

Top Global University Project (Type A) Tohoku University

1. Outline

Title

Tohoku University Global Initiative

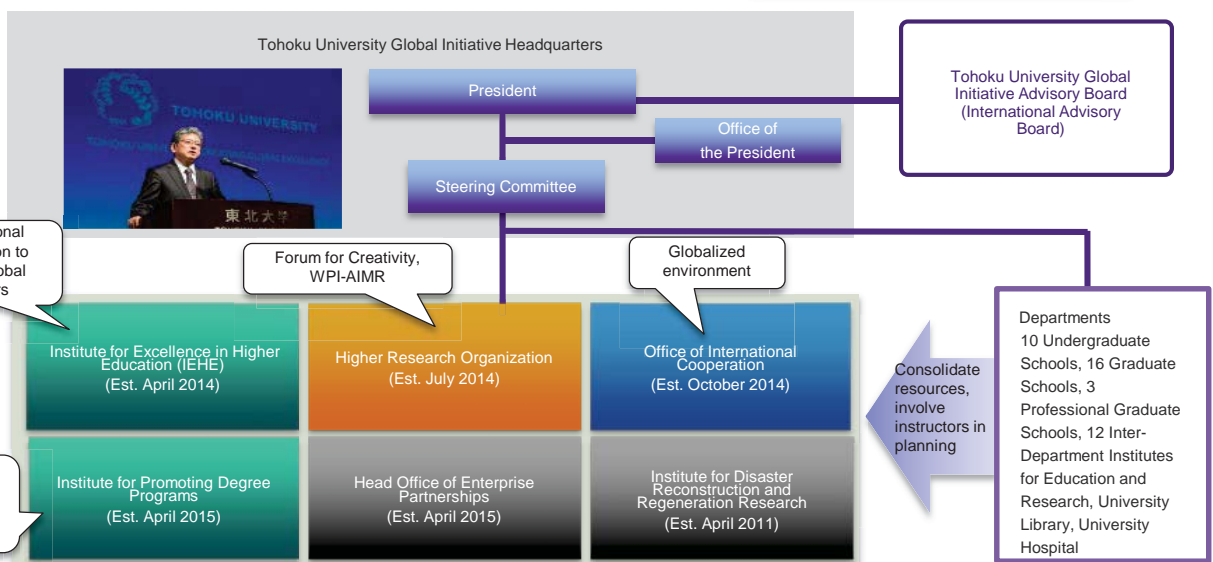
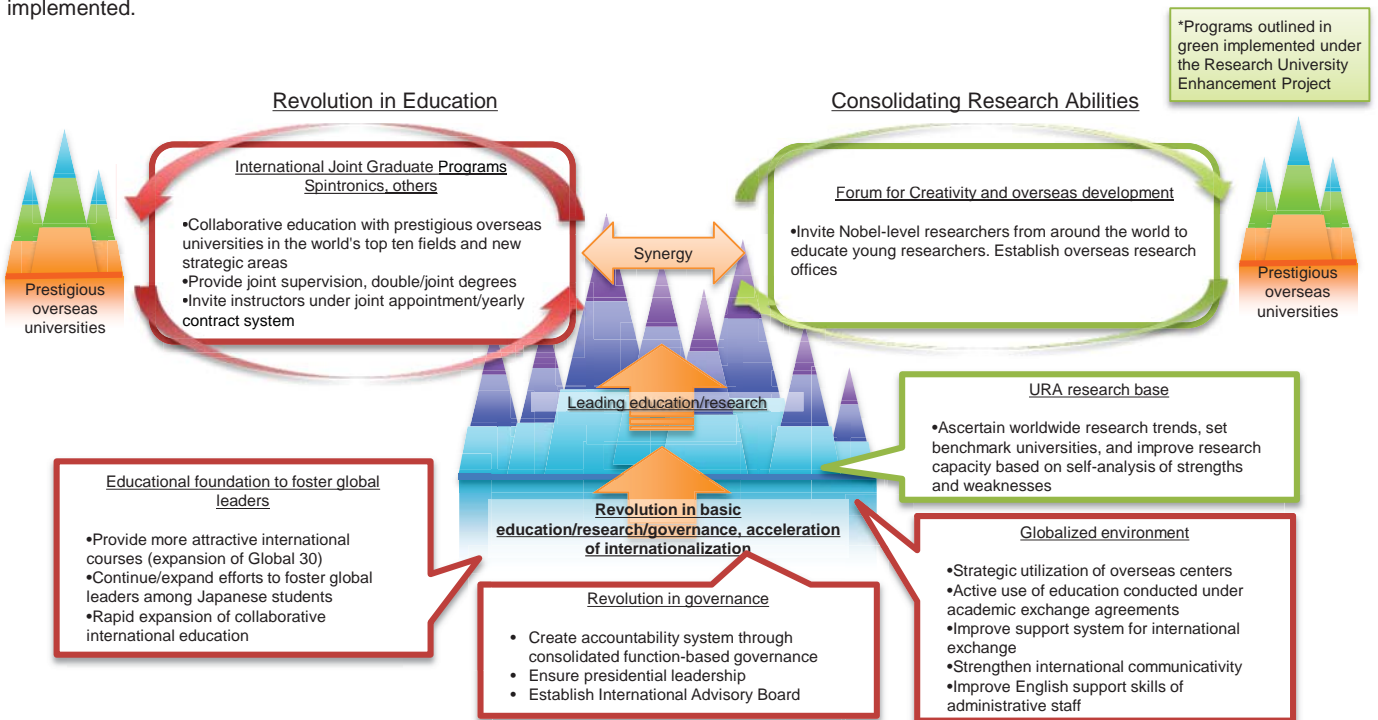
Future Accomplishments to be Achieved through the TGU Initiative

We will create a "fellowship of knowledge," with Tohoku University as the hub, that will enable us to truly "leap ahead as a world-class university" and conduct research that will lead the global age. In addition, we will foster advanced global human resources, create science/technology related to innovation, contribute to solving world-scale problems and sustainable development, and strive to earn a place among the world's top 30 universities.

