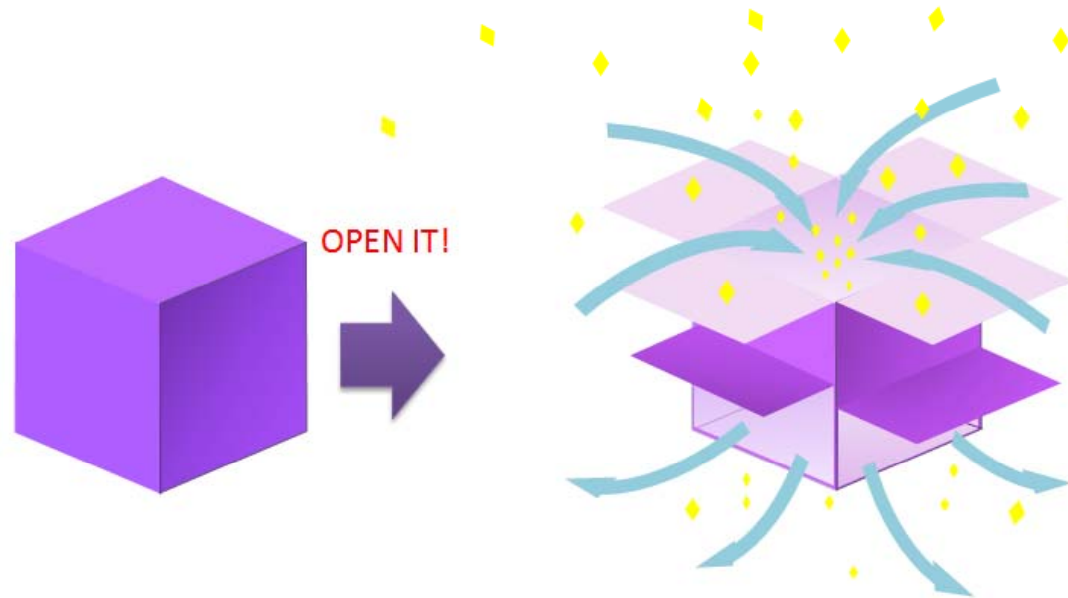


Top Global University Project

OPEN-TECH INNOVATION

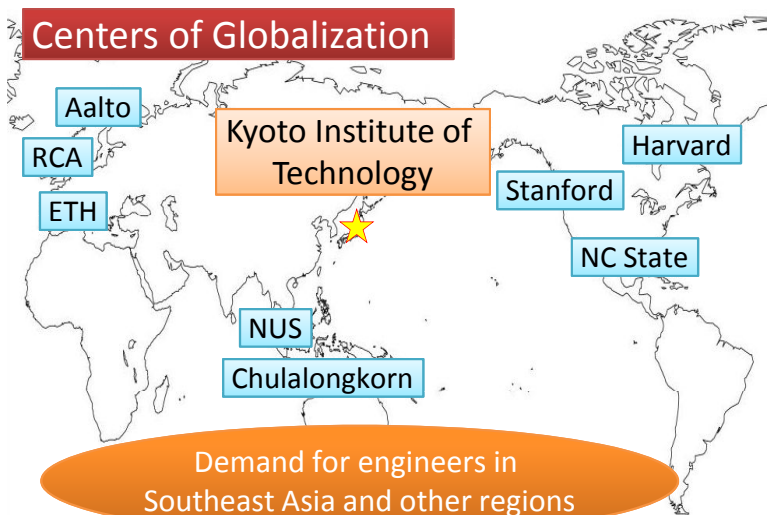
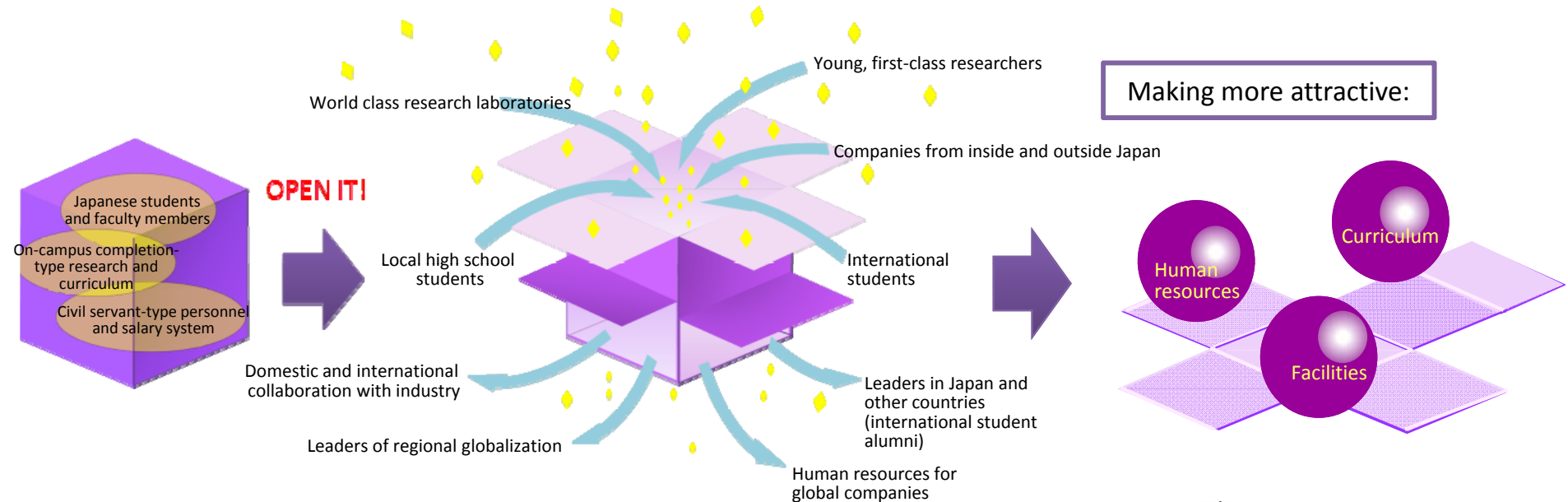
— An Initiative for Global, Social and Regional Collaboration —



