

# 大学改革支援 情報基盤の諸相

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NIAD-QE

National Institution for Academic Degrees and Quality Enhancement of Higher Education

## Conceptual Design of the Information Infrastructure for the Quality Assurance System of Higher Education in NIAD-QE

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NIAD-QE

National Institution for Academic Degrees and Quality Enhancement of Higher Education

# 発表の構成

- 大学改革支援・学位授与機構における高等教育のデータ
- 大学ポートレート
- 大学改革支援・学位授与機構の高等教育データにかかる課題



## Overview

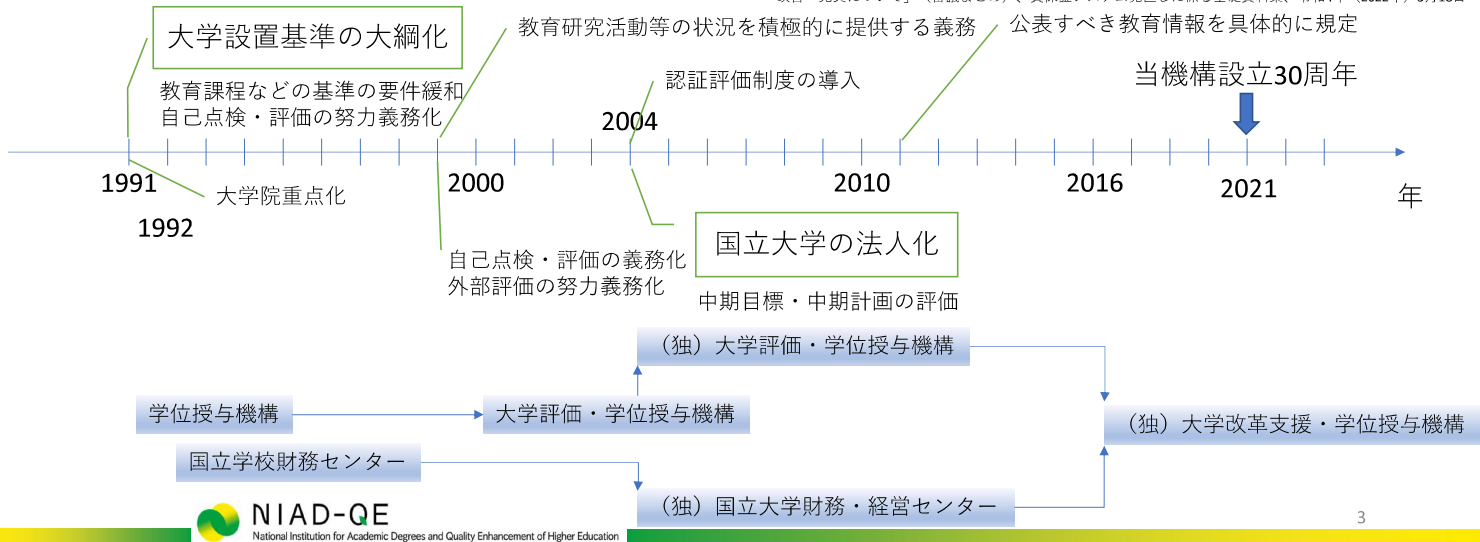
- Data on higher education at NIAD-QE
- Japanese College and University Portraits (JPCUP)
- Issues and challenges pertaining to the higher education data at NIAD-QE



# 大学改革の沿革

大学改革の流れ（関係法令の変遷や審議会答申等から理解する）

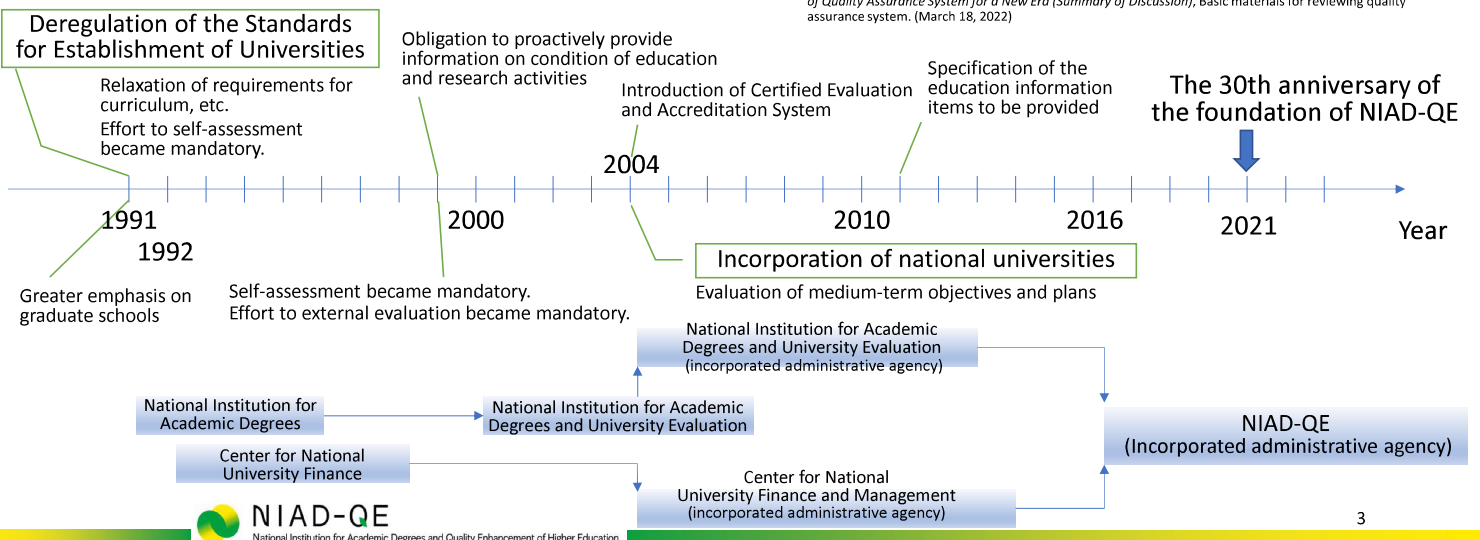
（参考1）川口昭彦、大学評価・学位授与機構大学評価シリーズ 大学評価文化の定着—大学が知の創造・継承基地となるために、ぎょうせい、178ページ、2009年  
（参考2）文部科学省中央教育審議会大学分科会質保証システム部会、「新たな時代を見据えた質保証システムの改善・充実について」（審議まとめ）、質保証システム見直しに係る基礎資料集、令和4年（2022年）3月18日