Outline of Plan

This plan will create a venue for talented Japanese and international students to "gather, learn, and create," and accelerate the building of an "educational foundation for fostering global leaders" that will not only impart our university's tradition of learning in advanced specialized abilities, but also allow young people living in this global era to acquire competency in next-generation literacy and a global mindset. Building on this foundation, Tohoku University will, in close cooperation with prestigious overseas universities, concentrate its education and research abilities on fields in which it excels and those which it wishes to focus on expanding in the future, thus creating a group of seven "International Joint Graduate Programs." Through these programs, we will foster individuals who possess the world's highest level of research skills, a broad perspective, global awareness, and experience, so that they can create new knowledge, produce innovations, and face global problems. Moreover, through initiatives to strengthen our research capacity, such as the "Forum for Creativity," and fostering organic connections, Tohoku University will become the hub of a leading education and research cluster that will form an "international fellowship of knowledge."

In order to implement our plans, we are working to further improve our globalized environment. A function-based structure, in which university resources will be consolidated and optimized by function, is being created as one measure to enable the president's ideas to be quickly implemented.



Outline of 10-year Plan

-Management system

The Tohoku University Global Initiative Promotion Headquarters were established in FY 2014. A management system was then organized. In FY 2015, the Tohoku University Global Initiative Advisory Board (International Advisory Board) was created. In FY 2016, 2019, and 2023 external evaluations will be conducted.

-Revolution in governance

In addition to the IEHE, six organizations were established, including the Office of International Cooperation (est. October 2014) and Institute for Promoting Graduate Degree Programs (est. April 2014) to consolidate university resources for functional governance. Enhancement of IR functions will be promoted.

-International Joint Graduate Program

We established the Graduate Program in Spintronics (GP-Spin) as the first of International Joint Graduate Programs in April 2015. Seven more International Joint Graduate Programs in various fields, including Data Science, will be established by FY 2019.

-Educational foundation that fosters global leaders

We will increase the number of international students through efforts such as expanding the Future Global Leadership (FGL) undergraduate/graduate courses (established under Global 30 to attract excellent students from abroad). Additionally, we will continue to operate the Tohoku University Global Leader Program (TGL) to develop educational programs that provide students with overseas study combined with an essential education in global leadership. We will also drastically expand educational cooperation with overseas universities and collaborative international education programs such as graduate-level double degree/joint degree courses.

-Globalized environment

International offices, academic exchange agreements, and consortia will be strategically strengthened to improve the international mobility of instructors/students and enhance international cooperation in education/research. Under the Office of International Cooperation (est. October 2014), we will strive to plan/implement international cooperative strategies, increase our international presence, and improve our ranking. We will further improve our globalized environment by working to enhance our international PR capacity (establishment of international PR center), improve our system for admitting students from abroad (establishment of international support office), and raise the administrative staff's English abilities.

Unique Initiatives (internationalization, revolution in governance and education, etc.)

Creation International Joint Graduate Programs

- Leverage Tohoku University's strengths to select fields that will potentially drive the world economy and contribute to human development
- Transcend the framework of traditional education to consolidate Tohoku University's knowledge base; implement collaborative education by deepening ties with prestigious universities overseas

Ideas &
Roles

- 1) Match present needs and cultivate highly capable human resources across the world.
- 2) Create cutting-edge education programs that increase our research abilities.
- 3) Create an intellectual foundation for the future, support international competition, and create innovation to aid in the creation of a sustainable global society.

Break
down

- Interdepartmental graduate programs
- Jointly supervised instruction between Tohoku University and overseas institutions
- Shift towards joint supervision/double degrees/joint degrees
- Plan to have a minimum of 7 programs within 5 years



Promotion of Cooperation with Universities Overseas

-Create global network leveraging international offices, academic exchange agreements, and consortia

We will promote cooperation with top universities overseas through our university-level agreements with 206 institutions and departmental-level agreements with 411 institutions (as of June 2016), and the 5-university APRU consortium. We will create a global network by developing overseas bases (North America, Asia, Europe) that have research and education functions. These will be the basis for expanding collaborative international education.

-Creation of an international knowledge fellowship

We will create an international knowledge fellowship in cooperation with prestigious overseas academic/research schools through enhanced, synergistic, research programs such as the Collaborative International Graduate Program and Forum for Creativity.

2. FY2014 Progress

Common Benchmarks and Milestones

International Relations

-Establishment of Office of International Cooperation and creating a globalized environment

The Office of International Cooperation was established in October 2014 to uniformly enhance international cooperation in education/research and promote our university's global strategy, thus improving its international presence. The International PR Center's functions were upgraded, enabling the creation of a homepage with a high level of international communicativity and promotional materials such as English promotional videos. In October 2014, the International Support Office was established to provide information to international researchers/students and a unified visa services system.

-Continuation of the FGL Program

We will continue the Future Global Leadership (FGL) courses (undergraduate/graduate), which offer degree courses taught in English for excellent international students.

-Enhancement of short-term study abroad programs (SAP etc.)

As a pillar of our effort to provide global education to Japanese students, we are focusing on developing and implementing university-wide short-term overseas programs such as the Study Abroad Program (SAP) as well as other short-term programs that leverage departmental strengths. Over 400 undergraduate students participated in FY 2014. Moreover, the Pre-enrollment Overseas High School Bridging Training Program, first implemented last year, proved popular and was implemented again in March 2015.



(Study Abroad Program)

-Support for practical English learning

To increase the Japanese students' practical English abilities, improvements were made to curricular/extracurricular English classes, and in FY 2015 the Tohoku University English Academy (TEA) was established to provide various kinds of extracurricular English learning support.

Revolution in Governance

-Institutionalization of consolidated-function governance

In addition to the IEHE, the Higher Research Organization (July 2014), Office of International Cooperation (October 2014), and Institute for Promoting Degree Programs (April 2015) were established along with 2 other institutes. This consolidated university resources by function, establishing a governance system that quickly reacts to the President's ideas.

-Advancement of administrative staff

As a means of improving the administrative staff's English skills, all staff will be required to take the TOEIC within 3 years. Over 200 administrative and technical staff took the group test implemented in December 2014. External lecturers were invited to conduct English Learning Seminars to motivate the staff. 130 people participated.

-Enhancement of IR functions

Our education and research are becoming more visible due to, respectively, the IEHE's Center for Institutional Research and the URA center's IR functions. Deliberations on consolidating IR functions have also begun.

