

Top Global University Project (Type A) Osaka University

1. Outline

【 Name of project 】

Global University “World Tekijuku”

【 Future vision of the university planned in TGU project 】

Osaka University looks to deliver relevant impact to modern society with its original research and education as a center of scholarship. Our world-class academics are based in the spirit of free and open exchange and driven by the motivation to ascertain the true essence of things. We look to continue offering multilevel, intergrated education that fosters proactive learning in an atmosphere of friendly competition. In this way we will nurture a generation of leaders capable of tackling global challenges and problems, surpassing outdated preconceptions for real solutions. Our institution aims to become one of the world's top 30 comprehensive research universities by the completion of the Top Global University Project in 2024 and a world top 10 comprehensive research university by our centenary in 2031. In the globalized world of the 21st century, Osaka University strives to foster a flourishing and peaceful society, born of harmonious diversity, through its contributions to our global society through the World Tekijuku Initiative.

【 Summary of Project 】

The World Tekijuku Initiative at Osaka University will cultivate leaders for the global society, top researchers and specialist technicians. It is expected to lead to the development of cutting-edge science and technology, setting forth solutions to complex, global-scale problems, thereby contributing to a flourishing global society.

Collaborative Innovation

新たな社会的価値・研究成果の提示
Quality research and value in society

コラボレーティブ
・イノベーションを
推進する人材
Experts driving
collaborative innovation

主体的学修の
実質化
Proactive,
substantive inquiry

学ぶ意欲の
涵養
Motivation for
the learning process

Synthesis
Knowledge
Analysis

次世代型人材育成に向けた教育プログラムの構築 Creating programs to educate future experts

- ①「知の統合学修」のプラットフォームを構築 A platform for integrating specialist knowledge
- ②全学の研究科に対して副専攻プログラムを提供 Graduate minor programs offered to all graduate schools
- ③新しい学位プログラムの開発 New degree program development
- ④マルチリンガルエキスパートの養成プログラムを提供 Programs to educate multilingual specialists

副専攻・副プログラム等の学際横断的な教育の充実 Enhancing interdisciplinary education with Graduate Minor Programs and the Graduate Program for Advanced Interdisciplinary Studies

国際標準の教育の保証、学習環境の向上 Guaranteeing internationally standardized education and improving the learning environment

学修暦の改革 Reforming the academic calendar

- クォーター制(3学期制及び夏期講習期間)導入
Quarter system (three terms and a summer session)
- 新AO入試の全学導入
A new university-wide entrance examination

教員の多様化 Increasing academic staff diversity

- 優秀な外国人教員の招へい
Inviting world-class academic staff members from overseas
- 年俸制、クロス・アポイントメント制度等の人事・給与制度弾力化
Modifying personnel systems such as the annual salary system and the cross-appointment system to allow for more flexibility

外国人・日本人の
混住を前提とした
「世界適塾ビレッジ」
(国際学生・教職員寮)

学生の多様化 Increasing student body diversity

- 新AO入試によるIB・SGH・SSH等の人材の積極的な受入れ
Actively accepting graduates of IB, SGH and SSH with a new entrance examination
- 新たな留學生入試の実施
Conducting a new entrance examination for international students
- 留學生受入れ数の倍増
Doubling the number of accepted inbound international students
- 日本語教育の充実
Enhancing Japanese-language education

A Global Village,
a dormitory where
Osaka University
students and staff
from Japan and all
parts of the world
will live

国際水準の教育の質保証システムの確立 Establishing systems to assure the quality of international standardized education

- 学位プログラムを中心とした質保証体制の構築
Constructing a framework for quality assurance with a central focus on degree programs
- ナンバリングの導入
Unifying course numbering
- GPAを通じた厳正な成績評価
Evaluating academic grades using the GPA system
- シラバス充実、英語化
Enhancing syllabi and making them available in Japanese and English
- IR、学生による授業評価の充実、国際的な学生経験調査
Carrying out institutional research, the Student Experience in the Research University (SERU) survey, and enhancing student course evaluation systems

英語で切磋琢磨する環境 All-English, friendly, rigorous academic environment

- 英語学位コースの充実
Enriching English degree courses
- 学生の海外派遣倍増
Doubling the number of outbound students
- 英語で提供される授業科目の増加
Increasing subjects taught in English
- TOEFL対応等の実践英語力強化
Enhancing practical English skills, using TOEFL as a target
- UC/UCEAP大阪オフィスと連携したサマープログラム、Frontierlab@OsakaU等の国際的に魅力あるプログラムの拡充
Expanding programs that are attractive for international students, such as Frontierlab@OsakaU and summer programs coordinated by the UC/UCEAP Osaka Office

世界に展開する大阪大学の教育・研究 Education and research at Osaka University expanding worldwide developments

- クォーター制を活かした外国人採用と人材交流
Hiring international academic staff and exchanging personnel more easily on the quarter system
- UC/UCEAP大阪オフィス誘致
New UC/UCEAP Osaka Office
- 国際ジョイントラボ
International Joint Labs

推進体制の強化 Enhancing systems

未来戦略機構

Institute for Academic Initiatives

学内の多様な分野の知的資源を戦略的・部局横断的につなぎ、部局を超えた新たな学術領域の創造に取り組む。

Innovating new disciplines which cross conventional boundaries of study, strategically uniting intellectual resources from a diversity of fields.

世界適塾大学院(仮称)

World Tekijuku Graduate School (provisional name)

大阪大学ならではのトップレベルの研究力を有する分野や、未来戦略機構を介し創造された新学術領域の研究分野を基盤とした「世界適塾大学院」(仮称)を平成29年に設置。

The World Tekijuku Graduate School will be established in April of 2017, with foundations in Osaka University's top-level research and the novel fields of research developed by the Institute for Academic Initiatives.