## History of university reforms

Historical changes in relevant laws, council reports, etc.

(Source 1) Kawaguchi, A. (2009) NIAD-QE University Evaluation Series. p.178.  
(Source 2) Subcommittee for Quality Assurance System of University Committee, Central Council for Education, Ministry of Education, Culture, Sports, Science and Technology (MEXT). 'Toward Improvement and Enhancement of Quality Assurance System for a New Era (Summary of Discussion)', Basic materials for reviewing quality assurance system. (March 18, 2022)



# 機構における事業ごとの収集データ

- 学校基本調査と同一データ  
(国公立大学、私立大学、公立短期大学)
  - 大学基本情報
  - 大学情報活用システム (BIツール)
- 認証評価  
(大学、高等専門学校、法科大学院)
  - 自己評価書
  - 実施結果報告
  - 根拠資料・データ
  - 共通基礎データ様式
- 国立大学教育研究評価  
(国立大学、大学共同利用機関法人)
  - 現況調査票 (教育)、現況調査票 (研究)、達成状況報告書
  - 現況分析結果 (教育)、現況分析結果 (研究)、達成状況評価結果
  - 根拠資料・データ
  - 入力データ集、データ分析集
  - 研究業績水準判定結果
- 大学ポートレート  
(国公立大学、私立大学、公立短期大学)
  - 国内版公表
  - 国際発信版公表
- その他
  - 高等教育資格承認情報センター  
(大学、短期大学、高等専門学校、専門学校、省庁大学校)
  - 公立大学実態調査 (BIツール)
  - 国立大学法人財務諸表

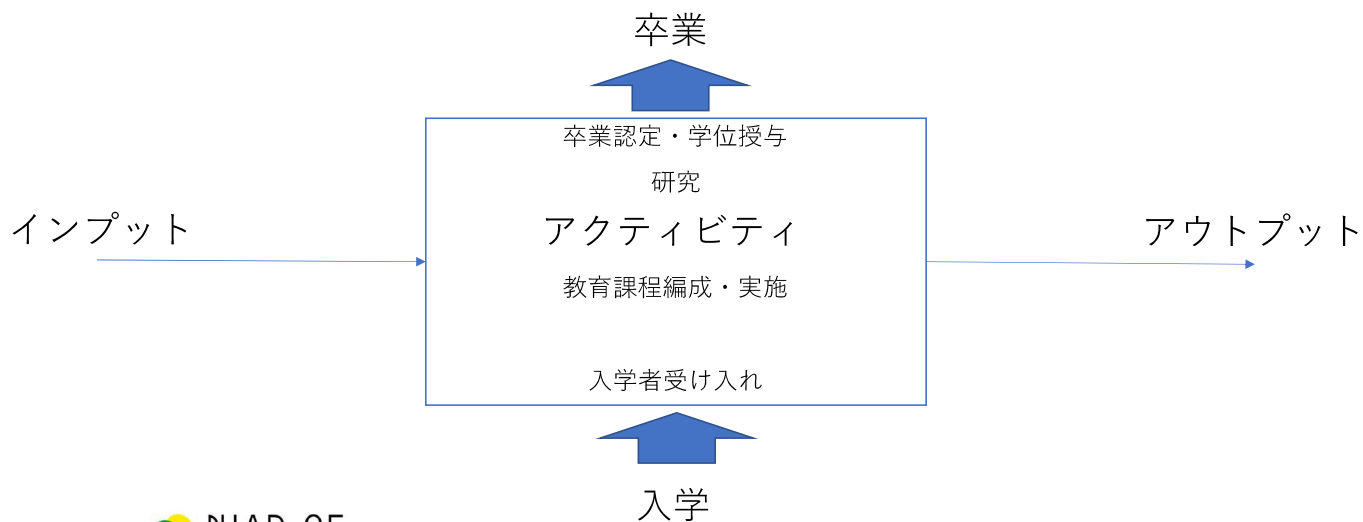
## Data collected for each business category at NIAD-QE

- Basic School Survey equivalent data collection (for national universities, public universities, for-profit universities, and public junior colleges)
  - Basic university information
  - University information utilization system (a business intelligence tool)
- Certified evaluation and accreditation (for universities, colleges of technology, and professional graduate schools)
  - Self-assessment reports
  - Evaluation reports
  - Evidence (materials and data)
  - Common basic data format
- National university corporation evaluation (for national universities and inter-university research institute corporations)
  - Performance reports
  - Performance evaluation reports
  - Evidence (materials and data)
  - Input data collection, data analysis collection
  - Judgment of the level of research achievement
- Japanese College and University Portraits (JPCUP) (for national universities, public universities, for-profit universities, and public junior colleges)
  - JPCUP for domestic public release
  - JPCUP for international public release
- Other business categories
  - National Information Center for Academic Recognition Japan (for universities, junior colleges, colleges of technology, professional training colleges, and educational institutions operated by government ministries and agencies)
  - Survey of public universities (BI tool)
  - National university corporations' financial statements