Revolution in Education

-Revolution in liberal arts education by the IEHE

Under the Institute for Excellence in Higher Education (which was established as part of the strategic restructuring of the liberal education/student support systems in April 2014) a unified system was created for conducting surveys, research, development, and implementation related to educational practices with a view towards fostering global leaders, and education/learning management improvements were planned. A unique organization was founded with planning participation by the Global Learning Center, which handles international educational exchange.

-Commencement of International Joint Graduate Program

We began to prepare for the start of the Graduate Program in Spintronics (GP-Spin), the first of the International Joint Graduate Programs, in early FY 2014. After preparing a common curriculum and negotiating with the overseas partner universities, it was commenced in April 2015. We are beginning preparations for other programs as well.

-Adoption of new global-facing entrance examination

We resolved to adopt the International Baccalaureate exam and a global entrance exam for educational programs conducted in English for Japanese students. These will be implemented in FY 2017. Furthermore, external exams, such as the TOEFL, will be actively incorporated into an expanded AO exam.



(GP-Spin framework)

University-specific Benchmarks and Milestones

-Expansion of Collaborative International Education

Efforts were increased in international educational cooperation, such as double and joint degree programs. Admittance of double degree students by overseas partner schools has accelerated, with the number increasing to 47 in FY 2015. In order to increase the number of outgoing students, Tohoku University began offering a scholarship for students in international educational cooperation and International Joint Graduate Programs from FY 2015.



(TGL Program)

-Tohoku University Global Leader Program (TGL Program)

Based on our foundation of highly specialized competencies, we implemented the Tohoku University Global Leader (TGL) Program, which organically incorporates sub-programs composed of classes, lectures and seminars that cultivate language/communication skills, international liberal arts abilities, and initiative, together with overseas study sub-programs. We held many classes including coeducational international seminars, classes focused on problem solving, and global career seminars. About 2,000 students, mainly 1st and 2nd year undergraduate students, registered for the TGL program. Students who fulfill the program's requirements are awarded Global Leader Certification.

Initiatives to Improve International Rankings

-MOU on Jointly Supervised PhD Program concluded with Mainz

An MOU on a jointly supervised PhD program was concluded with Johannes Gutenberg University Mainz (Mainz) in February 2015 as part of our promotion for the Graduate Program in Spintronics. Similar MOUs will be made in other fields hereafter.



(Signing of MOU on jointly supervised PhD program)

-Tohoku University Day at University of Cambridge

Tohoku University Day was held at the University of Cambridge, England, in December 2014. Information on both universities was given, and we signed a joint declaration on future student/researcher exchange. There were also workshops in the fields of global safety and material science.

-4th German-Japanese Universities Alliance (HeKKSaGOn) conference at Tohoku University

The German-Japanese Universities Alliance (HeKKSaGOn) conference was held at Tohoku University in April 2015. An overarching conference on the theme of Building Venues for the Creation of new Knowledge was held, in addition to parallel workshops composed of 8 other fields.

Achievements in Cooperation with Universities Overseas

-Activities with inter-university consortia:

We are independently participating in consortia with prestigious overseas universities. We attended the annual meetings of The Association of East Asian Research Universities (November 2014), Top Industrial Managers for Europe (November), and the Japan-UK Research and Education Network for Knowledge Economy Initiatives (December). We also attended the March meeting of the Japan-Russia Forum of Rectors as the Japanese representative. In addition to organizing the German-Japanese Universities Alliance (HeKKSaGOn) meeting in April 2015, we participated in the Alliance Internationale led by the University of Lyon in June.

-Enhanced cooperation with overseas partner schools:

Tohoku University Day at Cambridge (December 2014), SGU Kickoff Symposium attended by many overseas partner schools (February 2015), Tohoku-Harvard Workshop at Harvard (May 2015) etc.

-Activities at overseas offices:

Stepped up activities at overseas partner schools that host overseas offices. (Moscow State University, Russian Academy of Sciences Siberia, Lyon, Cambridge, UC Riverside, Chicago, Institut Teknologi Bandung, Chulalongkorn (scheduled), etc.)

Free Answer Section (Other Initiatives)

-SGU Kickoff Symposium

Tohoku University's Kickoff Symposium for the Top Global University Project was held in February 2015. Guests were invited from Mainz, Lyon, Cambridge, Case Western Reserve, Washington, and Chulalongkorn. Discussions on new collaborative international education/research programs were held with our overseas partner schools. About 100 people from Japan and abroad participated.



(SGU Kickoff Symposium)

-Initiative Website

https://www.tohoku.ac.jp/en/about/top_global_university.html

3. Progress of Initiatives (FY 2015)

Common Benchmarks and Milestones

International Relations

1. Promoting Recruitment of Foreign Instructors/International Students

- 1) We established the Promotional Expenses Fund for Employing Foreign Instructors etc. (JPY 100 million) to support recruitment of foreigners. As a result of partially supporting HR expenses for foreign instructors, there was a 13.5% year-over-year increase in the number of foreign nationals hired in FY 2016 (May 1), as compared with a 4.3% increase in FY2015 (May 1). (FY 2014: 185, FY 2015: 193, FY 2016: 219)
- 2) In addition to expanding courses taught in English that were newly established for the Global 30 program, we expanded 6-month to 1-year exchange programs and short inbound programs, 3 months or shorter, while further enhancing support for international students through the International Support Office. As a result, foreign student numbers increased substantially, from 1,677 in FY 2015 (May 1) to 1,943 in FY 2016 (May 1).

2. Workshop by International Alumni

On April 19, 2016, 16 former exchange students, who had studied at Tohoku University from 2005 to 2006, returned to celebrate the 10th anniversary of their study abroad and hold a workshop.

After studying at our university, the students had gone on to be active on the front lines of research and business at institutions like Johns Hopkins University and NASA (US), and Airbus and Areva (France). They gave presentations on topics such as the effect of studying overseas on their careers, and held active discussions with the current students.



JYPE International Mentorship Event

3. Providing Information in Foreign Languages

The English-speaking staff of the International Public Relations Section overhauled the English version of the university website, resulting in access numbers doubling. They also established a presence on 6 types of social media, gaining over 13,000 followers. In addition, they created a system for quickly releasing university research results to some 10,000 science journalists through websites such as EurekAlert and ResearchSEA. These activities advanced our efforts to improve Tohoku University's international reach and presence.