学修イノベーション機構(仮称)

Institute for University Learning Innovation (provisional name)

「知の統合学修」に係るプログラムや、主体的学修に係る教育活動を全学的に戦略化・体系化するための教学マネジメント拠点を平成27年度中に整備。

An educational management center will be established by the end of March 2016, with the purpose of strategizing and systematizing university-wide management of educational programs to foster the proactive acquisition of knowledge and the study of integrating knowledge.

国際戦略推進機構(仮称)

Office for International Strategic Promotion (provisional name)

教育研究の国際交流やブランディング戦略の展開等を全学的かつ戦略的に推進する組織を平成27年度中に整備。

An Office for International Strategic Promotion will be established by the end of March 2016, tasked with strategically and comprehensively enhancing international exchange in education and research as well as branding strategy.

*Years described in this paper is fiscal years.

【Summary of the 10-year plan】



【Featured initiatives (Internationalization, University reform, Education reform)】

Launching a World Tekijuku Graduate School

The World Tekijuku Graduate School will be established in 2017, with foundations in Osaka University’s top-level research and the novel fields of research developed by the Institute for Academic Initiatives. Osaka University will establish doctoral programs to cultivate talented individuals who can translate research results to *the creation of value for society* in addition to carrying out cutting-edge research in a global environment of friendly competition. Osaka University will then expand a new style of education and research developed by the World Tekijuku Graduate School to all faculty members and promote reforms in graduate school education systems and the development of internationally competitive, novel academic fields.

【Measures for the promotion of collaboration with foreign universities】

Osaka University will increase considerably the number of International Joint Labs from 22 labs in 2014 to 100 by 2023. These labs will act as bases for international collaborative research, expanding Osaka University’s international presence and allowing for international recognition as a pioneer of novel fields of research. Osaka University will enhance cooperative systems with worldwide education and research centers by opening the UC/UCEAP Osaka Office (in December 2014); expanding the reach of Osaka University’s four Overseas Centers from a single locale to an entire region; increasing the number of Inter-university Exchange Agreements (from the current 99 to 130 by 2023); and utilizing international networks (APRU, AEARU, RENKEI, HeKKSaGOn, etc.).

2. FY2014 Progress

■ Common Indicators and targets

Internationalization

1. Establishing Osaka University's International Strategy

Osaka University has integrated university-wide planning and implementing of globalization initiatives, promoting an organizational international strategy for education, research and international contributions that goes beyond the former focus on mere international exchange primarily limited to the exchange of individuals.

2. Opening the UC/UCEAP Osaka Office

Osaka University attracted the University of California to establish its UC/UCEAP Osaka Office at Osaka University. This has led to further promotion of studying abroad program to students via UC-style interactive lectures focused on group discussion in English.

3. Promoting the International Joint Research Promotion Program

As a foothold for establishing international joint labs, Osaka University has promoted the International Joint Research Promotion Program and successfully formed a total of 22 international joint labs in association with institutes and universities in 13 countries/regions including those with the University of Oxford and the California Institute of Technology.

4. Establishing Short-term support for personnel expenses under the International Joint Research Promotion Program

Osaka University established a program to cover short-term personnel expenses as one of its initiatives to support international research programs to further promote international joint research and for the purpose of inviting prominent international faculty to Osaka University. 53 research projects have been selected as beneficiaries of this program.

University Reform

1. Launching a World Tekijuku Graduate School Project

Osaka University has appointed an Establishment Examination Committee to, manage the establishment of the World Tekijuku Graduate School in April 2017. This Graduate School will integrate interdisciplinary specialist knowledge and foster the creation of novel fields of inquiry with its distinct programs. As an organization that represents the future of Osaka University, it will attract a high ratio of young and international faculty and conduct all activities in English as its official language under an annual salary system.

2. Annual Salary System

Osaka University has broadened the reach of faculty under the annual salary system and reformed personnel hiring and salary systems for greater flexibility as a means to become a world top 10 comprehensive research university.

3. Cross-Appointment System

Starting with the conclusion of an agreement with RIKEN and the acceptance of researchers from RIKEN, Osaka University has concluded a total of 31 agreements with research organizations including 2 domestic and 29 international agreements.

Education Reform

1. "World Tekijuku Entrance Examination" ***

In order to attract high school graduates with experience in proactive learning (such as those with research project experience) in addition to basic knowledge and skills, Osaka University has decided to implement the World Tekijuku Entrance Examination, a comprehensive applicant selection system used by all schools and faculties starting in 2017.

2. Implementing a new entrance examination for privately-funded international students

The Global Admissions Office (GAO), in charge of developing various entrance examination systems, established a new entrance examination, "Special Entrance Procedures for Privately-Funded Undergraduate International Students Living Overseas," in order to attract prominent international students. It allows international high school students to take an entrance examination in their home countries before coming to Japan.

3. Developing the Multilingual Expert Program *

This new type of educational program has been developed with foundations in Osaka University's unique strengths. It aims to contribute to society with its expertise in humanities and social sciences, educating students from a complete, global perspective in multilingual and multicultural matters. Students acquire proficiency in one or more languages in addition to English.

4. Reforming the Teaching Assistant (TA) system **

Osaka University is preparing a trial of a Teaching Fellow (TF) system in 2015, a pioneering system in Japan. They are endowed with the greatest responsibility within the TA system, planning additional educational activities, managing the progress of classes, and educating students directly and autonomously.

5. Establishing a Double Degree Program

Osaka University has promoted the establishment of a Double Degree Program to educate globally minded human resources. Students receive degrees from both Osaka University and a university abroad on the basis of an inter-university exchange agreement. Nine new agreements with universities abroad were signed in 2014.

