male and female adults aged between 25 and 64(base year: 2014)
- Items of survey
 - 61 items including actual situation of participating formal education / non-formal education/ informal education
- Official announcement period : Every Dec. 31st

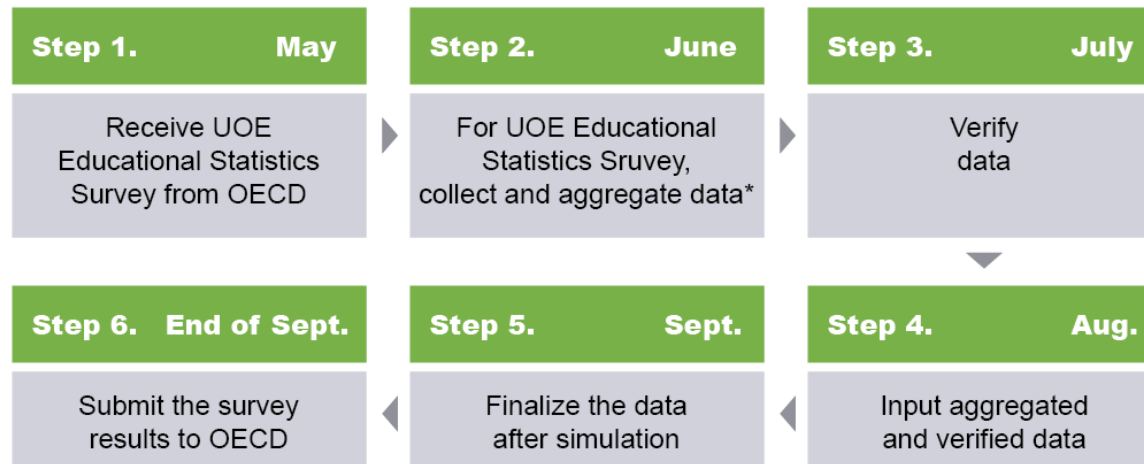
II. Educational Statistics Survey Process

5. International Education Statistics

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1) Overview

- Since 1995, international education statistics team has participated in UOE(UNESCO/OECD/Eurostat) Data Collection and “Education at a Glance: OECD Indicators” publication.



* Survey on Finance is annually designed and conducted by International Education Team and data of enrollments, entrants, graduates, population, class, classroom teachers and academic staff collected from pre- primary, primary, secondary, and Tertiary education survey are used.

- Conduct analysis of Korean Education Competitiveness at an international level(IMD and WEF's reports), and analysis of College Competitiveness at an international level(Shanghai Jiaotong University, QS, The Times Reports)

II. Educational Statistics Survey Process

5. International Education Statistics

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2) Survey subjects and items