Governance Reform

1. Establishment of International Advisory Board

Internal regulations were determined for the Tohoku University Global Initiative Planning and Advisory Board (International Advisory Board). In addition, six board members have been appointed (as of March 2016) from key figures taken from the presidential-class of influential overseas universities and business leaders in globally active enterprises.

2. Establishment of IR Office

The Tohoku University Office of Institutional Research (IR Office) was established in January 2016, and full-time instructors were assigned to it on April 1. The goal of this office is to contribute to the promotion of strategic university operations by effectively and efficiently collecting and analyzing various data related to the university's educational, research, and other activities.

3. Advancement of Administrative Staff

As a means of improving the administrative staff's English skills, English language training (about 40 participants) was conducted for 6 months by external instructors. Of the participants, around 40% (16) achieved the university's target score (TOEIC 700) while 60% (24) improved their TOEIC scores by 100 points or more. Of those who achieved certain target scores, 10 were sent for overseas training at the University of Sydney in Australia where they participated in discussions and presentations etc. with the administrative staff there. We anticipate that this will contribute further to internationalization at Tohoku University.

Educational Reform

1. Expansion of Active Learning/Global Education Classes

The university made plans to expand the number of Development Seminars, which incorporate active learning such as seminars, practical training, laboratory work, and fieldwork, and Global Coeducation Seminars, in which students of different languages and cultures work together in small groups on assignments and projects in order to foster acceptance/understanding of diversity and create of new values through cooperation. (Development Seminar: expanded from 30 to 46 classes; Global Coeducation: expanded from 11 to 16 classes) In addition, we have continued to offer/implement Basics Seminars (20 students/class; aimed at transitioning students to active learning), which are taken by all new students, on over 160 themes (classes) with cooperation from the entire university for over 10 years.



Global Coeducation class

2. Decision to Adopt Course Numbering and GPA

The university decided to adopt a course numbering system for all courses and a GPA system for all undergraduate students from FY 2016 after arranging the relevant regulations.

University-specific Benchmarks and Milestones

1. International Joint Graduate Programs

A jointly supervised program was commenced with Johannes Gutenberg University Mainz (University of Mainz) in Spintronics; this is a large step forward for international joint education (degree programs) among world-leading universities. (Enrollment: 7 in 2015; 16 as of April 2016.) We also came to an agreement with the University of Bayreuth (Germany) to prepare an International Joint Graduate Program in environmental/earth sciences to begin from FY 2016.



GP-Spin Seminar

GP-Spin Orientation

2. Tohoku University Global Leader Program (TGL Program)

Based on a foundation of advanced specializations, we implemented a program for fostering global leaders aimed at undergraduate students that organically incorporates sub-programs composed of classes, lectures and seminars that cultivate language/communication skills, international liberal arts abilities, and initiative, together with overseas study sub-programs. Students participating in TGL increased to 2,091 FY 2015 (up from 1,322 in FY 2014).

Initiatives to Improve International Rankings

1. Conclusion of Strategic Partnership Agreement with the University of Melbourne

In February 2016 Tohoku University concluded a strategic partnership agreement with the University of Melbourne. It was agreed to conduct mutual exchanges of students, researchers, and administrative staff.

Specifically, a joint research workshop will be held at the University of Melbourne in 2016.



Signing of agreement with the University of Melbourne

2. Hosting the T.I.M.E. General Assembly and Symposium, Participating AEARU etc.

In October 2015 Tohoku University hosted the first T.I.M.E. (Top Industrial Managers for Europe) General Assembly and Symposium held outside of Europe. At the symposium, the Japanese higher education system was explained, and reports were given by a student who had studied at Tohoku University from École centrale de Lyon, and a Tohoku University student who had studied at the Royal Institute of Technology in Sweden. Tohoku University actively participated in the annual conferences of overseas university consortia, such as AEARU (Association of East Asian Research Universities), RENKEI (Japan-UK Research and Education Network for Knowledge Economy Initiatives), and APRU (Association of Pacific Rim Universities)



T.I.M.E. Welcome Address by President Satomi

3. Conclusion of Academic Exchange Agreement with Case Western Reserve University (USA)

In October 2015 an academic exchange agreement was concluded with Case Western Reserve University.

This agreement laid the cooperative groundwork for the establishment of an International Joint Graduate Program in data sciences, and is anticipated to particularly spur cooperation in data science research and education.



From right: President Satomi, Consul-General Katayama, President Snyder

Achievements in Cooperation with Overseas Universities (Type A only)

Activities with overseas university consortia:

Attended yearly conferences for consortia to which the university belongs, e.g. AEARU, APRU, and RENKEI. Hosted German-Japanese Universities Alliance (HeKKSaGOn) in April and T.I.M.E. General Assembly and Symposium (first time it was held outside of Europe) in October. Hosted APRU Multi-Hazards Summer School in July.

Enhanced cooperation with overseas partner universities:

Held Tohoku-Harvard Workshop at Harvard in April; concluded academic exchange agreement and held data sciences symposium with Case Western Reserve University in July. Jointly held symposium with the Mansfield Center at the University of Montana in November. Concluded strategic partnership agreement with the University of Melbourne and agreed to hold Tohoku University Day the following FY in February.

Improved overseas offices:

Opened Cooperation Office in Hanoi at the Foreign Trade University of Vietnam in December and Bangkok Office in Thailand at Chulalongkorn University in February.

Free-answer

1. Establishment of Liaison/Cooperation Offices

In June 2015 a Memorandum of Understanding was concluded with INSA-Lyon regarding the establishment of a liaison office, and in November 2015 an agreement was concluded on an international collaborative research unit (ELyT MaX) with INSA-Lyon.

In December 2015, the Tohoku University/Foreign Trade University of Vietnam Cooperation Office was established and an opening ceremony held on-site.



Unveiling of Liaison Office Sign

2. Support for practical English learning

In FY 2015, the Tohoku University English Academy (TEA) was established to provide various kinds of extracurricular English learning support, such as learning advising and various kinds of English programs (175 participants in FY2016) based on teaching methods of ELS Language Centers.