■ University's own indicators and targets

1. Increasing the number of subjects ranked in the top 30 in the Thomson Reuters Essential Science Indicators(ESI)

Osaka University aims to be ranked in the top 30 citation index in ten fields in the Thomson Reuters Essential Science Indicators (ESI) before the completion of the Top Global University Project in 2024. Biology and biochemistry was ranked in this range in 2014, and including the three fields that ranked previously – immunology, chemistry, and material sciences – Osaka University currently has four fields ranked in the top 30.

2. Increasing the number of inter-university exchange agreements

The number of inter-university exchange agreements will be increased to 130 to further develop a robust international network before the completion of the Top Global University Project in 2024. The total number of agreements in 2014 was 104, which includes the five completed in 2014 and the 99 which were previously concluded. As of June 1, 2015, the total has increased to 105, a strong indicator of growth in this area.

■ Initiatives for the enhancement of international reputation

1. Promoting International Joint Research Programs *

Osaka University will substantially increase its number of International Joint Labs, centers of international joint research. The targets is 100 labs by 2023, from the total of 22 in 2014. These labs are expected to further research in their respective regions and expand Osaka University's international presence. This includes pioneering novel fields of inquiry to provide impact on the global scale.

2. Enhancing the international public relations

Osaka University has hosted the Academic Initiatives Forum “Global University Rankings and Excellence Indicators Reexamined” and promoted the University utilizing international universities rankings and journals.

3. Hosting the Association of Pacific Rim Universities (APRU) Presidential Retreat and the 19th Annual Presidents Meeting in Osaka.



1. 2014 International Joint Research Promotion Program Workshop

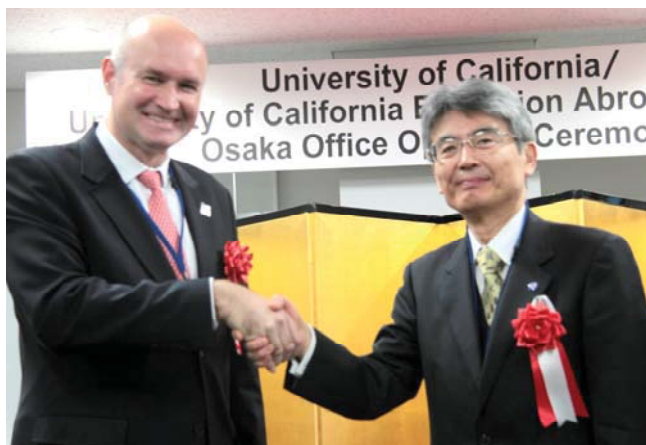
【Cooperation with Universities Abroad】

- ◆ The UC/UCEAP Osaka Office was opened in cooperation with the University of California at Osaka University in December 2014.
- ◆ Osaka University established a program to cover short-term personnel expenses as one of its initiatives to support international research programs. 53 of the proposed programs were selected for support.

In addition, Osaka University provided financial support to international joint conferences (supporting 15 events), research abroad programs (supporting 9 events), and visiting scholar programs (supporting 3 programs). This funding was made possible by the Program for Promoting the Improvement of Research Universities, funded by the Ministry of Education, Culture, Sports, Science and Technology.



2. Academic Initiative Forum “Global University Rankings and Excellence Indicators Reexamined”



UC/UCEAP Osaka Office Opening at Osaka University



3. Association of Pacific Rim Universities (APRU) 18th Annual Presidents Meeting

3. FY2015 Progress

■ Common indicators and targets

Internationalization

1. International Strategy Promotion Office (reorganized as the Center for Global Initiatives on April 1, 2016)

The International Strategy Promotion Office is a new organization established by Osaka University to coordinate university-wide activities related to global communications, the global cloud, and global collaboration.

- A new portal site for international students was released.
- It has enhanced the dissemination of research results to the international community, which in turn has increased significantly the number of hits to Osaka University's research information portal (an increase of 60% compared to the previous year and an increase of more than 70% from English-speaking countries).

2. Academic exchange with the University of California (UC)

Osaka University held the UC/UCEAP Osaka Office First-year Anniversary International Symposium in collaboration with the UC/UCEAP Osaka Office. (Refer to the *1 on the next page.)

Osaka University offered two summer programs mainly targeted at UC students and registered approximately 50 students. In addition, two UC faculty members were employed as specially appointed faculty members (full-time) at Osaka University through our cross-appointment system.

A special lecture series was conducted by Dr. John Hampton Ino, Professor Emeritus at UC San Francisco. This special English series involved nine lectures and was conducted in an interactive seminar style, based on group discussions. A total of 130 Osaka University members (students, faculty, and staff) attended.

3. International Joint Research Program

Osaka University's International Joint Research Promotion Program has successfully created 35 International Joint Labs in association with 41 institutes/universities in 16 countries/regions, including the University of Oxford and the California Institute of Technology.

University Reform

1. Osaka University Vision 2021

Osaka University has presented the "Osaka University Vision 2021" in anticipation of the 90th anniversary of its founding. The 6-year period from 2016 to 2021 is viewed as an "evolution period," and the "Osaka University Vision 2021" provides guidelines for self-reform.

2. Center for the Study of Co· Design

Osaka University is preparing to establish a new university-wide center in order to cultivate leaders who can develop their expertise and innovate in the real world. These leaders will be able to promote innovation and solve complex social issues by integrating knowledge into society.

3. Annual Salary System

Osaka University has expanded the eligible faculty members to be applied to performance-based annual salary system to secure talented and diverse individuals. In 2015, over 200 faculty members were newly applied to this system.