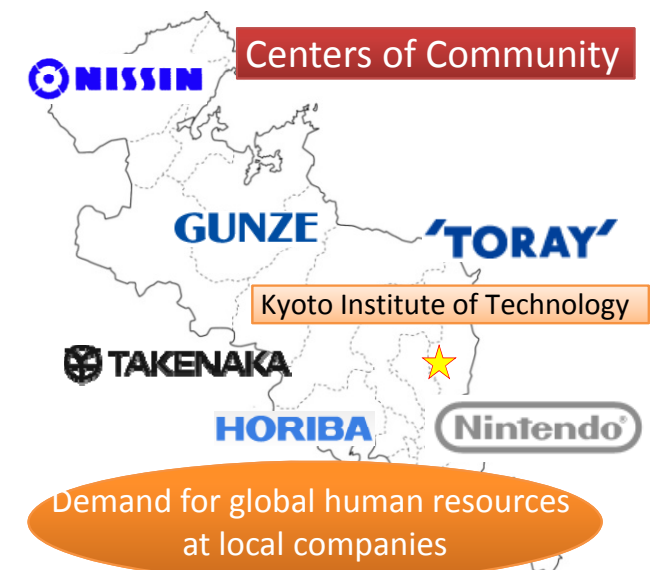
Kyoto Institute of Technology

★ 10 Years From Now

Kyoto Institute of Technology (KIT) will have become a center for top researchers, business representatives and engineers in international and domestic engineering research, industries and education, who are seeking the open resources (intellectual and human resources and state of the art facilities) available at KIT. We will ignite the emergence of innovation and establish an Asian Hub, within a worldwide network. At the same time, KIT will have developed into a core training institution for interculturally-aware Tech Leaders who will globalize the region and the foundations of industry in countries everywhere.



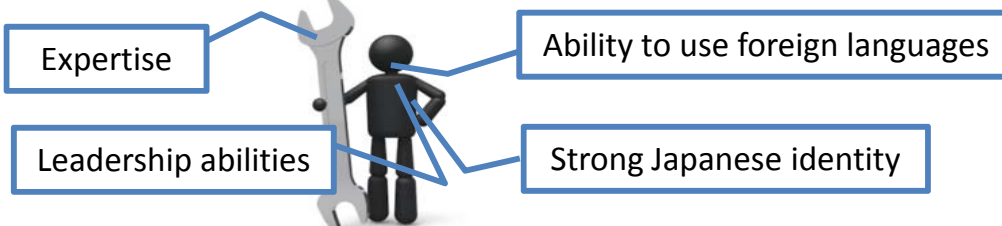
Global = ∫ Local
Human resources who can
find and solve problems in
every region in the world



[1] Making the curriculum more attractive

Ideal KIT human resource product: the "Tech Leader"

- ★ Human resources who can show leadership and lead projects to success at global sites based on knowledge and technical skills in their specialized fields



★ Projected success, example 1: Automotive manufacturer

Drive a project at an overseas plant for innovative energy-saving, cutting edge car model designs, and dominate overseas markets.