4. Progress of Initiatives (FY 2016)

■ Common Benchmarks and Milestones

International Relations

● Recruitment of International Students

The number of foreign students (i.e. student status of residence) increased to 1944, resp. 2161, as of May 1st, 2016, resp. November 1st, 2016, due to the activities of the international offices and the center for international public relations, as well as the continuation of courses within the “FGL Program” offered in English after the admission to the Global 30 Program, international exchange programs, and international joint graduate programs. This is an increase of ca. 280, resp. ca. 170 students compared to the previous financial year.

● Increasing Numbers of Students with International Experience

Students obtaining credits in combination with overseas experience increased by ca. 40% to 619 students compared to FY2015 as a result of efforts such as the promotion of the Study Abroad Program, mid-to-long term exchange programs, English learning support at the Tohoku University English Academy, support of travel expenses via e.g. the Tohoku University Fund (Global Hagi Exchange Incentive).

● Executives Meeting of the Chinese Alumni Association

In May 2016, a meeting of Chinese alumni of Tohoku University was organized in Beijing. The President as well as the responsible Executive Vice President and, mainly from the Beijing area, ca. 20 members of the Alumni Association participated, addressing their current situation as well as activities and the promotion of Natural but also Social Sciences and Humanities in China.



Study Abroad Program



Meeting with the Chinese Alumni Association

Governance Reform

● Organizing the International Advisory Board

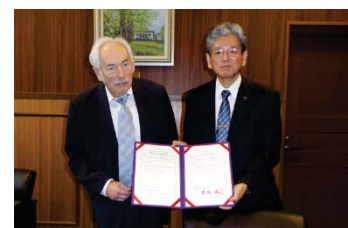
In order to obtain an external evaluation as well as support the top-down decision making of the President, the “International Advisory Board” (a consultative body consisting of international sophisticates) was organized in Sendai, Nov. 2016. Six experts from foreign universities and the industry participated, exchanging thoughts with the President and the executives on the progress of internationalization regarding education, research and governance.



International Advisory Board

● Appointment of a Specially Invited Professor

Nobel Laureate in Physics 2007, Professor Peter Grünberg, was appointed Specially Invited Professor in May 2016. The Specially Invited Professor System was established in March 2016 to invite outstanding researchers (e.g. Nobel Laureates, etc.) to Tohoku University and gain from their excellent experience in education and research. Prof. Grünberg was the first to receive this special title.



Specially Invited Professors

Educational Reform

● Introducing GPA System and Course Numbering

As of FY2016, Course Numbering was introduced to all lectures, leading to a visualization for students in form of a curriculum map. Furthermore, a “Grade Point Average System” was established for Bachelor students.

● Enhancement of Admission Office (AO) Entrance and Global Admission

Since the initiation in 2000, Tohoku University annually expanded the number of students admitted via AO Entrance, reaching ca. 20% in 2016, which is an outstanding ratio among national universities. Furthermore, Global Admission was introduced for Japanese returnees in courses with a possible acquisition of a degree in English.

■ Tohoku University's Benchmarks and Milestones

● International Joint Graduate Program

In addition to education in Spintronics in FY2015, education in Environmental and Earth Sciences was initiated in FY2016. (17 students in Spintronics, 12 students in Environmental and Earth Sciences.) For the initiation of programs in FY2017, 9 first generation students in Data Science and 12 in Cosmic Physics were selected, thus completing the preparation for the initiation starting with the new financial year.



Students of Env. & Earth Sciences

● Tohoku University Global Leader Program

The Global Leader Program for Bachelor students was continued with a substantial increase of 2562 participants in FY2016 compared with 2091 participants of FY2015.

■ Activities for the Improvement of International Rating (Type A)

● Tohoku University Day (Melbourne)

In November 2016, the Tohoku University Day was organized at the University of Melbourne and ca. 60 participants of both universities attended, including the President and responsible executives.

Based on the Strategic Partnership Action Plan of Tohoku University and the University of Melbourne, the academic exchange agreement was renewed with the addition of terms regarding student exchange, and a workshop in Material Science, as well as an overseas training program for professional staff was organized. In 2017, academic events are planned in Sendai, leading to a continuous and improved exchange between both universities.



Tohoku University Day at the University of Melbourne

● The Tohoku University Thailand Office at Chulalongkorn University

In August 2016, the "Tohoku University Thailand Office" was established within Thailand's outstanding Chulalongkorn University. It is the fourth foreign office of Tohoku University after offices in Beijing, Moscow, and Novosibirsk. The office is expected to function as a hub for exchange, promoting the recruitment of foreign students, alumni networking as well as support of joint research and arrangement of internships with local corporations.



Opening of the Tohoku University Thailand Office

Achievements in Cooperation with Overseas Universities (Type A)

● Activities within University Consortia

In 2016, two events were organized. In July, 50 participants from 17 countries attended the APRU Multi-Hazards Summer School, and in September, the AEARU 11th Web Technology and Computer Science Workshop was organized with ca. 100 domestic and international participants, thus promoting the exchange with overseas students and researchers. Tohoku University was also actively involved in overseas projects and a students team won 2nd place at the APRU Global Health Case Competition.

● Enhanced Collaboration with International Partner Universities

In addition to the Tohoku University Day at the University of Melbourne (November, mentioned above), various activities with partner universities were intensively promoted, such as the Energy Summit at the University of Montana, where several researchers from Tohoku University participated.

● Promotion of Activities at Overseas Offices

In addition to the new Thailand Office at Chulalongkorn University, the recruitment of local high school students was promoted, leading to a more active engagement of overseas offices.

■ Additional Statements

● High Rating from the THE Japan University Rankings

Tohoku University ranked top class in the categories "Education Resources", "Satisfaction", "Results", and "Internationality", receiving a 2nd place in the overall ranking of the "Times Higher Education Japan University Rankings" published FY2016. This represents the high appraisal for Tohoku University's continuous efforts in educational reforms.



5. Progress of Initiatives (FY2017)

【Tohoku University】

Common Benchmarks and Milestones

International Relations

Recruitment of International Students

In addition to the degree courses offered in English part of the Global 30 Program, we expanded recruitment activities of international exchange programs, the International Joint Graduate School, international offices and the Global PR Center. As a result the number of foreign students (i.e. student status of residence) increased by ca. 100 to 2027 as of May 1, 2017, and by ca. 200 to 2217 as of November 2017.