4. Cross-Appointment System

Osaka University has promoted education and research by concluding 46 agreements for this system with research organizations, which include 10 domestic and 36 international agreements.

Education Reform

1. Top Global University Project International Symposium (Refer to the *2 on the next page)

2. Improvement of language education to strengthen English proficiency

Osaka University has improved its English education curriculum by implementing the TOEFL-ITP test and considering this score (30%) in the grading of students in general education English classes.

Osaka University has offered interactive small-size advanced English classes for students with high English proficiency to further enhance their speaking and writing skills. Moreover, the Intensive Practical English Program was offered to Japanese students to improve their language proficiency.

3. Making syllabi available in Japanese and English

Osaka University is preparing to provide all syllabi in both Japanese and English. In order to support this initiative, the manual for syllabus creation—originally in Japanese—has been translated into English, and an English glossary of frequent words in has been created.

4. Development of the Multilingual Expert Program (MLE)

MLE started the educational program in which students of the School of Foreign Studies are able to take one of the courses which are designed as a minor in the following schools of the humanities or social sciences in Osaka University: School of Letters, School of Human Sciences, School of Law and School of Economics. In 2015, the first year of this program, 32 students were successfully selected and registered for the courses.

Additionally, MLE created the Academic English Support Desk Program, an English presentation tutorial. This program is aimed at enhancing the academic presentation skills of students, faculty and staff members, mainly for international conferences, through the tutorial conducted by an English native lecturer.

5. Advanced collaboration with high schools

Osaka University has improved collaboration with prefectures and high schools by organizing and co-hosting events for high school students.

■ University's own indicators and targets

1. Increased in the number of Double Degree Programs

Osaka University has promoted the establishment of a Double Degree Program to educate globally minded human resources. Students receive degrees from both Osaka University and a university abroad on the basis of an inter-faculty exchange agreement. 12 new agreements with universities abroad were signed in 2015.

2. Increased in the number of inter-university exchange agreements

The number of inter-university exchange agreements will reach 130 in 2024 as a way to further develop a robust international network before the completion of the Top Global University Project. The number of agreements signed in 2015 was five, which added to the previously concluded 104 agreements makes for a total of 109 agreements.

■ Initiatives for the enhancement of international reputation

1. Held two remarkable international symposiums

(1) UC/UCEAP Osaka Office First-year Anniversary International Symposium "Career Development and Globalization" (December 2015) *1

In collaboration with the UC/UCEAP Osaka Office, Osaka University held the international symposium. The symposium included a keynote speech by the Director of the Career Center at the UC Irvine and a panel discussion composed of four panelists from Japan and overseas.

(2) Top Global University Project International Symposium "New Learning of Liberal Arts and Quality Assurance (Quality Liberal Learning)" (January 2016) *2

Osaka University held the international symposium, to which it invited speakers from Japan and overseas. The symposium included keynote lectures, case reports, and the introduction of Osaka University's educational system and some unique Osaka University programs to become a world-class educational institution and promote globalization. A lively discussion took place among panelists and audience addressing key issues and solutions regarding liberal education and assessment.

2. Increased in the number of International Joint Labs

Osaka University will substantially increase its number of International Joint Labs, centers of international joint research. The target is 100 labs by 2023, from a total of 22 in 2014. These labs are expected to further research in their respective regions and expand Osaka University's international presence by pioneering new fields of inquiry to create an impact on a global scale.

3. Enhancing international public relations

Osaka University's website has started to offer "Research Highlights," a compilation of articles containing the research findings of International Joint Labs. Additionally, these findings were made accessible to researchers in Japan and overseas by e-mail.

Furthermore, the proceedings of the forum*3, held in 2015, were published in March 2016.

*3 For details on the forum, please refer to item 2 of the "Initiatives for the enhancement of international reputation" on the second preceding page.

4. Hosting the prestigious Association of Pacific Rim Universities (APRU) 19th Annual Presidents Meeting in Osaka

Osaka University is a member of the Association of Pacific Rim Universities (APRU), comprised of top research universities in the Pacific Rim area. In June 2015, Osaka University hosted prestigious APRU's Annual Presidents Meetings with the theme "University as an Agent for Global Transformation." The meeting hosted 106 guests—including 25 presidents—and composed of panel discussions that revisited the mission of universities in the 21st century and discussed the university's role as a proactive instrument of global transformation.



1-(1). Panel Discussion at the UC/UCEAP Osaka Office First-year Anniversary International Symposium



1-(2). Keynote Lecture at the Top Global University Project International Symposium



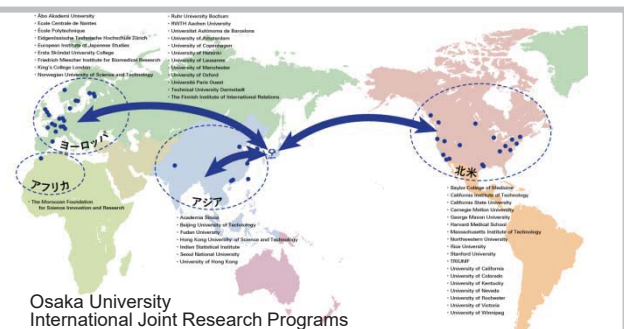
4. Association of Pacific Rim Universities (APRU) 19th Annual Presidents Meeting

[Cooperation with Universities Abroad]

◆ Osaka University selected 54 projects to receive short-term personnel expenses coverage, as a measure to support international research programs.

◆ Moreover, Osaka University provided financial support as follows. These supports were made possible by the Program for Promoting the Improvement of Research Universities, funded by the Ministry of Education, Culture, Sports, Science and Technology.

- 12 international joint conferences
- Seven research programs overseas
- One visiting scholar program



■ Osaka University has been rated the most innovative university in Japan, and 18th in the world.