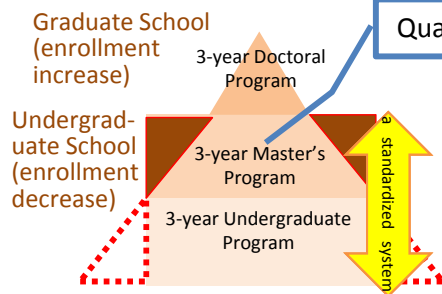
★ Projected success, example 2: Construction project developer

Organize a joint venture with an overseas company at a new overseas construction site, and lead the project to a successful conclusion.



Introducing the 3 × 3 Structural Reform and Quarter System

Mastery of English in the Undergraduate School and the Global Courses of the Graduate School



B1	B2	B3	B4 (M0)	M1	M2	D
★ Mastery of English ○ Tradition and cutting-edge technologies in Kyoto ○ Leadership cultivation			★ Global courses Liberal arts at the graduate school			
Foundational Science and Technology		Applied Science and Technology	Placement test	Graduation research	In depth Science and Technology & master's and doctoral thesis research	

- ★ 80% of the students from the graduate school attend these courses.
- ★ Overseas internship becomes compulsory.
- ★ In principle, classes are provided in English
- ★ Percentage of international students: 40%

[2] Making facilities more attractive:

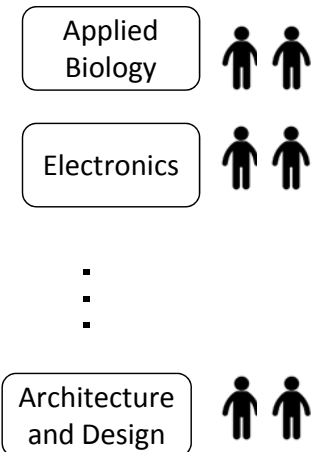
Opening of the "Tech Salon"

- ★ The "Tech Salon" will be designed as a place for global and local exchange by KIT's students and faculty workplace design specialists.
- ★ Our facilities will be offered as satellite offices to target overseas universities with which KIT has exchanged more than the specified number of students and faculty members.
- ★ Within our Social Collaboration Facility, that was completed in July 2014, we have secured space for the Tech Salon, which we will complete in fiscal 2014.



International “metabolism” of faculty members

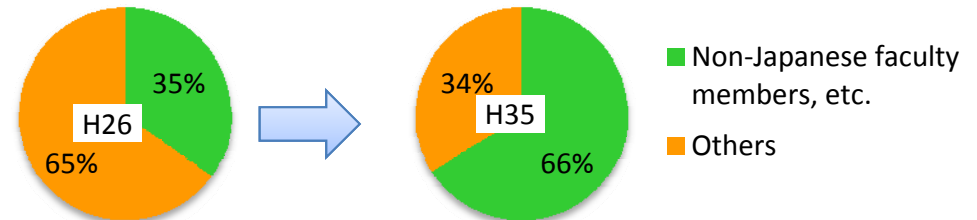
→ KIT has dispatched 10 faculty members overseas annually, a total of 90 faculty members in the past nine years.



Dispatch faculty members to overseas universities for educational-related coordination

- ◆ Coordination with overseas universities toward a new **Joint Degree Program**
- ◆ Coordination to enable KIT student acceptance in **overseas internships**
- ◆ **Recruiting international students** from overseas universities

Dramatically expanding the ratio of non-Japanese faculty members, etc.



“Non-Japanese faculty members, etc.” includes non-Japanese faculty members and Japanese faculty members who have a long-term experience of teaching and research abroad.

Inviting world-class research laboratories to KIT



Based on the Research Unit Agreement (MOU), KIT will invite research groups of faculty members, researchers and students from first-class overseas universities. Academic research will consistently be conducted at the global standard.