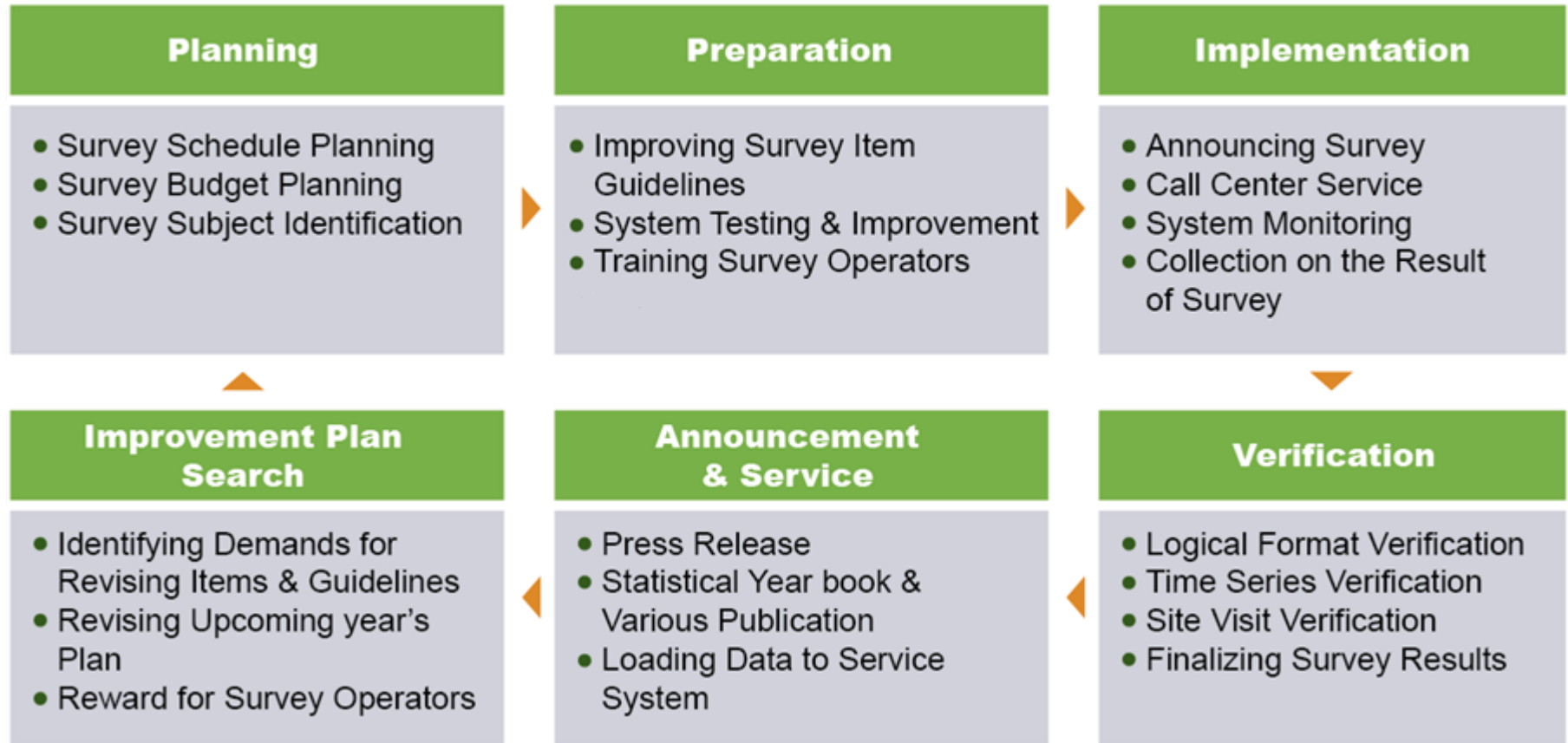
	Subjects or Items
Subjects in Survey	<ul style="list-style-type: none">- Pre-primary, primary, secondary, and tertiary educational institutions, Ministry of Education(MOE) and institutes directly responsible to MOE
Educational Finance Survey Items	<ul style="list-style-type: none">- Source of funds and type of transaction- Central, regional, local government expenditure- Private expenditure(expenditure of households) and expenditure of other private entities including firms and religious institutions and other nonprofit organizations, but not educational institutions- Expenditure in public institutions/government dependent private institutions/independent private institutions (public and private sources)- Capital expenditure
Major UOE Data Collection Items	<ul style="list-style-type: none">- Students(entrants, graduates) by level of education, type and purpose of educational program, type of participation, gender, and age- Annual enrollments by level of education and types of educational program- Classroom teachers and academic staff by level of education, types of educational program, gender, age, types of educational institutions and type of employment

II. Educational Statistics Survey Process

6. Efforts to Produce High-Quality Educational Statistics

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1) Common Process for Educational Statistics Survey



II. SURVEY SYSTEM AND ITEMS

6. Efforts to Produce High-Quality Educational Statistics

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<Stage 1 : Planning>

- Adequate examination of survey schedule & budget
- Identification of survey subject