Reuters, one of the leading international ranking organizations, announced the World's Most Innovative Universities in September 2015. Osaka University was ranked 18th in the world and 1st in Japan.

4. FY2016 Progress

■ Common indicators and targets

Internationalization

1. Center for Global Initiatives

Composed of three sections – Global Outreach, Global Collaboration and Global Exchange Support – the Center for Global Initiatives coordinated international PR strategies, the global cloud, as well as international cooperation throughout the university, reinforced and promoted study abroad programs and the risk management system, and carried out surveys to promote collaborative projects with international institutions.

2. International Joint Research Program

In addition to the existing 33 International Joint Labs, 23 International Joint Labs were newly opened to conduct joint research with the world's leading researchers.

3. Academic exchange with the University of California (UC)

Two UC faculty members were invited to Osaka University under a Cross-Appointment System, who collaborated with the university's faculty members while teaching graduate and undergraduate students.

University Reform

1. Center for the Study of Co* Design (Established on July 1, 2016)

The Center for the Study of Co* Design was established to develop new academic realms and nurture leaders with advanced comprehensive skills (ability to identify problems, find solutions, and implement the solutions for society). The Center leads the educational activities of the university in line with OU Vision, which aims to integrate academic expertise with society.

2. Cross-Appointment System

Osaka University has signed cross-appointment agreements with 58 organizations including national university corporations, inter-university research institute corporations and national research and development agencies (19 domestic and 39 foreign organizations) to conduct education and research under this system.

3. Center for Gender Equality Promotion (Established on April 1, 2016)

Osaka University established the Center for Gender Equality Promotion on April 1, 2016 and issued the "Osaka University Gender Equality Declaration," and was selected for the "Initiative for Realizing Diversity in the Research Environment (Collaboration Type)," a subsidy project of MEXT for the development of human resources in science and technology for FY2016. Under this project, the university provided support to five joint research programs and 17 female researcher training programs, thereby strengthening the leadership of female researchers and their research capabilities.

Education Reform

1. Introducing a new academic calendar

To encourage students to take the initiative in their studies and offer them a wider variety of learning opportunities, the university prepared for the introduction of a four-term system from April 2017.

2. Implementing World Tekijuku Entrance Examination and reinforcing the high school/university connection project

- The university implemented World Tekijuku Entrance Examination in cooperation with the Center for the Study of Higher Education and Global Admissions, an organization engaged in the study of holistic admissions. A total of 332 applications were received for the quota of 270, and 118 were admitted.
- The university organized various events to strengthen links with high schools and proceed with reforming the high school/university connection system.

3. Improving language education to strengthen English proficiency

The university revised its grading system to better comply with the international standard by considering the score of the TOEFL-ITP test in the grading of students in general education English classes, and designed a framework for proficiency-based English classes to be introduced in FY2019 based on an analysis of the score data. To help students improve their English proficiency, the university also offered a course on improving English test scores for students wishing to participate in the study abroad program, to study abroad, or to improve English proficiency in the academic field (attended by 184).

4. Multilingual Expert Program

This undergraduate program allows students of the School of Foreign Studies to take courses offered by schools of humanities/social sciences as minors. In FY2016, 73 students applied for the program and 31 were accepted. A total of 63 students, including the 32 accepted in FY2015, studied in this program and acquired advanced knowledge in humanities, human sciences, law/political science, and economics/business administration. As part of the Academic English Support Desk Program, which is designed to enhance English presentation and discussion skills at international conferences, English presentation tutorials were provided by native English instructors on a trial basis in FY2015. In FY2016, the tutorials were offered to students, faculty and staff university-wide throughout the year at four support desks. A total of 149 people studied in this program and 97 of them gave research presentations at international conferences during FY2016.

■ University's own indicators and targets

Increase in the number of Double Degree Programs

The number of Double Degree Programs reached 23 in FY2016. The university also signed a double degree agreement with National Tsing Hua University (Taiwan).

Continued increase in the number of inter-university exchange agreements

Osaka University aims to sign inter-university exchange agreements with 130 universities during the Top Global University Project period to build an international network. As of FY2016, the number of exchange agreements exceeded the target of 105, and reached a total of 113.

■ Initiatives for enhancing international reputation

1. Academic exchange with the University of California (UC)

Following FY2015, the university invited two faculty members of UC under a Cross-Appointment System, who taught two "UC Frontier Science" courses in English to 20 undergraduate and graduate students. Also, a total of 123 students attended the special lecture given monthly by a Professor Emeritus of UC San Francisco in English, a practical seminar "Case Based Critical Thinking."

2. Summer Program to accept UC students

Following FY2015, the university implemented the FrontierLab@OsakaU Summer Program, accepting 21 UC students at the university's scientific laboratories. The UC students conducted various research at the university's laboratories for eight weeks from mid June to early August. At the end of the program, a final presentation session was held where the UC students gave presentations on the results of their eight weeks' research. Japanese students of the laboratories also attended the session.

3. Social Innovation Action 2016

In this program, participants, including foreign lecturers, made various recommendations for building new collaborative networks from various perspectives, while participants also engaged in networking discussions. The program was attended by 81 people involved in social innovations in industry, government, academia and the private sector, and new collaborative opportunities were offered. Especially, the presentation by the participant in the global talent development program, which the university implemented jointly with UCL, garnered high praise.

4. International public relations

Osaka University participated in the "New Scientist Live" exhibition organized by a British science magazine, *New Scientist*, as an exhibitor along with seven Japanese organizations. In its booth, the university showcased its research achievements and gave a talk on robotics, which attracted many visitors.