Sharpening our strong points

Architecture and Design

Macromolecular & fiber materials

Green innovation

Forming an Asian Hub by becoming a world-class research and education center

Foundation of globalization

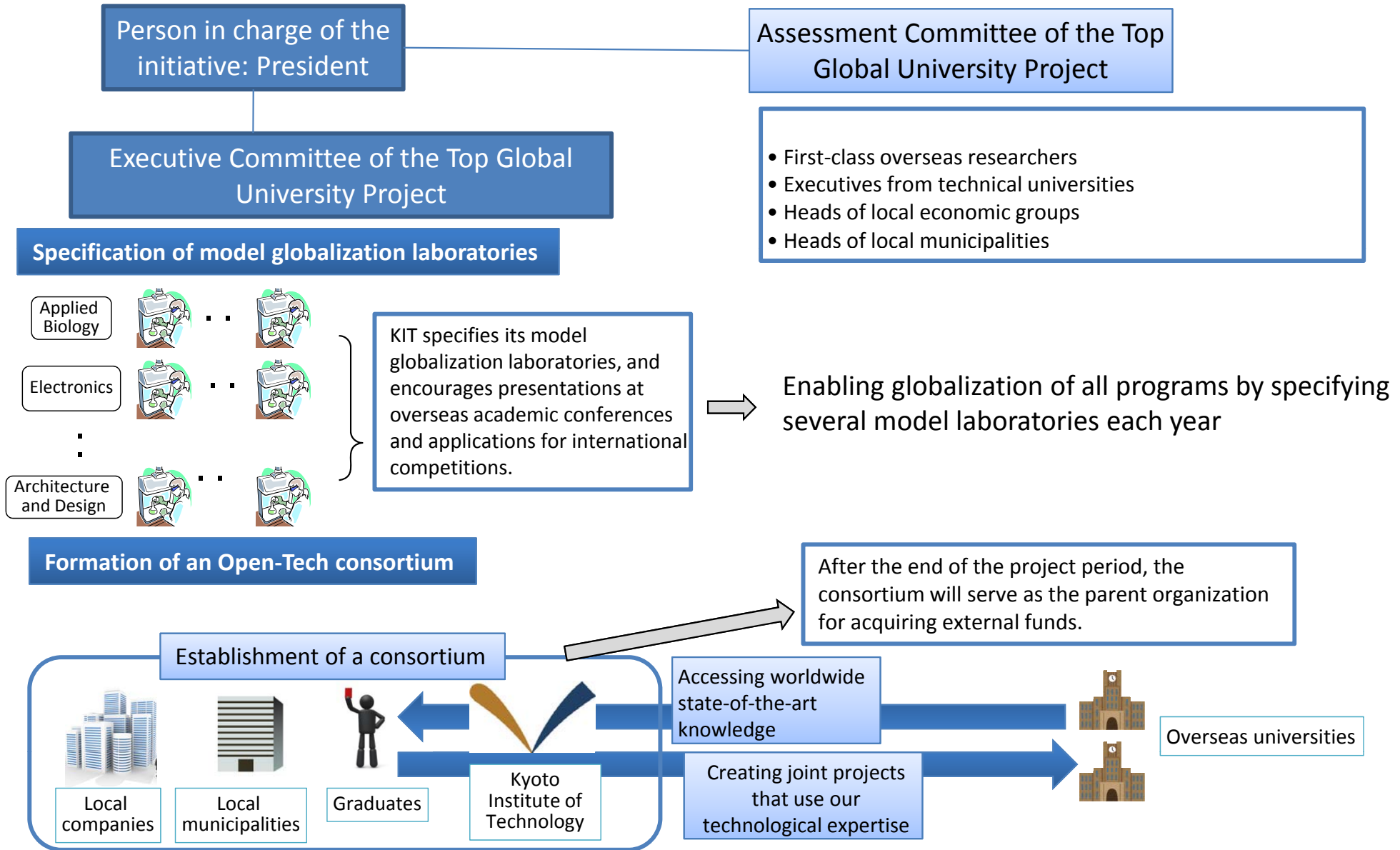
Curriculum

Facilities

Human resources

Laying a strong KIT resource foundation by making these three elements more attractive

- ◆ Managing the progress of projects by stationing executives and staff, appointed by the president, as project managers and project leaders.
- ◆ Making quick decisions regarding coordination with overseas universities on curriculum reforms, joint academic research and other issues.
- ◆ Receiving external assessments from the Assessment Committee of the Top Global University Project, and funneling feedback into improvements in projects in the following fiscal year