<Stage 2 : Preparation>

- Accurate guidelines for survey items
- Survey system tests in various environment
- Face-to-face training program as well as dissemination of survey guidelines
- Demonstration for survey operators' training

<Stage 3 : Implementation>

- Announcement for precise schedule & survey compulsion under the law
- Well-trained call center service

II. SURVEY SYSTEM AND ITEMS

6. Efforts to Produce High-Quality Educational Statistics

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<Stage 4 : Verification>

- Various logical verification process along the educational environment
- Time series verification for aggregated data such as students enrolled, facilities
- if necessary, investigating survey issues and improvement method during site visit verification

<Stage 5 : Announcement & Service>

- Expand usage of educational statistics information, besides statistical yearbook of education or various analysis materials of educational statistics.
- Provide services on educational statistics survey result through homepage using IT(Information Technology)

<Stage 6 : Search for Improvement Method>

- Assessment process for survey items & guidelines by qualified professionals
- Search for improvement methods on a regular basis

III. Statistics Survey Systems : H/W Architecture, Concepts, and Budget

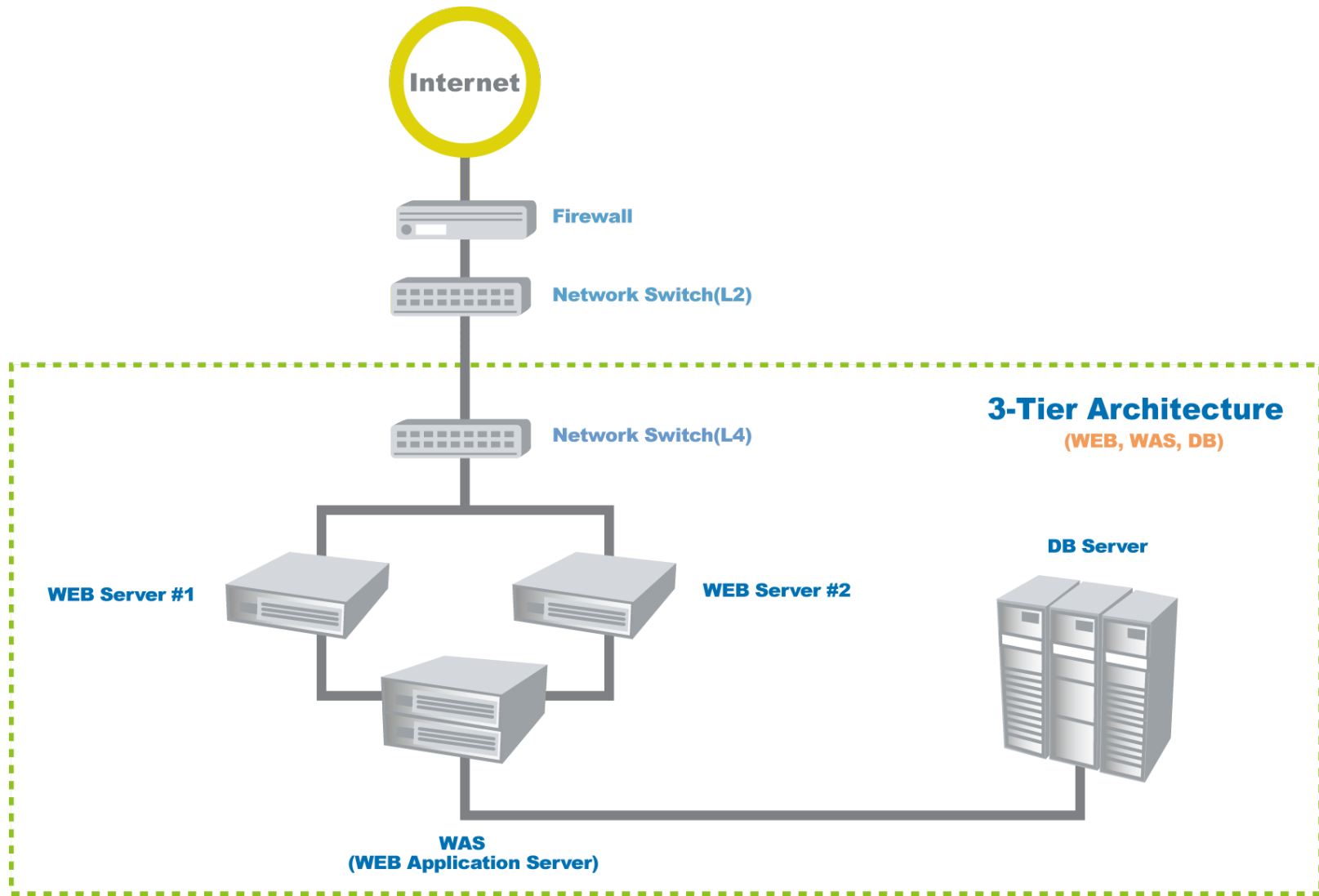


- 1. H/W Architecture**
- 2. Concepts**
- 3. Budget**

II. SURVEY SYSTEM AND ITEMS

1. Hardware Architecture

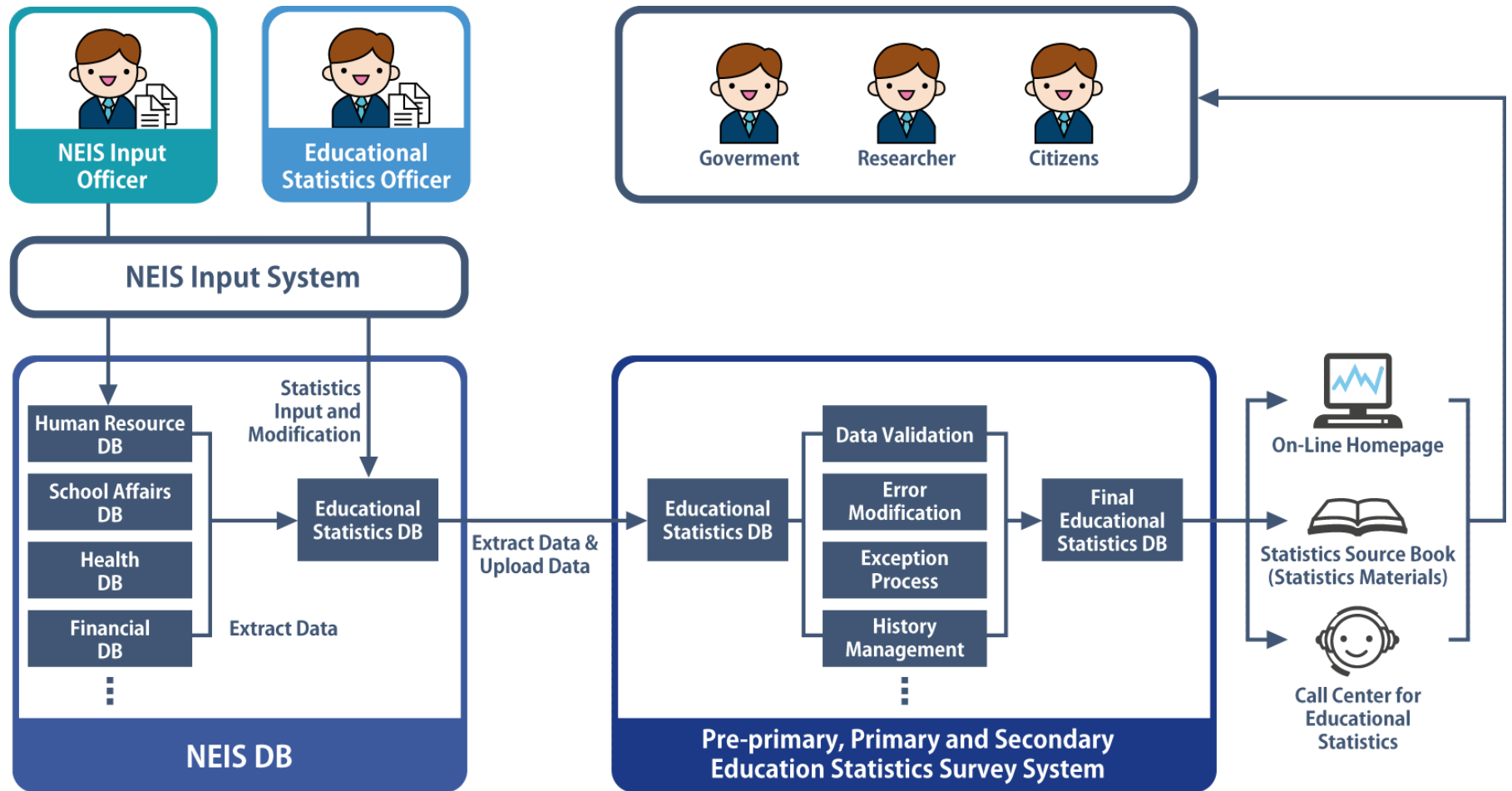
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II. SURVEY SYSTEM AND ITEMS