The university actively publicized its research achievements by issuing 74 press releases for foreign media and publishing *Osaka University Research Profile*, which outlines the research activities underway in the university. The university also carried out more effective PR by publishing *Osaka University Prospectus*, a PR magazine for overseas, updating the Chinese and Korean pages of its official website, and utilizing its official Instagram account to make more foreigners interested in Osaka University.

Cooperation with universities abroad

- Osaka University continued to carry out the International Joint Research Promotion Program (Support for Short-term Personnel Expenses) and selected 49 projects for the program in FY2016.
- Under the Program for Promoting the Improvement of Research Universities, Osaka University provided financial support for organizing 14 international joint conferences, sending three researchers overseas and inviting five foreign researchers to the university.

■ Other initiatives and achievements

New framework for industry-university co-creation

Immunology Frontier Research Center (IFReC) signed a comprehensive collaboration agreement for advanced immunological research with Chugai Pharmaceutical Co., Ltd. in May 2016 and Otsuka Pharmaceutical Co., Ltd. in February 2017. Both of these agreements are long-term spanning 10 years, which will enable IFReC to maintain an academic environment that allows researchers to pursue their own basic research and share the latest immunological research achievements with society.

External Advisory Council

The External Advisory Council was held in November 2016 and the university obtained useful advice on the university's initiatives to achieve the targets set for the Top Global University Project and received evaluation on the progress.



(1) Lecture given by a UC professor



(3) Social Innovation Action 2016



(4) The Japanese booth in New Scientist Live held in London

5. FY2017 Progress

■ Common indicators and targets

Internationalization

1. Preparations underway for establishing ASEAN Campuses!

In December 2017, a signing ceremony for the establishment of a joint campus office, along with an opening ceremony, was held at the Vietnam Academy of Science and Technology, and a signing ceremony was held at Mahidol University in Thailand. These ceremonies were attended by many people from the Japanese embassies in respective countries as well as university staff. In Brunei Darussalam, an opening ceremony for a joint campus office was held in February 2018 with the attendance of the Japanese ambassador and university staff, and it was agreed to sign an academic exchange agreement between Brunei Institute of Technology and Osaka University.

2. Academic exchange with the University of California (UC)

Two UC faculty members were invited to Osaka University under the Cross-Appointment System, where they worked with the university's faculty and taught a total of 133 graduate and undergraduate students in two classes of a course titled "Frontier Lectures from University California."

3. International Advanced Research Institute established in April 2017

Building on the track record of the Immunology Frontier Research Center (IFReC) in organizational management, Osaka University established the International Advanced Research Institute (IARI) to work on creating strategic and effective research hubs, and incorporated IFReC as the first research hub of IARI.

4. International Joint Research Promotion Program

Under the International Joint Research Promotion Program launched to conduct joint research with the world's leading researchers, eight International Joint Labs were newly opened in FY2017 in addition to the existing 49 Labs.

University Reform

1. Co-Creation Bureau established in January 2018

The Co-Creation Bureau was opened on January 1, 2018 for conducting strategic, university-wide research and education to produce innovations through collaboration between the university and society, and for strengthening the structure of such efforts.

2. Senior Executive Vice President post and Osaka University Council established in August 2017

To reinforce the management structure of the university, two persons were appointed to the new post of Senior Executive Vice President (Osaka University's equivalent of provost) responsible for coordinating issues that require university-wide decision-making such as university management, education and research. To strengthen the university's ability to develop strategies better tailored to the nature of each field of study, the Osaka University Council was established in three fields: humanities and social sciences; science, engineering and information; and medical, dental, pharmaceutical and life sciences.

3. Employment of international faculty under the Cross-Appointment System, etc.

In FY2017, Osaka University signed cross-appointment agreements with 82 organizations, including five private companies, up 24 (41%) from the previous year. Of these 82 organizations, 39 are foreign research institutions, including 16 parties to the International Joint Research Promotion Program. Combined with 33 faculty members employed under the Support Program for International Faculty Employment, the number of international faculty at Osaka University reached 254 as of January 2018, up 24 (10%) from the same month of the previous year. The number of faculty working under the annual salary system, including specially appointed academic staff, has increased by 157 (15%) from the previous year, reaching 1,234 as of the end of FY2017.

Education Reform

1. FY2018 AO and recommendation examinations (World Tekijuku Entrance Examination)

In FY2017, Osaka University introduced AO and recommendation examinations (World Tekijuku Entrance Examination) in cooperation with the Center for the Study of Higher Education and Global Admissions, an institution established to conduct studies and research on a holistic admission process. In FY2018, the second year of this examination, 565 people applied and 178 were admitted, increases of approximately 1.7 and 1.5 times respectively from the previous year.

2. Large increase in course numbering system

In order to make the educational program visually easier to understand in line with the international standard system and to review and update the ongoing structure of the program, Osaka University established a numbering system for courses and fields of study based on the degree programs in FY2016. The university also revised the Student Information System earlier than scheduled and completed assigning numbers to all the courses, thus making the course numbering system ready to apply university-wide from FY2017. As a result, the rate of implementing the course numbering system increased greatly from 7.7% in the previous year to 91.5%.

3. Multilingual education

Under the Multilingual Expert Program, Osaka University has continued to offer the Academic English Support Desk service, while introducing "English and Anglo-American Culture" as a new minor program. The university also prepared to establish the Center for Multilingual Education (opened in April 2018) for the centralized supervision of language education at the university and continued promoting reforms in language education. The Center will develop, manage, implement, and evaluate advanced educational methods and systems for studying English and other foreign languages as well as Japanese, with the aim of establishing Japan's language education model for the global era.