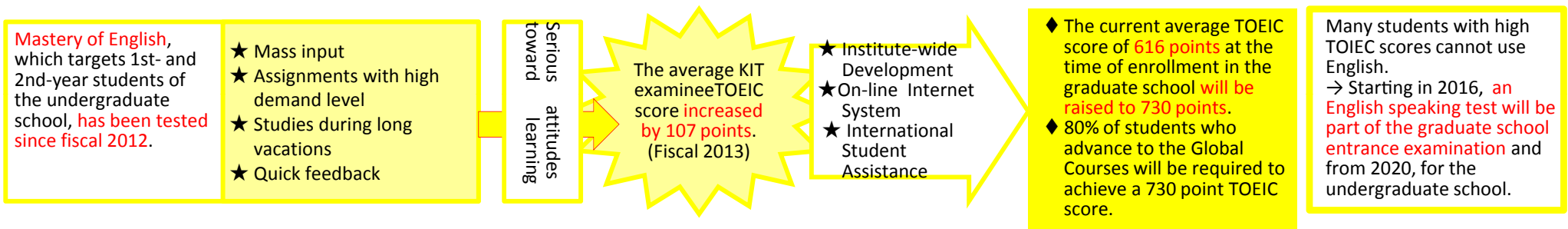


Basic target concepts

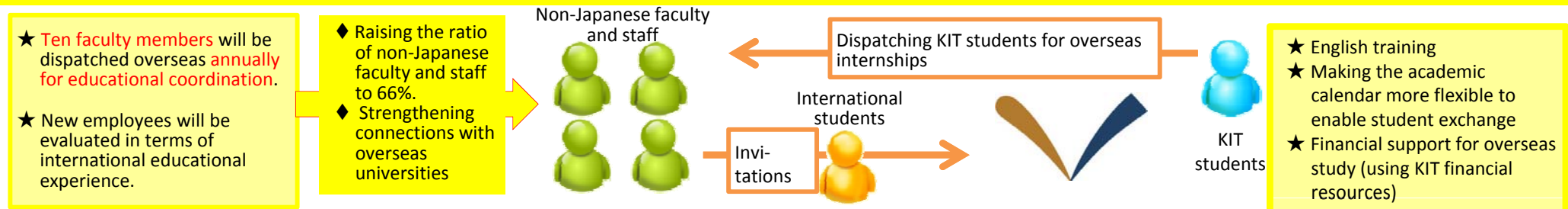
- ◆ KIT **globalization will focus on the graduate school** and involve a decrease in undergraduate school enrollment quotas and an increase in those of the Graduate School. We will implement 3 × 3 program Structural Reform (mentioned on P2). **The undergraduate school will focus on enrolling motivated high school students and insuring their mastery of English.**
- ◆ To promote the mobility and globalization of our faculty organization, KIT will promptly realize non-civil-servant-type governance reforms of its salary system and personnel policies, using its **mobility and flexibility** as a technical college.

Core targets

- [1] Criteria for foreign language skills: **50% of undergraduate** school students and **80% of graduate** school students will achieve English skills equivalent to a 730 point TOEIC score.



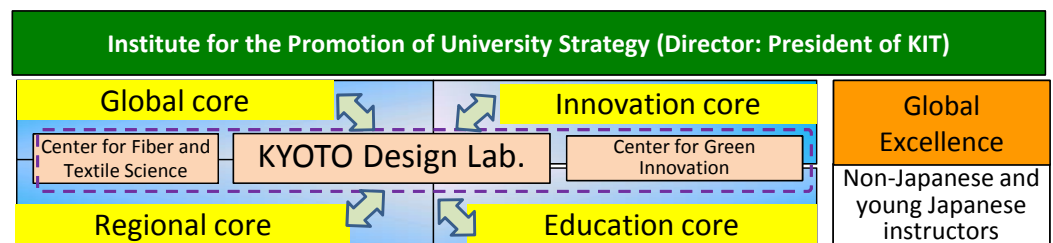
- [2] Diversification and internationalization of the campus: percentage of non-Japanese faculty and staff: **66%**, percentage of international students (graduate school): **40%**, ratio of KIT's students (graduate school) who experienced study abroad: **80%**



- [3] Governance reform: Reorganization intended to accelerate the decision-making process

[Reorganization in March 2014]

- ★ Establishing the **Institute for the Promotion of University Strategy**, which will be **directly controlled by the president.**
 - ★ Quick decision-making regarding personnel affairs, International Exchange Agreements, and joint research, etc.
 - ★ Establishing the **University Strategy Cabinet** intended to coordinate with the graduate school
- Securing a flexible management system through continued and unremitting governance reforms



Internationalization-related objectives

International students



- ◆ Proportion of class subjects provided in foreign languages
66.2% → 80.1% (graduate school)