2. Concepts of Survey System

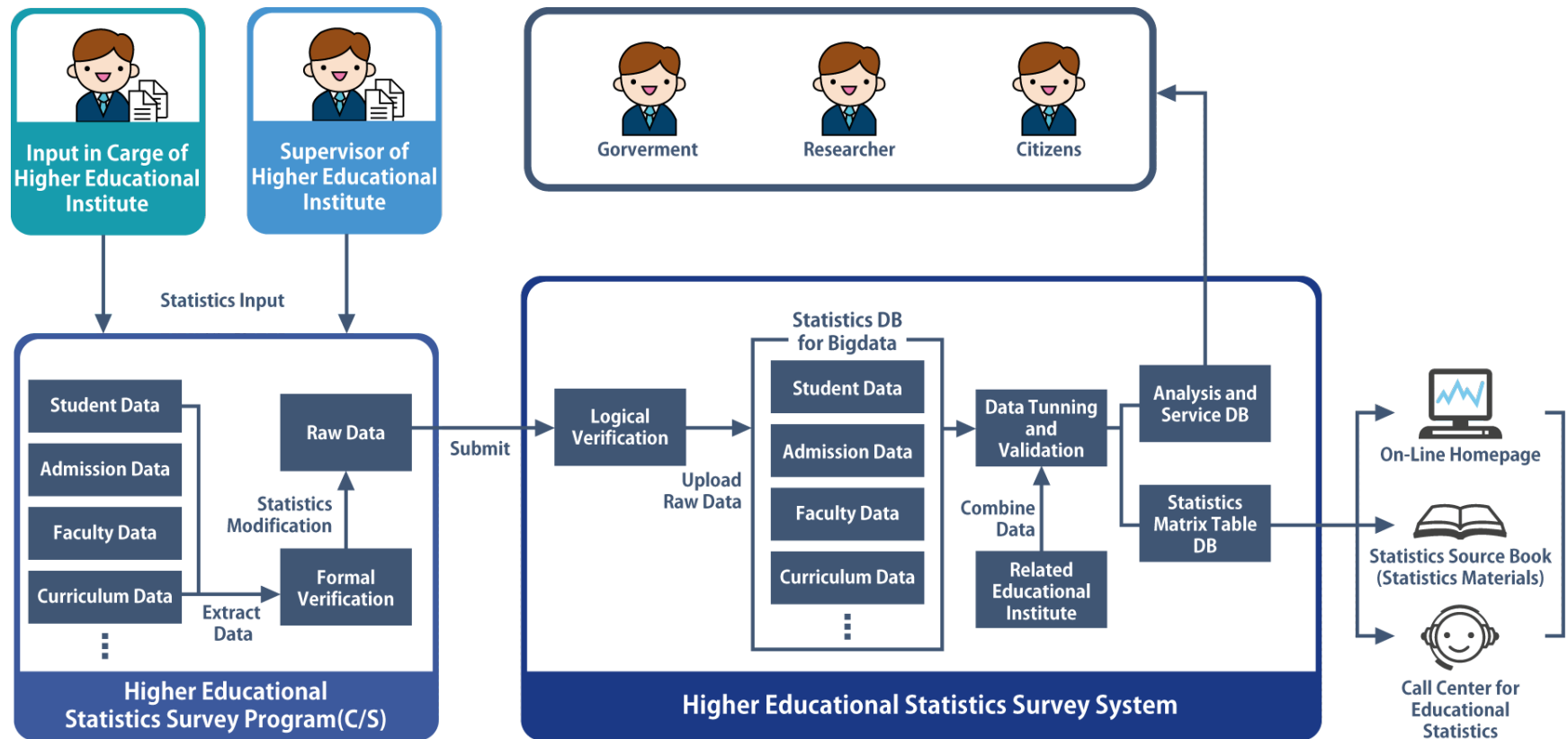
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II. SURVEY SYSTEM AND ITEMS