■ University's own indicators and targets

Increase in the number of Double Degree Programs

During FY2017, Osaka University signed a double degree agreement with Shanghai Jiao Tong University (China), Universiti Sains Malaysia (Malaysia), Mahidol University (Thailand), Macquarie University (Australia), and Tianjin University of Traditional Chinese Medicine (China), with the total number of Double Degree Programs reaching 28.

Continued increase in the number of inter-university exchange agreements

Osaka University aims to sign inter-university exchange agreements with 130 universities during the Top Global University Project period to build an international network. In FY2017, the number of exchange agreements increased by 12 from the previous year to 125 in total.

■ Initiatives for enhancing international reputation

1. AEARU Advanced Material Science Workshop 2017 (November 2017)

As part of the activities of the Association of East Asian Research Universities (AEARU), Osaka University hosted the Advanced Material Science Workshop 2017 for students of member universities. This event was attended by more than 50 students and academic staff from Japan and abroad, who deepened their expertise in the specialized fields while acquiring knowledge in non-specialized fields and enjoying meeting other participants.

2. HAO Training Program (August and November 2017)

The Center for the Study of Higher Education and Global Admissions (CHEGA) implemented the HAO (Handai Admission Officer) Training Program to facilitate admission reform at each university by helping university staff acquire a wide range of knowledge and skills concerning higher education and admissions and apply it to implementing holistic admissions or improving the admission process. The first session in August and the second session in November were attended by 66 people and 39 people (or 84 people counting the participants in related events) from all over Japan, who underwent training under the guidance of a Senior Fellow of the Association of American Colleges & Universities who serves as a Specially Appointed Professor at CHEGA under the Cross-Appointment System, and the Director of Admissions at the University at Oregon, as well as academic staff of CHEGA. This Program was covered by national newspapers and also reported by the National Association for College Admission Counseling in the U.S., and garnered high praise.

3. Public lecture hosted by the Center for Global Initiatives (November 2017)

On November 16, 2017, a lecture titled "How good are Japan's research universities in global terms, and how much does it matter?" was given at the Convention Center of Osaka University by Dr. Simon Marginson, Professor of International Higher Education at University College London's Institute of Education and Director of the Centre for Global Higher Education. Intended for university staff and students, this lecture was attended by more than 50 people from both inside and outside Osaka University and was followed by a lively exchange of opinions.



1. AEARU Advanced Material Science Workshop



2. HAO Training Program



3. Public lecture by the Center for Global Initiatives

Cooperation with universities abroad

- Osaka University continued to carry out the International Joint Research Promotion Program (Support for Short-term Personnel Expenses) and selected 41 projects for the program in FY2017.
- Under the Program for Promoting the Improvement of Research Universities, Osaka University provided financial support for organizing nine international joint conferences, sending four researchers overseas and inviting two international researchers to the university.

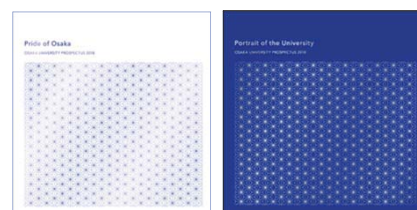
■ International public relations and world university ranking

Osaka University ranks 1st in Japan (31st globally) in the Nature Index 2017 Innovation Tables

In August 2017, *Nature*, a British science journal, announced the Nature Index 2017 Innovation Tables that rank academic institutions in terms of the influence of research on the development of innovations. In these tables, Osaka University ranks 1st in Japan and 31st in the world, thus showing the university's significant contribution to innovation.

PROSPECTUS 2018

Osaka University published Prospectus 2018, an English PR brochure including two booklets, containing selected information through pictures and data. Their covers are designed to resemble *furoshiki*, traditional Japanese wrapping cloth.



PROSPECTUS 2018 consisting of two booklets

6. FY2018 Progress

■ Common indicators and targets

Internationalization

1. Inbound & outbound programs

To replace the Research Fellow Program, Osaka University introduced the International Internship Trainee Program designed for internships of three months or shorter at the university's research laboratories, and accepted 75 researchers under this program. The university also implemented a new program, "Intercultural Experience in New Zealand" through an external contractor. This is a short-term study-abroad program for new undergraduate students to enhance their English proficiency and understanding of foreign culture; 15 students participated in the program.

2. Academic exchange with the University of California (UC)

One UC faculty member was invited to Osaka University under the Cross-Appointment System, where she worked with the university's researchers and taught a total of 27 graduate and undergraduate students in a course titled "Frontier Lectures from University of California." In addition, a Professor Emeritus of UC was invited to give a special lecture every month, attended by a total of 92 graduate and undergraduate students.

3. Establishment of ASEAN Campuses

A signing ceremony for the establishment of an ASEAN Campus was held at the Institut Teknologi Bandung in Indonesia. Two students of Mahidol University in Thailand enrolled in the Double Degree Program to study Japanese language and culture.

4. International Joint Research Promotion Program

To conduct joint research with the world's leading researchers, 13 International Joint Labs were newly opened in FY2018 in addition to the existing 50 Labs.



Lecture by a UC faculty member

University Reform

1. Institute for Transdisciplinary Graduate Degree Programs established 2018 August 1.

The Institute for Transdisciplinary Graduate Degree Programs was established in 2018 August as a base for the university's graduate school education reform initiatives to promote the new University-wide Major Minor System to nurture individuals with doctoral degrees who can contribute to creating innovation in the academic community and society at large.

2. Introduction of numerical goals as university-wide key indicators to measure the degree of internationalization

Osaka University evaluates its achievements using university-wide key indicators starting from FY2018. The university requires the Executive Directors to set numerical goals to measure the degree of internationalization achieved by their respective department and use the results of those evaluations when allocating the budget. This system works as an incentive to set higher goals and motivate each school/faculty/department/division to promote internationalization with a greater recognition of university-wide objectives and goals, thereby helping to improve university governance.