- ◆ Construction of a dormitory for international and domestic students
The number of international students living in the dormitory: **64 → 170**

College House Matsugasaki



Facilitation of overseas study and invitation of faculty members

Overseas researchers



- ◆ **All majors** provide courses in which students can graduate from KIT without Japanese language coursework. (graduate school)



- ◆ Improvement of Japanese language education by providing Japanese language education through **Kyoto culture**
Establishment of the Multi-cultural Exchange Room

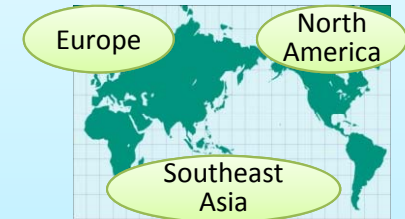


Overseas development
Information transmission

Internationalization- and governance-related matters

P6

- ◆ Construction of overseas bases
Establishing three contact bases



- ◆ Information transmission in foreign language
Videos that showcase faculty research



Governance-related objectives

Overseas universities



Quick decision-making on international agreements, joint academic research and other matters

Ensuring international applicability and flexibility of appointment and evaluation of faculty members

Advancement of clerical staff

Global

Innovation

Establishment of the Institute for the Promotion of University Strategy
(Institute's Director: President of KIT)

Regional

Education

- ◆ Introduction of an annual salary system
1.7% → 63.9% (faculty)

- ◆ Expansion of the Tenure Track System
12.5% → 38.9%

- ◆ Internationalization of the Personnel Evaluation System
Performance evaluation based on the **number of citations, international prizes won** and other recognition

- ◆ Participation of non-Japanese faculty in decision-making
Appointment of non-Japanese faculty to councils and other positions of responsibility.

- ◆ Improvement of language abilities
Taking the TOEIC test will be made obligatory, 30% of administrative staff at KIT must score at least 730 points.

- ◆ International personnel exchange
Dispatching **one clerical staff member** overseas **every year**

Formulating **Kyoto Institute of Technology's International Strategy Plan** (2014) to incorporate the content of implementation, locus of responsibility and road map of all efforts for this initiative.

Facilitation and promotion of overseas study

Framework

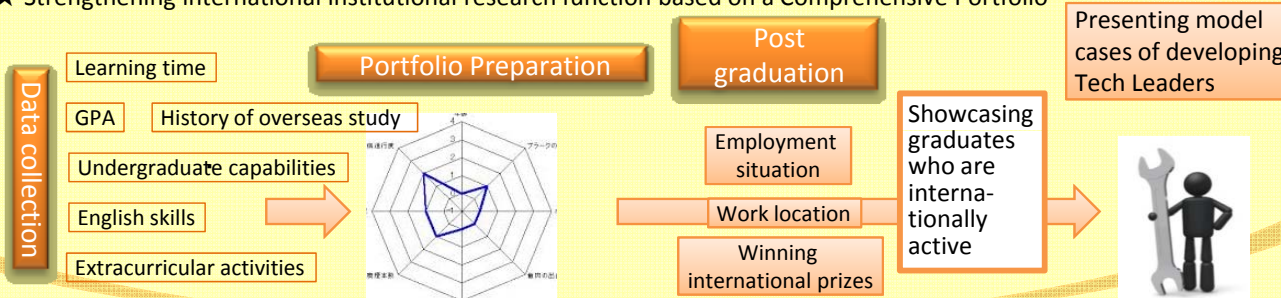
- ★ Achieving international acceptance for our Educational System
 - **Course Numbering** [0% → 100%], ○ **GPA implementation** [undergraduate school only → 100%], ○ **English syllabus availability** [0% → 100%]
 - Introduction of the **Quarter System** [introduction to all majors (graduate school)],
 - Ratio of classes provided in English [66% → 80% (graduate school)]

Contents

- ★ Achieving internationally accepted diploma policies, curriculum, and learning time
 - Applying **AHELO** (OECD), **reference standards to each field** (Science Council of Japan), Diploma Policy and curriculum based on the accreditation of **JABEE**, ○ Increase in learning time: **11h 36 min./w** → 15h/w (extracurricular learning), ○ Student evaluation of classes: **56.8% → 86.4%**

- ★ Strengthening international institutional research function based on a Comprehensive Portfolio