2. Concepts of Survey System

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- **Building Budget**

- H/W & S/W
 - ✓ WEB Server & Middleware 2EA: \$52,000(USD)
 - ✓ Web Application Server & Middleware 1EA: \$43,000(USD)
 - ✓ DB Server & DBMS 1EA : \$173,000(USD)
 - ✓ N/W switch, Security, Backup : \$43,000(USD)
- Statistics Survey System Building
 - ✓ System Development : \$432,000(USD)

- **Maintenance Budget**

- H/W & S/W : 12% ratio per Building Budget
 - ✓ Server, N/W switch, Security, Backup : \$37,320(USD)
- Statistics Survey System : 15% ratio per Building Budget
 - ✓ Survey System : \$64,800(USD)

IV. EDUCATIONAL STATISTICS SERVICE








1. **Statistics Service Homepage**
2. **Mobile Statistics Service**
3. **Service Status**

III. Major Publications

1. Publications

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Title		Type	First Publication n Year	Publication term	Circulation (copies)
Statistical Yearbook of Education		Booklet	1962	Periodic Annual (Sep.)	1,400
Analysis of Educational Statistics (Pre-primary, primary, secondary, tertiary, employment, and lifelong)		Booklet	2002	Periodic Annual (Oct. ~ Dec.)	800
Brief Statistics on Korean Education		Booklet	1998	Periodic Annual (Oct.)	Kor : 1,000 Eng : 700
Statistics on Korean and the World Education		Booklet	2010	Occasional (4 times/yr)	500 Each time
Education at a Glance: OECD indicators(in Korean)		Booklet	1997	Periodic Annual (Dec.)	600

* 17 publications in 2014

IV. EDUCATIONAL STATISTICS SERVICE

2. Statistics Service Homepage

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1) Educational Statistics Portal System



- Educational Statistics Portal System provides all-inclusive services related to pre-primary, primary, secondary, and higher education, employment status, lifelong education, and international educational statistics information.

Publication Service : Statistical Yearbook of Education, Statistical Yearbook of Employment, Education at a Glance: OECD Indicators, Lifelong Educational Statistics Materials, Brief Statistics On Korean Education(Kor/Eng), Analysis of Educational Statistics, Korean Education At a glance(KEAG), Lifelong Learning Condition of Korean Adults and etc.

2-2. <http://kess.kedi.re.kr>

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지금 인터넷 주소창에

<http://kess.kedi.re.kr>

경험해보세요.