ELyTMaX & ELyT Global Opening Ceremony at Lyon

In March 2018, we held the opening ceremony for ELyTMaX and ELyT Global at our partner university INSA-Lyon with the participation of the university presidents, executive vice presidents and ca. 30 other members. Centered around ELyTMaX, we will establish a global network for academic cooperation aimed at international joint research and industry collaboration with institutes from e.g. Germany, Sweden and China.



〈ELyTMaX Opening Ceremony〉

Governance Reform

Tohoku University Global Initiative Seminar 2017

In 2017 three Global Initiative Seminars were organized (May, June, October) on topics such as effects of extracurricular activities for global HR development, international coeducation or comprehensive internationalization. We invited renowned speakers for the lectures and established an important event for further strategic global engagement.

Skill Enhancement of Professional Staff

The number of professional staff with English skills of 700 points or more in TOEIC went from 3% as of September 2014 up to 7.8% as of December 2017 due to the organization of English seminars, e-learning and courses at language training schools. Furthermore, 10 participants achieving necessary scores took part in an exchange program with The University of Sydney and had the opportunity to observe the work of professional staff at a foreign university. The participants gained insight to international affairs, providing them with a wider perspective and giving impulses to the further internationalization of Tohoku University.

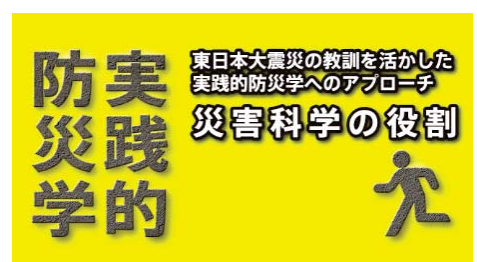


〈Conferral of Certificates〉

Educational Reform

Tohoku University MOOC

Since 2016 we offer Massive Open Online Courses (MOOC) in order to be a university “open to the global community” and “actively promote education and research activities for the people, based on the curiosity of the community”. In addition to the two courses “Memento Mori” and “The Mystery of the Aurora”, we offered a new course “Approach to Practical Disaster Risk Reduction – The Role of Disaster Science” in 2017.



■ Tohoku University's Benchmarks and Milestones

● International Joint Graduate Program

In addition to courses in Spintronics FY2015 and Environmental and Earth Sciences FY2016, 9 students were selected for the International Joint Graduate School for Data Science and 12 students for the IJGS for Physics for the Universe in FY2017, starting the education program in the respective courses. The curriculum includes exchange and collaboration programs with leading universities and will promote both our education and research capabilities in our world leading academic disciplines .



〈Seminar at the Cosmic Physics Program〉

● Tohoku University Global Leader Program

We organized Global Leader Programs for Bachelor students, combining seminars and lectures regarding “Language & Communication Skills”, “International Sophistication” and “Proactive Initiative” with the “Overseas Training” subprogram. The number of participants in FY2017 increased substantially to 2873 (compared to 2562 in FY2015).

■ Activities for the Improvement of International Ratings (Type A)

● Tsinghua-Tohoku Joint Workshop

The Tsinghua-Tohoku Joint Workshop was held at Tsinghua University in December 2017, with more than 50 participants including the President and managing Executive Vice Presidents. It was agreed to further strengthen the cooperation of the partnership and to hold the next workshop in Sendai, celebrating the 40th anniversary of the Treaty of Peace and Friendship between Japan and China as well as the 20th anniversary of the partnership agreement between Tsinghua University and Tohoku University.



〈Tsinghua-Tohoku Joint Workshop〉

● University Washington-Tohoku University Academic Open Space

In April 2017, we established the “University Washington-Tohoku University Academic Open Space” within the University of Washington (Seattle). This is the fifth overseas office after Beijing, Moscow, Novosibirsk and Bangkok. It will be a gateway for Tohoku University in the US, providing workshops with researchers and corporations from various fields as well as serving as a place for exchange and collaborations, promoting international joint research projects as well as industry cooperation.



〈Academic Open Space〉

Achievements in Cooperation with Overseas Universities (Type A)

● Activities within University Consortia

In July, 40 participants from 10 countries attended the APRU Multi-Hazard Summer School, sharing the experience and findings from the Great East Japan Earthquake and discussing the role of universities for disaster risk reduction as well as safety on campus. Furthermore, our members engaged in international consortia with overseas universities such as AEARU (annual meeting in Sep.), APRU (July), RENKEI (April) and the JANET FORUM 2017.

● Enhanced Collaboration with International Partner Universities

Diverse international activities such as the aforementioned joint workshop with Tsinghua University in December the Tohoku-Melbourne Day in November were promoted, leading to a closer relation to our partner universities.

● Promotion of Activities at Overseas Offices

In addition to the opening of the overseas division in April at the University of Washington, we established a liaison office at the National Chiao Tung University in May.

■ Additional Statements

● High Rating from the THE Japan University Rankings

Tohoku University ranked top class in the categories “Education Resources”, “Satisfaction”, “Results”, and “Internationality”, receiving a 3rd place in the overall ranking of the “Times Higher Education Japan University Rankings” published FY2017. This represents the high appraisal for Tohoku University’s continuous efforts in educational reforms.



6. Progress of Initiatives (FY 2018)

【Tohoku University】

■ Common Benchmarks and Milestones

International Relations

● Promoting recruitment of international students

In addition to expanding the courses taught in English newly established after being selected for the Global 30 program, we have further enhanced international student recruiting, primarily through our overseas offices and international PR centers. Subsequently, foreign student numbers have shown a substantial increase since the project was started, reaching 3,405 in FY 2018 (a year-on-year increase of 134 students).

● Opening of University House (UH) Aobayama

UH Aobayama, a co-educational international student dormitory with room for 752 residents, was completed in September 2018 and opened in October. This dormitory increased our university's co-educational international student housing capacity to over 1,700 residents, which is among the highest in Japan.

● Exchange event for international students and foreign-investment companies

An exchange event attended by about 100 international students and 13 foreign-investment companies was held in cooperation with JETRO and the Tohoku Innovation Human Resources Development Consortium. The event assisted students with future career planning by demonstrating the potential of global enterprises.