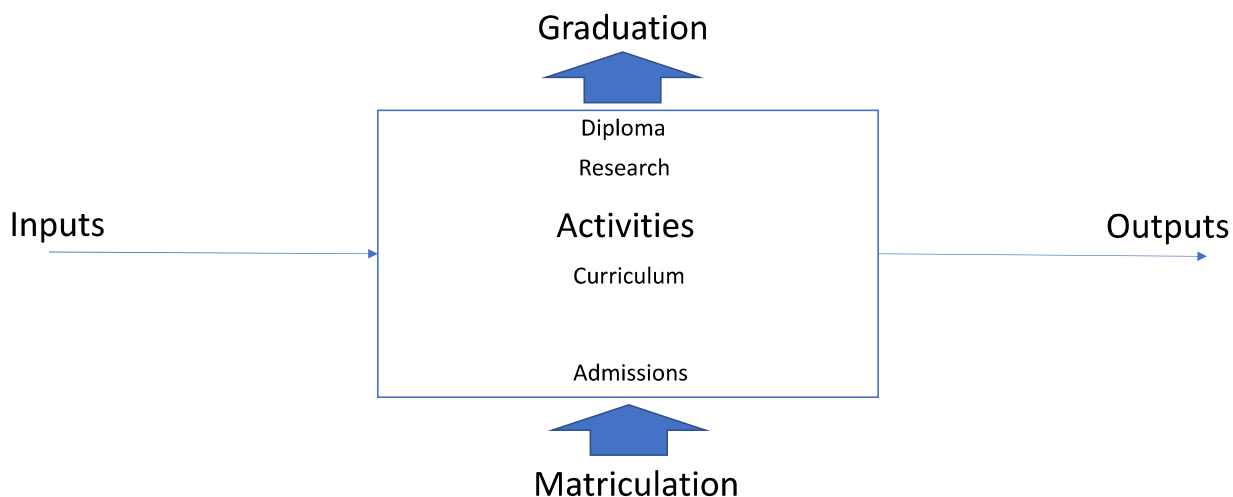
# 大学の状況を知るための情報モデル

機構は、組織全体もしくは下部組織の単位で、さまざまな種類の情報を収集している



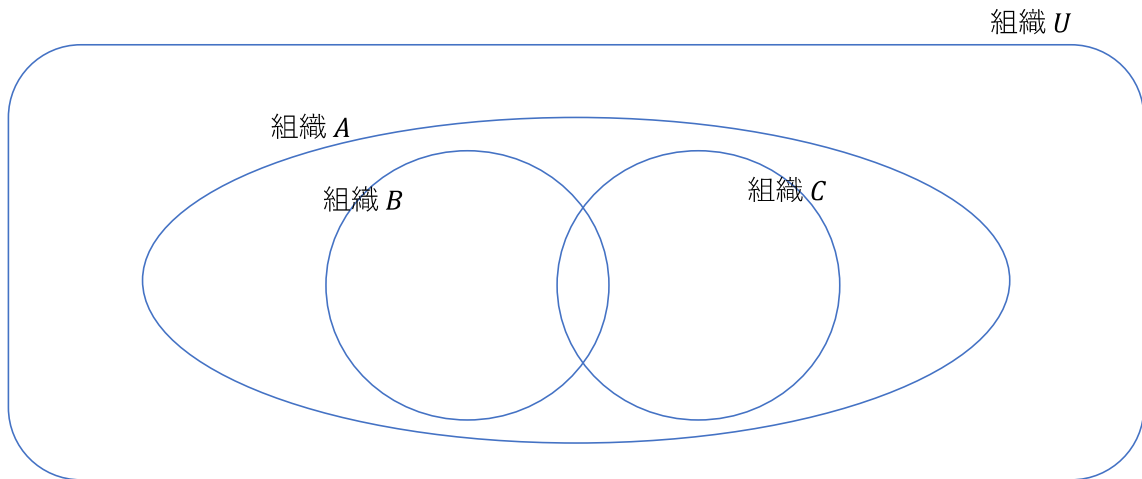
## Information model for observing university conditions

NIAD-QE collects various types of information at the whole organization or sub-organization level.