사용자 맞춤형 차트 기능

- 별도의 프로그램 설치 없이 차트 기능 제공
- 사용자가 원하는 형태의 차트로 변환 가능
- 통계표의 항목 추가/삭제, 가로/세로 축변환, 부분별 확대/축소 기능 제공



빠르고 편리한 검색 기능

- 인기 검색어 기능 및 연관 검색어 기능 제공
- 결과 내 재검색 및 추가 검색어 기능 제공
- 스피드 검색기능을 통해 간편한 검색 가능

간행물 온라인 제공 서비스

- 모든 교육통계 간행물에 대한 온라인 열람기능 제공
- 간행물 PDF파일 다운로드 기능 제공
- 간행물에 대한 간추린 요약정보 제공



IV. EDUCATIONAL STATISTICS SERVICE

3. Mobile Statistics Service

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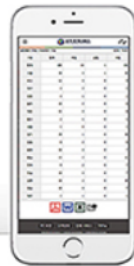
지금 앱스토어, 구글플레이 마켓에서

교육통계 또는 교육통계서비스를 검색해보세요.



다양한 자료제공 서비스

- 다양한 통계지표 PDF 및 WORD 파일 다운로드 서비스 제공
- 간행물 PDF 및 EXCEL 파일 다운로드 서비스 제공
- 모든 교육통계 간행물에 대한 모바일 열람 서비스 제공

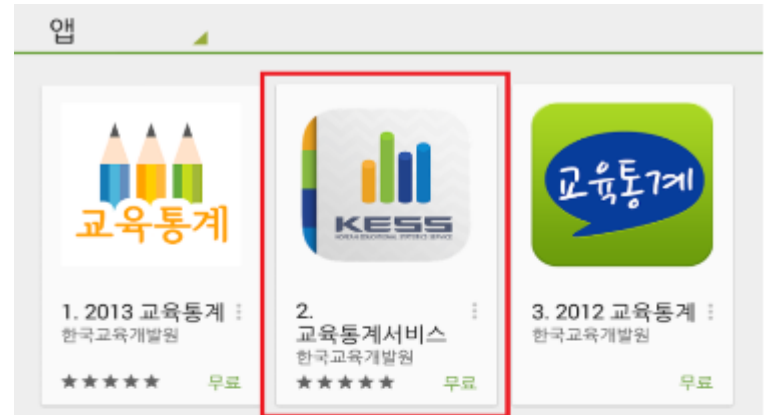


모바일 최적화 서비스

- 모바일에서도 기존 홈페이지와 동일한 서비스 제공
- 홈페이지 게시판(공지사항, 보도자료, 자료실 등)의 모바일 서비스 제공
- 모바일에 최적화된 통계별 차트 제공 및 SNS 연동 서비스 제공

사용자 맞춤형 서비스

- 인기 검색어, 연관 검색어 기능 제공 및 빠른 검색기능 제공
- 맞춤형 통계 즐겨찾기 서비스 제공
- 다양한 형태의 차트 제공 및 사용자 차트유형 변경 기능 제공



휴대전화에 적합하게 설계

교육통계서비스
한국교육개발원

설치

IV. EDUCATIONAL STATISTICS SERVICE

4. Service Status

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- Publication Service : Statistical Yearbook of Education, Analysis Materials, Brief Statistics On Korean Education, Leaflet based on the result of statistical survey on pre-primary, primary, secondary, and higher education, employment, and lifelong education

On-line Service : Educational Statistics Service Homepage(<http://cesi.kedi.re.kr>)

 - Provide the source service of statistics publications such as Statistical Yearbook of Education, Standard Form Service arranged by the common requests of users, time series statistics, press release and statistical materials
- Call Center Service

 - Please use the resource request sheet available on- and off-line
 - User-customized educational statistics call center, operated by professional staffs
- Service Status(in 2014)

Classification	Requesters							Total	Home-page visitors
	Within KEDI	Government	Educational Institutions	Research Institute	Private enterprise	individuals	Organization/ Association		
Service Details	389	1,128	339	183	131	37	88	2,295	131,337

Thank you very much for your attention!♪

Contact Information

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