〈University House Aobayama〉



〈International student/foreign-investment exchange event〉



〈Tohoku University Vision 2030 Presentation〉



〈Global Initiative Seminar〉

Governance Reform

● Tohoku University Vision 2030

We published the Tohoku University Vision 2030, which describes an ideal form (vision) for Tohoku University for the year 2030 and specifies mid/long-term policies (strategic priorities) and specific actions (major policies) to achieve it. It lays out 19 strategic priorities for implementing four pillars of education, research, cooperation with the community, and administrative innovations.

● Establishment of the International Strategy Office

A new International Strategy Office was established in order to pivot our various international expansion activities towards more strategic and comprehensive endeavors.

● Tohoku University Global Initiative Seminar

This seminar was held twice in FY 2018 (July, March). Eminent instructors were invited from overseas to come and speak on themes of internationalization in higher education and global HR development. It was a valuable opportunity for us to consider our future international exchange strategy.

Educational Reform

● Establishment of College of Creative Endeavor: a modern educational program

This program, slated to begin in 2019, will fulfill the educational objectives of Tohoku University Vision 2030 by providing a new General Education program for students living during changing times. Aimed primarily at 1st and 2nd year students, it is expected to greatly encourage students to undertake challenges through practical education in three categories: global mindset, AI/data skills, and entrepreneurship.

● Establishment of International Education Subject Committee

The International Education Subject Committee was formed under the Academic Affairs Council to systematize, and provide unified management of, global education subjects that were expanded and developed in the Tohoku University Global Leader Program (TGL Program). The committee is building a framework for global education that will be sustainable after the program ends by publishing international co-learning implementation guidelines, providing model syllabuses, and conducting FD and symposiums.



〈College of Creative Endeavor〉

■ University-specific Benchmarks and Milestones

● Collaborative International Graduate Programs

Following the establishment of the Graduate Program in Data Science and Graduate Program on Physics for the Universe in 2017, the Neuro Global International Joint Graduate Program (9 students) and GP-Mech Program (18 students) began in 2018. By cooperating on curricula and exchanging researchers and students with top universities in world-leading areas, Tohoku University has further improved its education and research capacity.

● Tohoku University Global Leader (TGL) Program

Every year, more recipients receive the Global Leader Certification from the TGL Program. 27 received certification in FY 2018 (a year-on-year increase of 9). Many students who receive Global Leader Certification are expected to be internationally active after graduation.

■ Initiatives to Improve International Rankings (Type A only)

● Participation in international university conferences

Tohoku University worked to increase its international standing and presence by participating in a number of international university conferences, such as the Presidential Conference of the German-Japanese University Network (HeKKSaGOn; a network of six influential Japanese and German universities), the General Meeting of the Association of Institutions of Higher Education of the Russian Federation and Japan, and the 22nd Annual Presidents' Meeting of the Association of Pacific Rim Universities (APRU).

● Inauguration of the Tohoku University Vietnam Alumni Association

The Tohoku University Vietnam Alumni Association was inaugurated in Hanoi, Vietnam, with a commemorative ceremony and seminar. This is Tohoku University's seventh overseas alumni association in its growing international network. On the same day, final presentations were given for the TU Future Global Leadership (FGL) Challenge in Vietnam, a contest for Vietnamese high school students hosted by Tohoku University.

● Tohoku University SDGs Symposium

At the Tohoku University SDGs Symposium, "Global HR and the Achievement of Sustainable Development Goals," we presented our university's SDGs from our perspective as a part of the community that was affected by the Great East Japan Earthquake. This symposium is also expected to increase our international presence.

Achievements in Cooperation with Universities Overseas (Type A only)

● UCL-Tohoku University Kickoff Partnership Event (October 2018)

The UCL-Tohoku University Kickoff Partnership Event was held at University College London (UCL) in England. A total of 90 people, 50 visitors from Tohoku University and 40 from UCL, attended. Both schools expressed their commitment to cooperate even more strategically and closely hereafter.

● 2nd Tohoku University-Tsinghua University Joint Workshop and visit by Tsinghua University students (July 2018)

The 2nd Tohoku University-Tsinghua University Joint Workshop was held at Tohoku University. A total of 120 people, 60 visitors from Tsinghua University in China and 60 from our university, attended.

Research exchange between the two universities was expanded to a wider range of fields. In addition to materials science and spintronics, which were present in last year's (1st) Workshop, there were sessions on disaster science. In addition, during the workshop 66 Tsinghua University students visited to participate in exchange events and a competitive origami workshop together with Tohoku University students.

● UCL and Tsinghua University Matching Fund (Collaborative Research Fund)

In order to support collaborative research and exchange activities between researchers from Tohoku University, UCL, and Tsinghua University, we have agreed to establish a Collaborative Research Fund to promote/encourage joint research. A call for projects has been announced.

■ Free Answer Section (Other Initiatives)

● Raising our ranking in the Times Higher Education (THE) Japan University Rankings

In the FY 2018 THE Japan University Rankings Tohoku University was highly rated in "educational resources," "satisfaction with education," "educational results," and "international diversity," and was ranked 3rd overall in Japan. Our university is highly regarded for its long-term efforts toward educational innovation and academic strengths.

【Tohoku University】



〈 A GP-Mech class 〉

iversity Alumni Association in

Hanoi, February 23rd 2019



〈 Tohoku University Vietnam Alumni Association: (from right) President Ohno, Vietnam Alumni Association Chairman Viet, Thuyloi University President Thu 〉



〈 UCL-Tohoku University Kickoff Partnership Event 〉



7. Progress of Initiatives (FY 2019)

【Tohoku University】

Common Benchmarks and Milestones

International Relations

● Promoting recruitment of international students

In addition to expanding courses taught in English, which were newly established after being selected for the Global 30 program, we have further enhanced international student recruiting, primarily through our Student Exchange Program, International Joint Graduate Program, overseas offices, and international PR centers. Subsequently, foreign student numbers have shown an increase since the project was started, reaching 3,548 in FY 2019 (up 143 from the previous year).

● Increased hiring of international instructors and researchers

As a result of the President's discretionary International Instructor Hiring Fund (JPY 110 million/year), in addition to the creation of the new Cross-Appointment Support System (JPY 200 million/year) and Young Women/International Instructor System (JPY 200 million/year), The number of instructors from overseas has risen to 265, an increase of 37.3% compared to FY 2015.