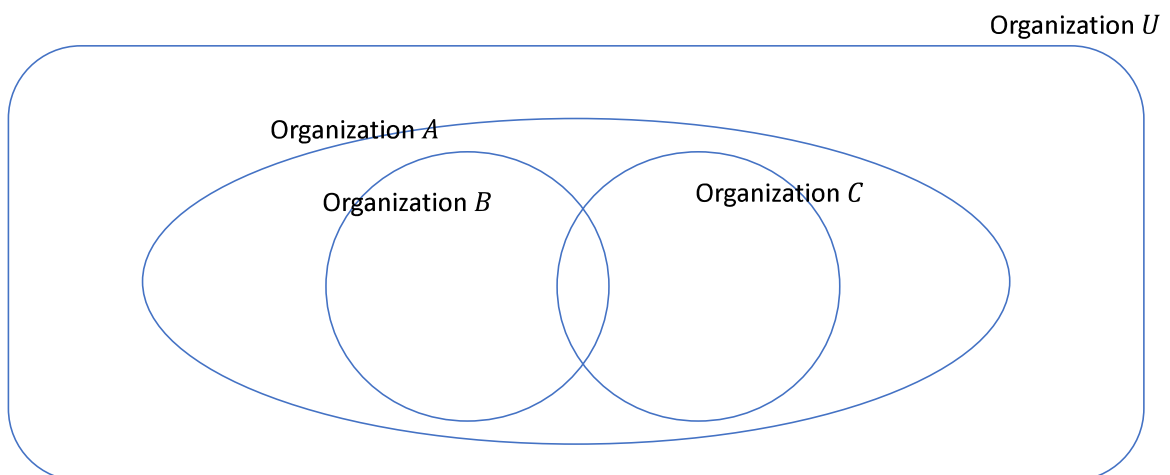
# 組織構造

各々の組織を人の集合とする



## Organizational structure

Each organization refers to a set of persons.



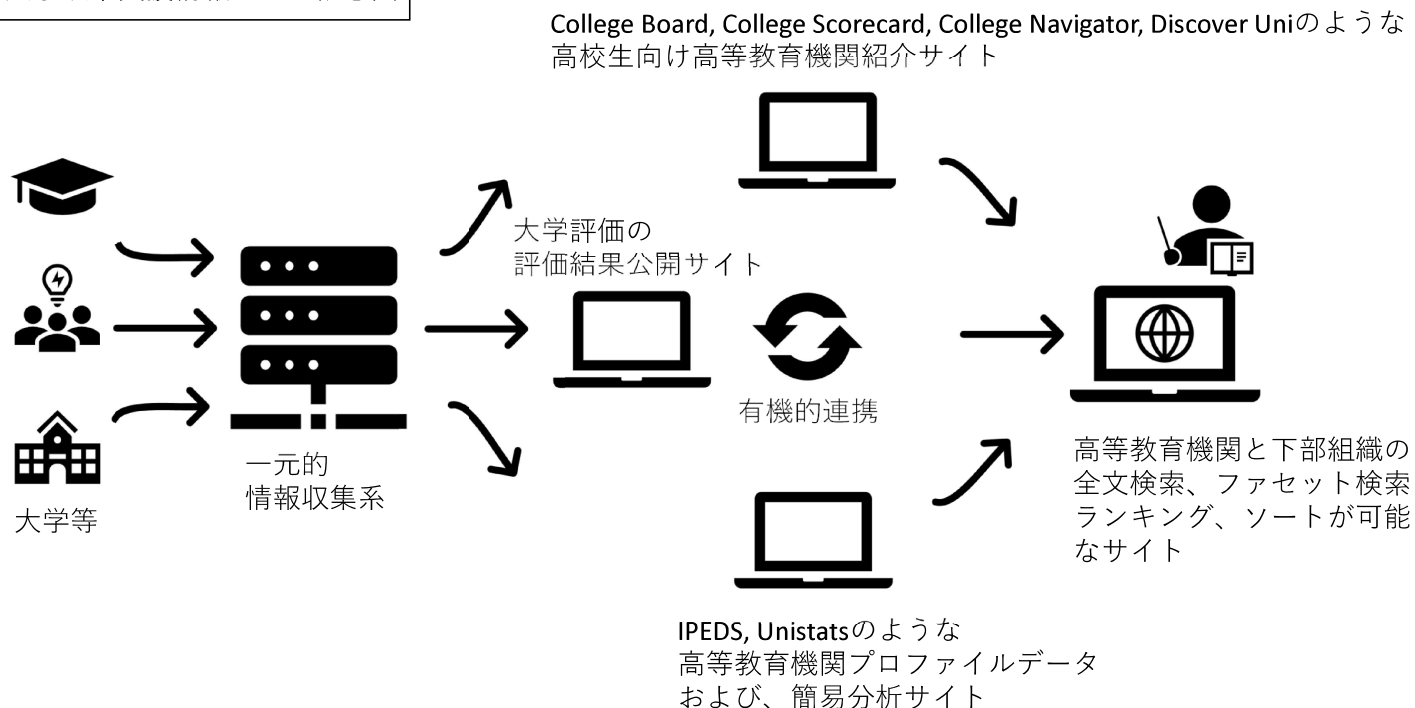
# 情報モデルに沿った組織調査

- 組織
    - 機関
    - 教員組織
    - 事務組織
    - 教育研究実施組織
    - 教育及び研究の課程
  - インプット
    - 組織の構成員
      - 教員
      - 事務職員
    - 校地、施設及び設備
      - 空地
      - 運動場
      - 校舎
      - 資料及び図書館
      - 附属施設
      - 機械、器具及び標本
    - 研究のインプット
  - アウトプット
    - 研究のアウトプット
    - 社会貢献等のアウトプット
- 大学設置基準等が令和4年10月1日に改正・施行され、組織区分が変更された
- アクティビティ
    - 教育方針
      - 建学の精神
      - 入学者受け入れの方針
      - 教育課程編成・実施の方針
      - 卒業認定・学位授与の方針
    - 教育上のサービスと支援
      - 教育課程
      - 課外活動
      - 学生のための費用支援
    - 学生の学習状況
    - 研究活動の状況
  - 入学
    - 入学試験
    - 学生
  - 卒業
    - 卒業後のアウトカム
  - 財務状況