Evaluation



Improvement of global access

Entrance

- ★ Entrance examination reform
 - Establishment of the International Entrance Examination Reform Task Force
 - Expanding **the quota for the AO (Admission Office) entrance examinations** (10-year old PISA*-type AO entrance exams called “da Vinci”) (quota → doubled) *Programme for International Student Assessment
 - Using the results of external exams and qualifications (IB, TOEFL, TOEIC, etc.) to select students
 - **Introducing an English speaking test**
 - Expanding **the quota for autumn admission and pre-arrival entrance examinations for international students**

Other objectives

- ★ Publicly announce performance

Information to be announced:

- Percentage of students who leave KIT prior to course completion
- Percentage of students who graduate from KIT within the standard term of study
- Information on chosen career paths

	Percentage of students who graduate from KIT within the standard term of study	Percentage of students who leave KIT	Percentage of students who repeat a year
Total for the undergraduate school	81%	4%	16%

In the future, the results of **target indicators** in this initiative, will be **announced on our website** every year.



Overseas universities



Kyoto Institute of Technology



Overseas partner universities



Collabo-
ration

Super Science High Schools
Super Global High Schools

[1] Formation of Asian Hub

Acquiring world top-level educational and research abilities in specific fields

Performance indicators unique to KIT

P8

★ Architecture and Design

TARGET: To be selected as the Best Design School in the World

★ Macromolecular & Fiber Materials

TARGET: To be generally ranked above the benchmark and be within the world's top 50 in related fields

★ Green Innovation

TARGET: To hold an International Conference which first-class engineers attend

Kyoto Institute of Technology

To become a flagship within the Asian region

Europe

North America

Meeting other first-class overseas researchers

INNOVATION ↑

REPUTATION ↑

Reduction in the cost of interacting with Western researchers

Emerging economies

[2] Developing Tech Leaders

Undergraduate School

◆ Thorough and effective English training

◆ Cultivation of leadership
◆ Liberal arts at the graduate school

◆ Basic Science and Technology → Applied Science and Technology → Greater Depth in Science and Technology

Graduate School

★ Global Courses (80%)
◆ Overseas internship

To the world

Developing 3,000 Tech Leaders in 10 years

To domestic regions

Cultivation of a global-oriented mind

◆ To increase the percentage of students who hope to work overseas in the future
60% (2013) → 90% (2023)

Cultivation of leaders' mindset

◆ Developing Tech Leader indicators and setting the criteria for the indicators → 90% of our students will attain the criteria

[3] Globalization of local communities

To hold **Open-Tech Seminars** with the participation of first-class overseas researchers mainly from consortiums of local companies

➡ Holding 18 seminars annually, attended by 180 groups, including companies.

Open-Tech Consortium



Local companies



Local municipalities



Graduates

Contributing to the globalization of local companies

Company questionnaire implementation

◆ To investigate the contribution of our seminars for our graduates and working members of society to the globalization of companies and other organizations, we will conduct questionnaires at local companies.

➡ 90% of respondent companies and other organizations answered that KIT contributed to the globalization of local communities.

Local high schools



- ★ Super Science High School
- ★ Super Global High School

Approximately 80% of the new students come from local high schools in the related regions



Project Cooperation Association

Approximately 60% of our graduates find work at local companies, etc.

Kyoto-area companies



Producing Tech Leaders who drive domestic globalization

- ◆ Fostering advanced global engineers with a Kyoto identity through experience at traditional Kyoto ateliers.



Global Adult Education for active engineers and designers



- ★ International Joint Workshop
- ★ Global Adult Education Certification Program
- ★ International Industry-Academia Collaboration