● Establishment of the International Student Help Desk

The International Student Help Desk was established in FY 2019 to provide a one-stop service to international students for questions and counseling on student life and academics. Staffed by experienced Japanese and international students, it provides substantial support to international students through counseling and peer support.



< Degree-conferring courses taught in English:
Future Global Leadership Undergraduate Courses >



< International Student Help Desk >

Governance Reform

● International Advisory Board (2nd Session)

In October 2019, International Advisory Board came to Sendai to externally evaluate the project. This is the second time since FY 2016 that this board has convened. Nine experts from overseas universities and the business community attended, including President Michael Arthur from University College London (UCL). The President and related Executive Vice Presidents gave reports and exchanged opinions on the status of the internationalization of education, research, and governance at the university since the last meeting. The board members gave advice on how to further internationalize the university.



< International Advisory Board (2nd Session) >

● Formulation and announcement of international strategies

In 2019, Tohoku University's International Strategy Office formulated and announced the "Tohoku University International Strategy", which aims to clarify the guidelines and action plan for the university's further internationalization. It will also strengthen the measures needed to achieve Priority Strategy No. 17 (Strategic Partnerships for further Excellence) of the "Tohoku University Vision 2030" formulated in November 2018.

Educational Reform

● Conclusion of MOU on English language education between Tohoku University and America's ETS (first in Japan)

As a high level of English language education will be indispensable from now on, we became the first national university in Japan to sign an MOU on English language education and research with the US non-profit organization Educational Testing Service (ETS) in July 2019. TOEFL® content, developed and provided by ETS, will play a central roll in Tohoku University's General Education curriculum for 1st and 2nd year undergraduate students. English language education will be restructured following this new curriculum and educational policy starting in FY 2020.



● Expansion of degree programs facilitated by the Institute for Promoting Graduate Degree Programs

The Tohoku University Institute for Promoting Graduate Degree Programs was established in 2015 to consolidate multidisciplinary, cross-sectional degree programs. It has expanded graduate programs at the university that transcend their graduate schools, national borders, and sectors —notably the International Joint Graduate Programs and WISE Program. It has expanded from 3 programs in 2015 to 14 programs as of April 2020.

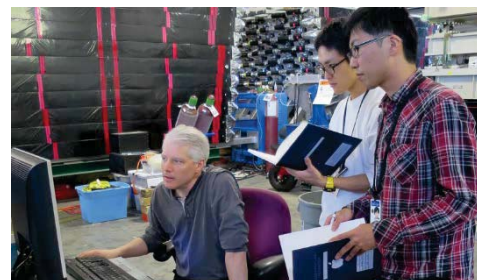


< Collaborative International Graduate Programs accrediting ceremony >

■ University-specific Benchmarks and Milestones

● Collaborative International Graduate Programs

In FY 2019, educational activities began in the new International Graduate Program in Japan Studies (4 people), International Joint Graduate Program in Materials Science (14 people), and International Joint Graduate Program in Resilience and Safety Studies (12 people). We have created/begun international joint graduate programs in 9 fields (197 people). By cooperating on curricula and exchanging researchers and students with top universities in world-leading areas, Tohoku University has further improved its education and research capacity.



<Collaborative International Graduate Programs>

● Tohoku University Global Leader (TGL) Program

We conferred Global Leader Certification on 23 students in FY 2019. Since it began, this program has conferred Global Leader Certification on over 100 students who are expected to be internationally active after graduation.

■ Initiatives to Improve International Rankings (Type A only)

● Organizer for the STS Forum University Presidents' Meeting

Tohoku University organized the University Presidents' Meeting, which was one of the general sessions of the STS Forum held in Kyoto in October 2019. Approximately 70 university presidents attended to discuss the theme of "How Universities Engage with and Contribute to Social Issues such as SDGs with respect to Education and Research." President Ohno from Tohoku University co-chaired with President Michael Arthur of University College London, with which Tohoku University has an academic exchange agreement.



<STS Forum University Presidents' Meeting>

● Participation in international conferences

Tohoku University worked to increase its international standing and presence by participating in a number of international university conferences, such as the 23rd Annual Presidents' Meeting of the Association of Pacific Rim Universities (APRU), the 7th Presidents' Conference of the German-Japanese University Network (HeKKSaGOn), the 5th Japan-Indonesia Rectors' Conference, the 2nd General Assembly Meeting of the Association of Institutions of Higher Education of the Russian Federation and Japan (8th Japan-Russia Rectors' Forum), and the 11th Japan-China University Presidents' Meeting.



<23rd APRU Presidents' Meeting>

【Achievements in Cooperation with Universities Overseas (Type A only)】

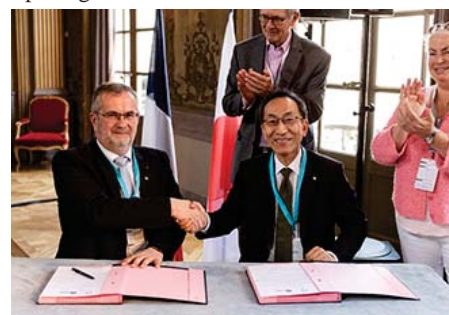
● New matching fund (collaborative research fund) project

Joint research projects were started through the establishment of matching funds between Tohoku University and Tsinghua University (China), and UCL (U.K.) in FY 2019. In FY 2020, a new joint research project was begun through a matching fund with the University of Lorraine (France). We expect this to result in the further development of joint research with prestigious universities around the world.

● Signing of Letter of Intent

In June 2019, Tohoku University signed a Letter of Intent on academic cooperation with the University of Lorraine (France). Based on this, a joint workshop was held with the University of Lorraine in September 2019. In addition to workshops in fields in which we have longstanding exchanges, such as spintronics and mathematics, there were workshops for international and students exchange staff.

In September 2019, we also signed a Letter of Intent with Purdue University(U.S.A) to promote further academic cooperation in the fields of quantum engineering, spintronics, and materials science.



<Letter of Intent signing with the University on Lorraine>

■ Free Answer Section (Other Initiatives)

● Ranked 1st in the 2020 Times Higher Education (THE) Japan University Rankings

Tohoku University was ranked 1st in the 2020 Times Higher Education (THE) Japan University Rankings.

While the university was highly rated for "educational resources," "educational completeness," and "internationality," it was the large increase in the "internationality" score compared with the previous year that resulted in the 1st place ranking.