## Organizational survey according to an information model

- Organization
    - Institution
    - Academic staff organization
    - Administrative organization
    - Organizational principle for education and research
    - Education and research programs
  - Inputs
    - Members of the organization
      - Academic staff
      - Administrative and clerical staff
    - School sites, facilities, and equipment
      - Empty spaces
      - Athletic grounds
      - School buildings
      - Books and libraries
      - Attached facilities
      - Machines, instruments and specimens
    - Research Inputs
  - Outputs
    - Research outputs
    - Outputs of social engagement
- The Standards for the Establishment of Universities were revised and entered into force on October 1, 2022, and organizational classification changed.
- Activities
    - Education Policies
      - School mottos
      - Admissions policies
      - Curriculum policies
      - Diploma policies
    - Education services and support
      - Curricula
      - Extracurricular programs
      - Student financial support
    - Students' learning status
    - Research activity status
  - Matriculation
    - Entrance exams
    - Students
  - Graduation
    - Graduate outcomes
  - Financial statements

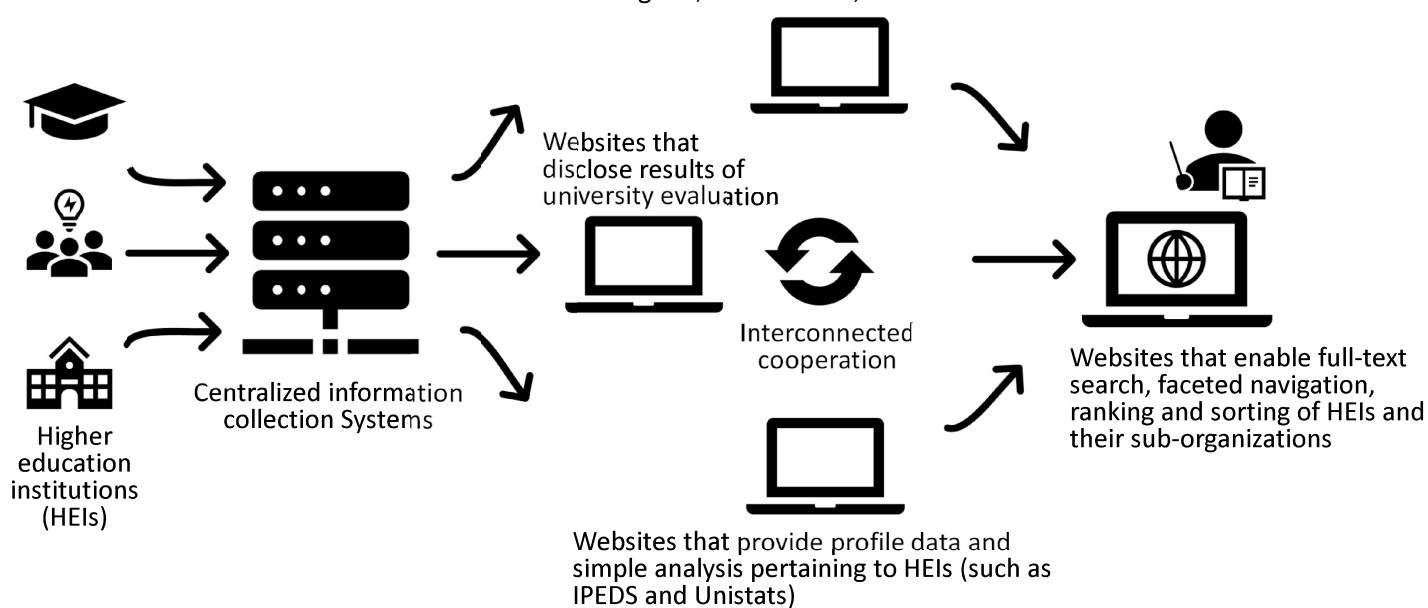
大学改革支援情報基盤の概念図



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Conceptual diagram of the information infrastructure for the quality assurance system of higher education in NIAD-QE

Websites for the introduction of HEIs to high school students (such as College Board, College Scorecard, College Navigator, Discover Uni)



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# 大学ポータルをとりまく内外からの期待

- 2010年、事業仕分けにおける高等教育データベース事業（大学情報提供事業）の廃止
  - 大学入試センター/大学情報提供事業（ハートシステム等）
  - 日本学生支援機構/学生生活支援事業のうち大学情報提供事業（学生支援情報データベース等）
  - 大学評価・学位授与機構/情報の収集・整理・提供事業のうち大学情報提供事業（大学情報データベース等）
  - 国立大学財務・経営センター/財務経営の改善に資する情報提供事業のうち大学情報提供事業（国立大学法人経営ハンドブック等）
- 2011年4月、学校教育法施行規則第172条の2第1項に規定された教育研究活動等の情報の公表、義務付け
- 2011年8月の文部科学省/大学における教育情報の活用支援と公表の促進に関する協力者会議「大学における教育情報の活用・公表に関する中間まとめ」
  - 各大学が自主的・自律的に教育情報の活用・公表に取り組むことが基本とされるべき
  - その上で、各大学の取組を支援し、あるいは補完するための大学団体等の活動が重要
  - さらに、大学団体等の自主的な連携を通じて、教育情報の活用・公表のための共通の基盤の整備を進めることが求められる
- 共通の基盤としての「大学ポータル」の3つの目的
  - 各大学の使命とそれに基づく教育研究活動の状況を分かりやすく示し、教育の質の向上に資する教育情報の分析を促進すること
  - 大学進学希望者、自治体、産業界など、国内外の大学教育に関係・関心を有する者に分かりやすく情報を提供すること
  - 大学への各種調査などの負担を軽減すること