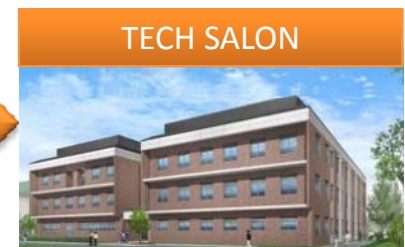


Local engineers and designers

Research seeds

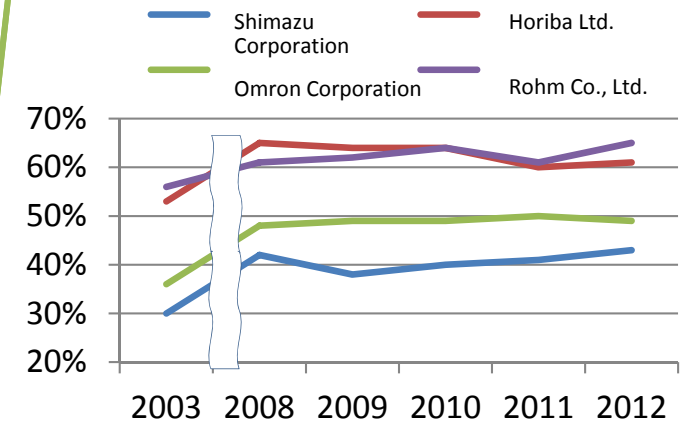
Business needs

Exchange Venue



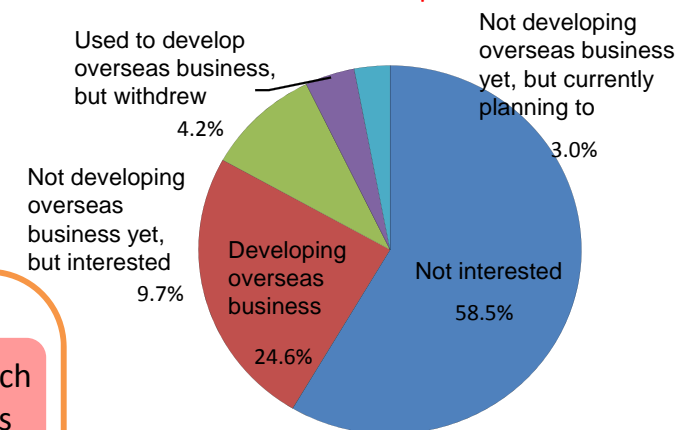
Shift in overseas sales of regional global companies

Significant increase over the past 10 years - International sales is currently 40 to 60% or more, of total sales.



Situation of overseas development of small and medium-sized businesses in Kyoto City

Approximately 60% of these businesses are not interested in overseas development

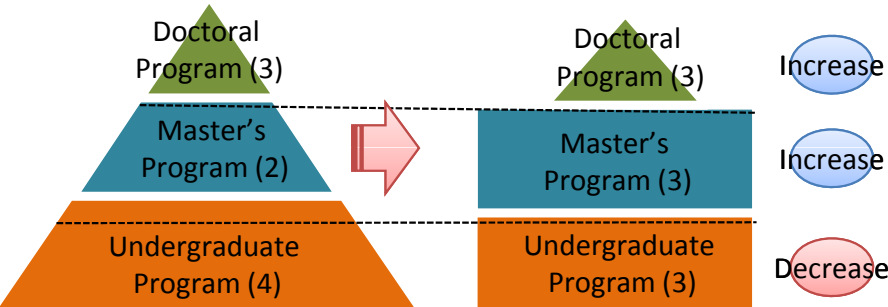


Development of global human resources in science and technology through 3 × 3 Structural Reform and step-up type Project Based Learning (PBL)

3 × 3 Structural Reform will result in a consistent campus-wide, six-year education program with a high technological standard.

- ◆ The duration of our Doctoral, Master's and Undergraduate Programs will be changed to three years each.
- ◆ Decreased undergraduate school enrollment, and increased Master's and Doctoral Program enrollment

Reorganization in fiscal 2014 and 2015



Admission quota

Doctoral Program	60 (+14)	11.8%
Master's Program	510 (+80)	87.5%
Undergraduate Program	583 (-42)	

Distinctive efforts based on the characteristics of KIT (2)

P10

★ Becoming the Japanese university with the highest percentage of matriculates continuing to its own graduate school

★ Curriculum designed by planning for the next six years

★ Student participation in overseas internships, using the three years of the Master's Program

Science and technological global human resource development

Step-up type PBL

Construct a curriculum which will enable problem identification and solutions through a three-step process. Implement this **from institutional groups, to benefit Kyoto-area and overseas projects**. This project-based learning and leadership skill development through PBL will be team-based.

Group Projects

"Science encounters art"
Creating work with pinhole cameras, in teams



Solutions to Regional Problems Project

Formulating a reinvestment plan in collaboration with Yosano Town in Kyoto Prefecture



Overseas Projects

Formulating a Hanoi Old Town Preservation and Restoration Plan



Group projects (first half of the undergraduate program)

Regional Solutions Project (second half of the undergraduate program)

Local = Global

Overseas projects (first half of the period in the graduate school)

Global Innovation Project (completion research)

The world is made up of aggregates of regions

Development of human resources who can find and solve problems in every type of region.

Team-based leadership and communication skill cultivation

Undergraduate School

PBL in a group in KIT and under the theme of regional problems

Advance projects demonstrating Japanese leadership.

Graduate School

PBL in an internationally combined teams for Kyoto-area and overseas companies