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.

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.

**Educational foundation to foster global leaders**
- Provide more attractive international courses (expansion of Global 30)
- Continue/expand efforts to foster global leaders among Japanese students
- Rapid expansion of collaborative international education

**Revolution in basic education/research/governance, acceleration of internationalization**
- Create accountability system through consolidated function-based governance
- Ensure presidential leadership
- Establish International Advisory Board

**Revolution in Research**
- Collaborative education with prestigious overseas universities in the world’s top ten fields and new strategic areas
- Provide joint supervision, double/joint degrees
- Invite instructors under joint appointment/early contract system

**Consolidating Research Abilities**
- Involve Nobel-level researchers from around the world to educate young researchers. Establish overseas research offices

**Globalized environment**
- Strategic utilization of overseas centers
- Active use of education conducted under academic exchange agreements
- Improve support system for international exchange
- Strengthen international communicability
- Improve English support skills of administrative staff

**Tohoku University Global Initiative Headquarters**
- Presidents Office
- Office of the President
- Steering Committee
- President’s Office of International Cooperation

**Institute for Excellence in Higher Education (IEHE)**
(Est. April 2014)

**Higher Research Organization**
(Est. July 2014)

**Office of International Cooperation**
(Est. October 2014)

**Institute for Promoting Degree Programs**
(Est. April 2015)

**Head Office of Enterprise Partnerships**
(Est. April 2015)

**Institute for Disaster Reconstruction and Regeneration Research**
(Est. April 2011)
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

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 Leaders (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.

- 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.

(Study Abroad Program)

(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.

-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 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.

-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:
Steped 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.

-Initiative Website
https://www.tohoku.ac.jp/en/about/top_global_university.html
### 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 FY 2015 (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).

### 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.

**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.
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.

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).

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.

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.

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 1<sup>st</sup>, 2016, resp. November 1<sup>st</sup>, 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.

#### 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.

- **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.

#### 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.

- **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.

- **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.

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)**

### 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.

#### 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 into international affairs, providing them with a wider perspective and giving impulses to the further internationalization of Tohoku University.

#### 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.
Activities for the Improvement of International Ratings (Type A)

- **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.

- **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).

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)

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.

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.
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.
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.

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.

- **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 role 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.
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.

- **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.

- **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.

**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.

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.
Common Benchmarks and Milestones

**International Relations**
- **HR diversity: young researchers, foreign and women instructors**
  Under the leadership of the president and provosts, we are continually investing in projects to assist excellent young researchers (JPY 1.2 billion) and diversify HR in the areas of foreign and women instructors (JPY 330 million). Since the inauguration of these projects we have seen progress and an increase in the numbers/percentages of young researchers, women instructors, and foreign instructors, particularly in the Higher Research Organization's world-leading research institutes for materials science, spintronics, future medicine, and disaster science.

  - Young researchers: (FY 2015) 515, 22.7% → (FY 2020) 572, 24.3%
  - Women instructors: (FY 2013) 392, 12.6% → (FY 2020) 544, 16.9%
  - Foreign instructors: (FY 2013) 785, 25.2% → (FY 2020) 1,115, 34.7%

- **Increasing the Percentage of International Students in PhD Curricula**
  Although recently acceptance of international students and new arrivals from abroad has been limited due to the pandemic, the percentage of international doctoral students increased from 22.6% in 2016 to 29.1% in 2020, thanks in part to our aggressive response to COVID-19, such as conducting entrance exams, admissions procedures, classes, and research advising online.

**Governance Reform**
- **Tohoku University Connected University Strategy**
  In July 2020, we updated the "Tohoku University Vision 2030" plan to lead social changes for overcoming COVID-19 and building a new society in light of the "new normal" required by the times. We formulated the "Tohoku University Connected University Strategy" for joint development of education, research, and the community, and began onlining all university operations. We continue to rapidly implement university reforms for the post-COVID period.

- **Operations DX during the COVID-19 pandemic**
  Under the leadership of the president and provosts, in June 2020 we became the first Japanese university to announce the onlining of office functions, structured around three key efforts to provide a "service counter-free," "stamp/signature-free," and "workplace-free" environment in response to the new normal of the pandemic. As part of this, in March 2021 the university implemented a multi-lingual chatbot as a means of moving service counter functions online and improving student services during the pandemic.

**Educational Reform**
- **Growth of degree programs and expansion to Tohoku University Advanced Graduate Studies**
  In addition to our 14 existing programs, such as the International Joint Graduate Programs, the WISE Program inaugurated its Program for Sustainability in the Dynamic Earth (SyDE), expanding our total of degree programs to 15 as of FY 2020. The Institute for Promoting Graduate Degree Programs (the umbrella organization for these degree programs) was reorganized as the Tohoku University Advanced Graduate School, which began operation in April 2021.