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## Internal and external expectations for JPCUP

- In 2010, the higher education database services (university information provision services) were terminated after the government's budget screening process.
  - National Center for University Entrance Examinations/University Information Provision Service (Heart System, etc.)
  - Japan Student Services Organization (JASSO)/University Information Provision Service (Student Support Information Database, etc.) as part of the student support programs
  - National Institution for Academic Degrees and University Evaluation (NIAD-UE, the predecessor of NIAD-QE)/University information provision service (University Information Database, etc.) as part of the duty of information collection, organization, and provision
  - Center for National University Finance and Management (CUFM)/University information provision service (National University Corporation Management Handbook, etc.) as part of the duty of information provision for supporting improvement of finance and management
- In April 2011, the information on education and research activities to be provided has been specified, as stipulated in Paragraph 1 of Article 172-2, the Regulation for Enforcement of the School Education Act.
- "Interim Report on the Utilization and Public Provision of Education Information at Universities" (August 2011), Expert meeting for supporting the utilization and promoting the public provision of education information at universities, MEXT
  - Each university should voluntarily and autonomously engage in the use and public provision of education information.
  - In this regard, it is important for university associations and other relevant organizations to support and complement the efforts of each university.
  - Furthermore, through voluntary cooperation among university associations and other relevant organizations, the development of a common infrastructure for the use and public provision of education information should be promoted.
- Three Objectives of the JPCUP
  - To clearly illustrate the mission of each university and the condition of its education and research activities and to promote the analysis of education information that will contribute to enhancing the quality of education.
  - To provide information in an accessible manner to stakeholders and interested parties in university education, both domestically and internationally, including prospective students, local authorities, and industry representatives.
  - To help universities and colleges respond to various surveys.



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[illegible]

The diagram illustrates the structure of the JPCUP system. At the top, 'Deliberative bodies within MEXT' and 'Steering Committee for JPCUP' are connected by a double-headed arrow. Below them, the 'JPCUP Stakeholders Board' is shown. The 'Steering Committee for JPCUP' is connected to the 'JPCUP Stakeholders Board' and 'Certified evaluation and accreditation organizations'. The 'JPCUP Stakeholders Board' is connected to 'Secondary education institutions', 'Universities and other HEIs/university associations', 'Private universities and junior colleges', and the 'Industrial sector'. 'Certified evaluation and accreditation organizations' are connected to 'Private universities and junior colleges' and the 'Industrial sector'. 'Secondary education institutions' are connected to 'Universities and other HEIs/university associations'. 'Universities and other HEIs/university associations' are connected to 'Private universities and junior colleges'. 'Private universities and junior colleges' are connected to the 'Industrial sector'. The diagram also includes logos for the Ministry of Education, Culture, Sports, Science and Technology (MEXT), NIAD-QE, and JPCUP, as well as icons for schools, universities, and industrial buildings.

# 大学ポータルサイトによる教育情報の公表

大学別公表画面（国公立版）

大学別公表画面（私学版）

国公立共通検索画面

The image displays three screenshots of the JPCUP (Japan Private College University Portal) website. The leftmost screenshot shows the 'Common search page for national, public, and private institutions' with various filters and search criteria. The middle screenshot shows the 'University-specific publication screen (National/Public version)' for Tokyo University of Foreign Studies. The rightmost screenshot shows the 'University-specific publication screen (Private version)' for Tsuda University. Arrows indicate the flow from the search page to the respective university-specific pages.

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## Public provision of education information through JPCUP

Common search page for national, public, and private institutions

Result page (national and public)

Result page (private)

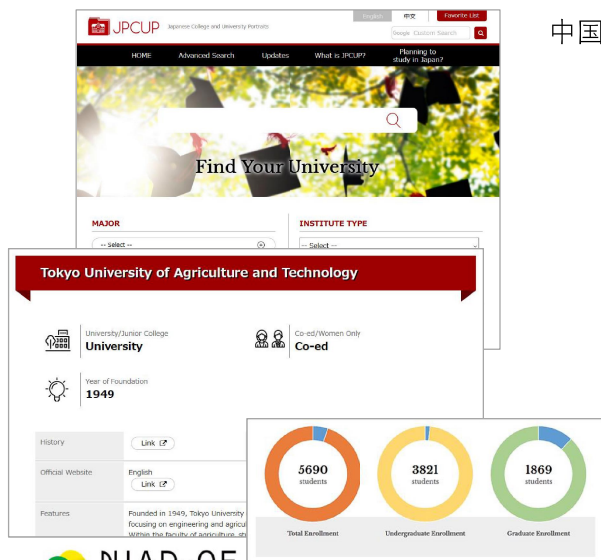
This section provides a detailed view of the JPCUP portal, highlighting the search and result pages. The leftmost screenshot is the common search page. The middle screenshot shows the result page for national and public universities, featuring the Tokyo University of Foreign Studies. The rightmost screenshot shows the result page for private universities, featuring Tsuda University. Arrows indicate the flow from the search page to the respective result pages.