3. Employment of international faculty under the Cross-Appointment System

In FY2018, Osaka University signed cross-appointment agreements with 126 organizations, up 44 (54%) from the previous year. Of these 126 organizations, 59 are foreign research institutions, including 21 parties to the International Joint Research Promotion Program, up 20 (51%) from the previous year. The number of international faculty totals 268.

Education Reform

1. University-wide curriculum reform

In preparation for the university-wide curriculum reform scheduled for April 2019, Osaka University developed new curricula at each of its schools/faculty based on the vertically integrated education model that allows students to study Liberal Arts, Academic Major, and Global Literacy consistently from the first-year undergraduate level to graduate level. The Center for Education in Liberal Arts and Sciences worked with all schools/faculty, departments, institutes, and centers, to prepare for the introduction of a new subject, "A Door to Academia," which all first-year students are required to study, to shift from the passive learning style they had acquired in pre-university education to a more creative, active learning style.

2. Enhancing the high school and university connection project

The university organized various events to strengthen links with high schools and proceed with a reformation of the high school and university connection system. These events included: A joint presentation meeting for students of Osaka Prefecture-designated Global Leaders High Schools (approx. 500 participants); a research presentation meeting "Day for Considering International Issues" for students of Hyogo Prefectural high schools held in cooperation with the WHO (approx. 434); and a national research presentation meeting for students of Super Global High Schools (approx. 2,400).

3. Multilingual education

Under the Multilingual Expert Program, Osaka University has continued to offer the Academic English Support Desk service, while introducing programs in Spanish language and culture and graduate programs. The university also established the Center for Multilingual Education in April 2018 to prepare for the introduction of a new curriculum of foreign language education in 2019, while formulating a plan to promote multilingual education under the "Establishment of our Global Presence through Integrated Language Education on Campus" project, for which a budget has been requested in order to be implemented by the Center from 2019.

■ University's own indicators and targets

Increase in the number of Double Degree Programs

During FY2018, Osaka University signed double degree agreements with nine universities, including Peking University (China), Yonsei University (Korea), Nanyang Technological University (Singapore), and Sorbonne University (France), with the total number of Double Degree Programs reaching 37.

Continued increase in the number of inter-university exchange agreements

Osaka University aims to sign Inter-university Exchange Agreements with 130 universities during the Top Global University Project period to build its international network. In FY2018, the number of exchange agreements increased by four from the previous year to 129 in total.

■ Initiatives for enhancing international reputation

1. Annual Presidents' Conference of the German-Japanese University Alliance (HeKKSaGOn) (April 2018)

Osaka University hosted the 6th Annual Presidents' Conference of HeKKSaGOn, an alliance among six German and Japanese universities established in 2010 July to promote sustainable academic cooperation. Held at the time of the transition of the alliance from the 1st phase to the 2nd, the conference was attended by about 200 people, including presidents, vice presidents, researchers, and students of the member universities, who looked back on the achievements made by the alliance during the eight years since its establishment.

2. Symposium "Future of High School/University Connection" held by the Center for the Study of Higher Education and Global Admissions (March 2019)

The symposium was held at Hitotsubashi Hall in Tokyo to review the achievements made by the Center and share research results widely with external entities while exploring how high schools and universities could work together to nurture human resources capable of meeting the needs of Society 5.0, and other new social needs, against the backdrop of improvement in the high school/university connection system, involving high school education, university education, and university admission processes. The symposium was attended by about 130 people from universities, high schools, and companies, who listened to presentations on progressive cases made by the Orange County Superintendent of Schools from the U.S. and a high-school teacher at Hokkaido International School and deepened their understanding of the improvements while enjoying friendly networking opportunities.

3. Symposium held by the Center for the Study of Co* Design (September 2018)

The Center hosted a symposium titled "STEAMM: Sciences x Arts x Humanities – Human Resource Development that Integrates Sciences, Arts, and Humanities," which was attended by 142 people. The symposium discussed the possibilities and necessity of Japanese university education that integrates sciences, arts, and humanities, and shared with society the issues to be addressed and future visions for undergraduate and graduate education in Japan to compete favorably in international competition, and the development of human resources with advanced skills and innovative capabilities.



1. Annual Presidents' Conference of HeKKSaGOn



2. Symposium held by the Center for the Study of Higher Education and Global Admissions



3. Symposium held by the Center for the Study of Co* Design

Cooperation with universities abroad

- Osaka University continued to carry out the International Joint Research Promotion Program (Short-term Support for Personnel Expenses) and selected 38 projects for the program in FY2018.
- Under the Program for Promoting the Improvement of Research Universities, Osaka University provided financial support for organizing 20 international joint conferences, sending four researchers overseas and inviting two international researchers to the university.

■ Other initiatives and achievements

Osaka University ranks 1st among Japanese educational institutions and 11th in the world in terms of the number of international patent applications

In its efforts to promote industry-university co-creation initiatives, Osaka University encourages technology transfer to create new businesses and innovations, while globally sharing technical information and know-how. As a result, the university ranked 11th in the world and 1st among Japanese educational institutions in terms of the number of international patent applications during FY2018, as announced by the World Intellectual Property Organization (WIPO).

Osaka University awarded an "S" grade in the Initiative of the Implementation of the Diversity Research Environment

Osaka University was given the highest grade, "S", for its mid-term evaluation under the Initiative of the Implementation of the Diversity Research Environment (Collaboration Type), a funding program to support the development of human resources in science and technology. In addition, OU was the only institute in Japan selected to represent the new category of "National Network Core Institutes" under this initiative.