- **Tohoku University Be Global Project**
  Rising to the clear challenges posed by the pandemic, a new international support project, Be Global, comprising four units (1. Online Overseas Study, 2. Online Intercultural Collaborative Learning, 3. Online International Student Education 4. Online International Student Support) was inaugurated in April 2020 to assist students with their lives and studies in the "new normal" era as they strive to become part of the global workforce.

- **Tohoku University Emergency Support Package**
  In April 2020, we promptly implemented the Tohoku University Emergency Support Package (JPY 400 million total) for students who were affected by the COVID-19 pandemic and/or were not equipped for online classes. In addition to offering economic aid for 3,582 students (including 384 international students), we provided diverse forms of student life support, including a peer support system employing students (2,289, including 121 international students) for new and enrolled students.
**International Joint Graduate Programs**

In FY 2015 we concluded MOU with a number of influential overseas universities on Jointly Supervised Degree/Double Degree programs in 9 areas, notably spintronics. We have been conducting collaborative educational activities under these strong partnerships, and grown the number of enrollees from 7 in FY 2015 to 235 as of FY 2020. In FY 2020, we conducted 86 online seminars and workshops with overseas researchers and students. Notably, a poster session on materials science was conducted via VR, demonstrating a new way of holding symposiums for the new normal. As for the future of the International Joint Graduate Programs, in FY 2020 it produced 29 new graduates who are already building academic careers abroad.

**Initiatives to Improve International Rankings (Type A only)**

**Global Webinar Series**

As an important means of overseas cooperation and communication during the post-pandemic period, the Tohoku University Global Webinar Series (TUGW Series) was begun in FY 2020, offering 9 programs to actively promote online international symposiums and seminars, and increase international awareness of our research results and various projects.

**Participation in the APRU Virtual Student Exchange Program**

We are participating as a founding member in Virtual Student Exchange (VSE), APRU's online overseas credit exchange program, and constructing a new model for online overseas exchange. We have offered 9 credit-conferring subjects, taken by 11 students from APRU member universities, and held 14 non-credited classes and events in Co-curricular Programs, attracting 529 participants.

**Achievements in Cooperation with Universities Overseas (Type A only)**

**Implementation of Strategic International Joint Research Fund**

Strategic International Joint Research Funds are being established with leading overseas university. Agreements, under which a total of 38 projects are now being implemented, were made with Tsinghua University (China) and University College London (England) in 2018, and the University of Lorraine (France) in 2019. In FY 2020, 10 projects, 4 of which are new, were implemented with Tsinghua University. Also in FY 2020, joint workshops and conferences were held with Tsinghua University and the University of Lorraine, which generated a steady pace of research results even during the COVID-19 pandemic.

**Free Answer Section (Other Initiatives)**

**Ranked "S" in FY 2020 Midterm Evaluation**

In FY 2020, Tohoku University received the highest rank of "S" on its 2nd midterm evaluation for the Top Global Universities Project. The synergistic effect of the educational reforms made in the course of improving our research capacity and conducting the International Joint Graduate Programs for this project were highly praised.

**Ranked 1st in the THE Japan University Rankings for 2nd Year**

Tohoku University was ranked 1st in the 2021 Times Higher Education (THE) Japan University Rankings. This marks the 2nd consecutive year since the university was ranked 1st in 2020. While the university was highly rated on "educational resources," "educational completeness," and "internationality," it was the large year-on-year increase in the "internationality" score that resulted in the 1st place ranking for the 2nd straight year.
Common Benchmarks and Milestones

International Relations

- **International HR Strategy for Promoting Outstanding Young Researchers**
  Based on advice received from the 2nd International Advisory Board in AY 2019, JPY 3.3 billion has been allocated yearly to provide seamless comprehensive support, for students and researchers, to foster outstanding young researchers who will be active internationally.
  Our signature project is the Prominent Research Fellow System, which confers a title on 89 Assistant Professor and helps them establish independent research environments. As a result of this project, our researchers received 11 MEXT "Young Scientists‘" Prizes in 2021 (2nd nationwide) and 14 in 2022 (1st nationwide), and 5 JSPS awards in 2021 (2nd nationwide), indicating the successes their undertakings have achieved.