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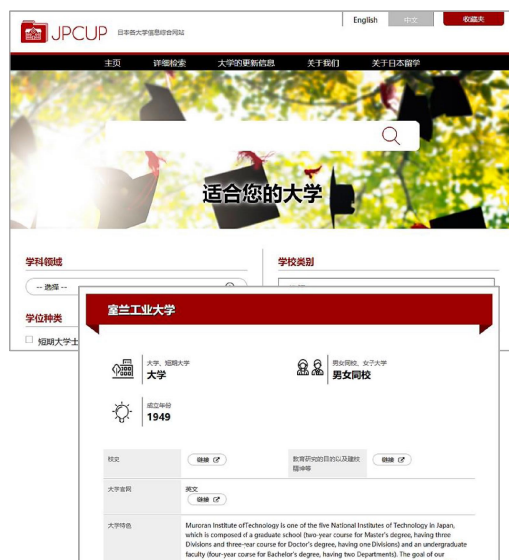


# 留学希望者向け教育情報の公表

英語版



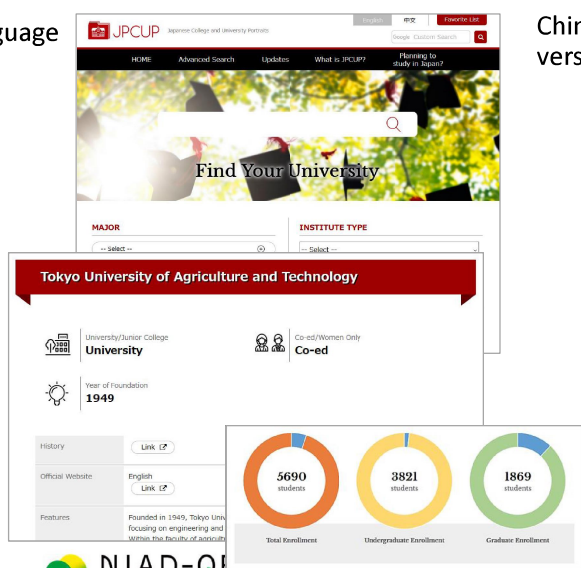
中国語版



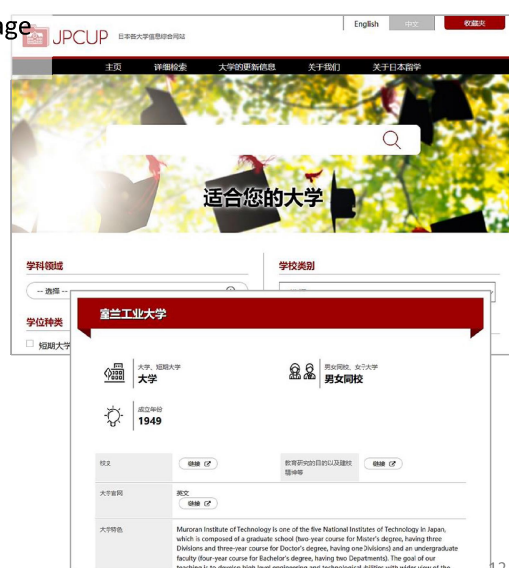
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## Public provision of education information for students planning to study in Japan

English-language version



Chinese-language version



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# 教育情報の分析環境やデータの提供（1）

## 大学基本情報を対象とした分析環境

2012年から2022年までのデータ



修業年別卒業生数



# Providing a resource platform for the analysis of education information and data (1)

## Resource platform for the analysis of Basic University Information

Data from 2012 to 2022

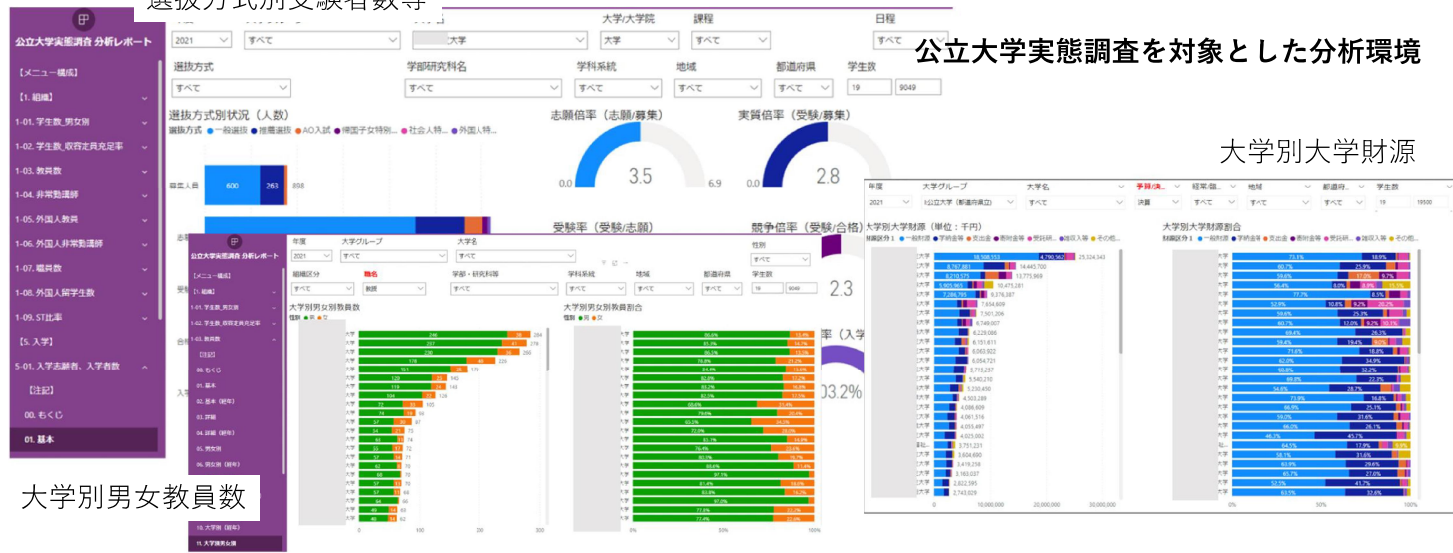


Number of graduates by years required for graduation

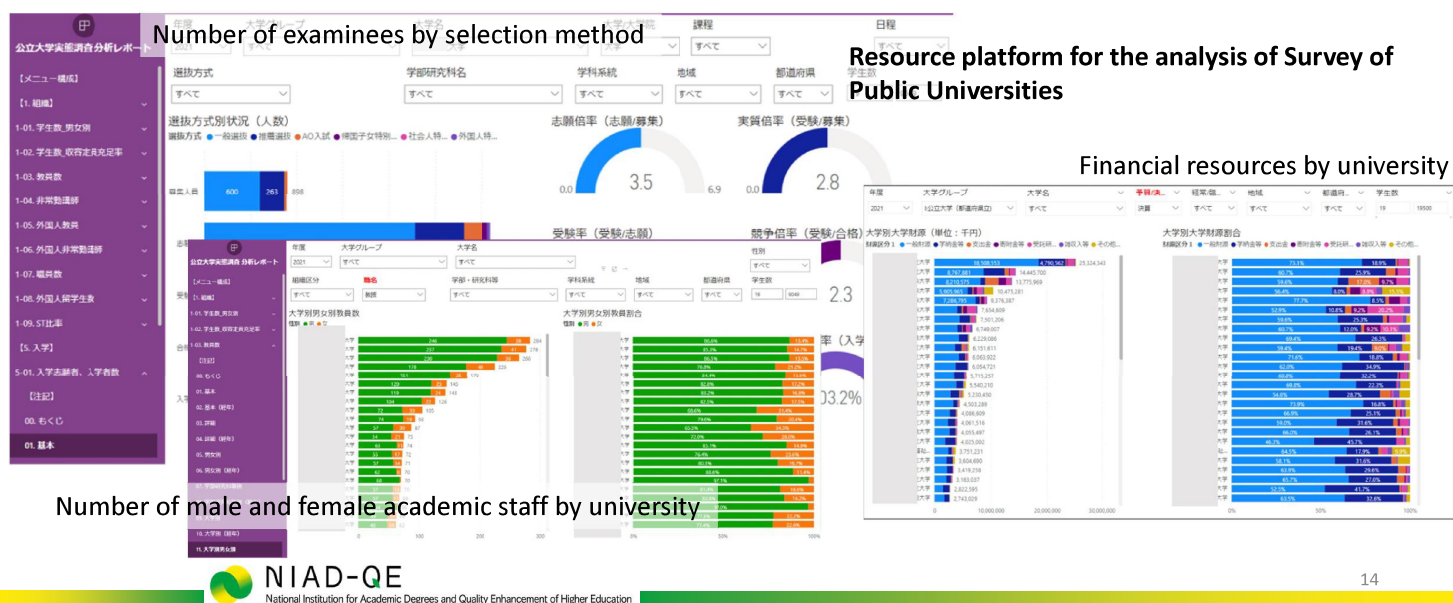


# 教育情報の分析環境やデータの提供（2）

選抜方式別受験者数等



## Providing a resource platform for the analysis of education information and data (2)



# 機構の高等教育データにかかる課題の認識

- 全体にわたって現場力を高める必要がある

- 高等教育データに関する専門性
  - 高等教育データの活用目的の理解
  - 高等教育データの定義
  - 高等教育データの発展の方向性の理解
- 高等教育データの提供・利用者コミュニティとの対話
  - 大学のデータを扱う経営戦略室担当者、IR(institutional research)室担当者、情報基盤担当者等
  - 高等教育のデータを扱う研究者
- 高等教育データを取りまくサービスイノベーションと提供戦略
- 高等教育データに関与する公的機関、民間組織との有意義な連携
  - 大学改革支援・学位授与機構、日本私立学校振興・共済事業団
  - 国立教育政策研究所、科学技術・学術政策研究所
  - 大学入試センター、日本学生支援機構
  - 国立大学協会、公立大学協会、全国公立短期大学協会、日本私立大学連盟、日本私立大学協会、日本私立短期大学協会
  - 認証評価機関
  - 大学IRや学生調査を行う非営利組織
  - 大学受験産業、大学進学情報産業、高等教育情報産業などの民間企業



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## Issues and challenges pertaining to the higher education data at NIAD-QE

- It is necessary to enhance our capabilities at all levels.

- Expertise in higher education data
  - Understanding the purpose of using higher education data
  - Definition of higher education data
  - Understanding the future development of higher education data
- Provision of higher education data and interaction with the user community
  - Personnel of the management strategy office, institutional research (IR) office, information infrastructure department, and other departments who handle university data
  - Researchers working with higher education data
- Service innovation and delivery strategies pertaining to higher education data
- Meaningful collaboration with public and private entities that operate higher education data management
  - NIAD-QE, The Promotion and Mutual Aid Corporation for Private Schools in Japan
  - National Institute for Educational Policy Research (NIER), National Institute of Science and Technology Policy (NISTEP)
  - National Center for University Entrance Examinations, Japan Student Services Organization (JASSO)
  - The Japan Association of National Universities (JANU), The Japan Association of Public Universities, Japan Association of Public Junior Colleges, The Japan Association of Private Universities and Colleges (JAPUC), Association of Private Universities of Japan (APUJ), The Association of Private Junior Colleges in Japan
  - Certified evaluation and accreditation organizations
  - Non-profit organizations that perform IR and student surveys
  - Private enterprises in the university entrance exam industry, university enrollment information industry, and higher education information industry, etc.



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