- **Foundation of the International Support Center**
  The International Support Center was founded in April 2022 as a university-wide organization to assist international researchers and students with their daily lives. The center aims to ease international researchers and students into life in Japan by providing one-stop, comprehensive assistance for Residence Status acquisition, ward-office and bank procedures, and purchasing basic necessities. In addition, by decreasing the workload of the host departments, it frees time that instructors can devote to educational and research activities. https://sup.bureau.tohoku.ac.jp/supportcenter/

Governance Reform

- **Evidence-Based Administration Utilizing the Tohoku University Dashboard**
  The new Tohoku University Dashboard is a system that tracks over 50 indexes related to medium-term goals/plans and KPIs for the Designated National University framework. It will facilitate steady progress towards our Tohoku University Vision 2030 and the Designated National University framework goals. The system instantly visualizes data as graphs, effectively manages progress, and will be used for internal department evaluations.

- **Tohoku University Diversity Equity Initiative (DEI)**
  In addition to continuing our ongoing efforts to promote gender equality, we announced the Tohoku University Diversity Equity Initiative (DEI) in April 2022. This initiative aims to create an inclusive environment in which constituents of all genders, sexual orientations, and gender identities can fully realize their potential.

Educational Reform

- **Start of New Humanities Program**
  From the 2022 academic year, Tohoku University began a new curriculum in its "General Education" liberal arts program. This curriculum will create an undergraduate program of education that gives students the fundamentals necessary to future communities. It creates a curriculum that connects first-year students with higher-year and even graduate students, while providing a multidisciplinary program of systematic modern liberal arts education. The curriculum aims to provide classes that respond to social conditions and educational environments that are changing in the midst of advances in information communication technology (ICT), globalization, etc.

- **Selected for the Japan Forum for Internationalization of Universities Support Projects**
  The Japan Forum for Internationalization of Universities was formed in AY 2021. Building on its success and strength in intercultural collaborative learning (ICL) Tohoku University was selected, along with partnering Japanese universities, to lead a project aimed at using collaborative international networks to accelerate internationalization in university education and stimulate global expansion (ICL project).
  In AY 2021, we ① founded a consortium with our partner universities (ICL-Channels), ② concluded a credit-exchange agreement in preparation for class exchanges in AY 2022, ③ jointly held extracurricular student exchange activities, and ④ held a symposium to present project results. https://intercul.ihe.tohoku.ac.jp/icl/
Tohoku University hosted the 8th Presidential Conference of the German-Japanese University Network (HeKKSaGOn), which has 6 member universities, online in September 2021. We conducted a live-streamed academic conference, virtual poster session for young researchers, and group workshop for Japanese and German students. HeKKSaGOn also issued a joint announcement reconfirming its resolve to gather comprehensive, multidisciplinary knowledge and share its research with the community to overcome global issues such as pandemics and natural disasters.

■ Initiatives to Improve International Rankings (Type A only)

- Strengthening cooperation with alumni abroad through strategic use of overseas offices
  We built a platform (website), which began operation in March 2021, for alumni abroad in order to establish a framework for discovering key people in our university's overseas expansion and maintain cooperation channels over the long term. Some of the contents on this platform are viewable only by registered members. In June and December 2021 we held an online conference for the platform’s members.

■ Achievements in Cooperation with Universities Overseas (Type A only)

- Hosting the Presidential Conference of the German-Japanese University Network (HeKKSaGOn)
  Tohoku University hosted the 8th Presidential Conference of the German-Japanese University Network (HeKKSaGOn), which has 6 member universities, online in September 2021. We conducted a live-streamed academic conference, virtual poster session for young researchers, and group workshop for Japanese and German students. HeKKSaGOn also issued a joint announcement reconfirming its resolve to gather comprehensive, multidisciplinary knowledge and share its research with the community to overcome global issues such as pandemics and natural disasters.

■ Free Answer Section (Other Initiatives)

- Ranked 1st in the 2022 THE Japan University Rankings for 3rd Year Running
  Tohoku University was ranked 1st in the 2022 Times Higher Education (THE) Japan University Rankings. The university has been ranked 1st for 3 consecutive years, starting in 2020. While the university was highly rated on "educational resources," "educational completeness," "educational results," and "internationality," it was the large year-on-year increase in the "internationality" score that resulted in the 1st place ranking for the 3rd straight year.

- Selected to Represent the Japan Forum for Internationalization of Universities
  The Japan Forum for Internationalization of Universities (comprising 130 member schools) aims to create an environment for increasing the growth of various endeavors by and cooperation among universities that lead Japan in internationalization. It also strives to improve the international recognition and competitiveness of Japanese higher education with an eye toward the new normal. Tohoku University is not only a participant, but was also selected as the forum’s representative.