

Upgrade to the Future

the Campaign for Excellence in Higher Education in Taiwan

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Content

- **Taiwan's Higher Education & The Five-Year Fifty Billion NTD Initiative**
- **Higher Education at National Taiwan University**
- **The Five-Year Fifty Billion NTD Initiative at NTU**

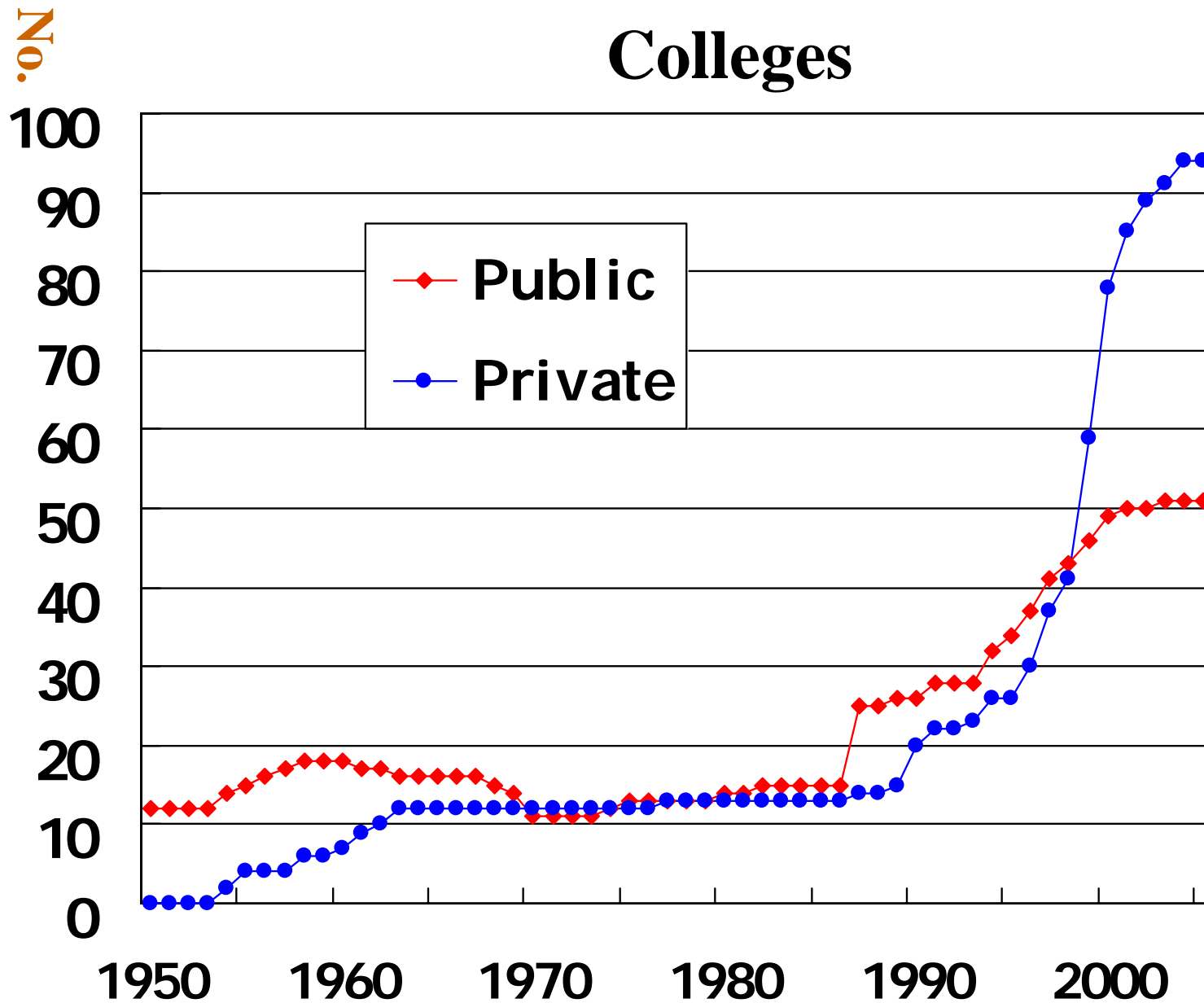
Taiwan's Higher Education & The Five-Year Fifty Billion NTD Initiative

- **A brief look at higher education in Taiwan**
- **The Five-Year Fifty Billion NTD Initiative**
 - Background
 - Objectives and Strategies
 - Annual Budget Allocation

Growth of Higher Education in Taiwan

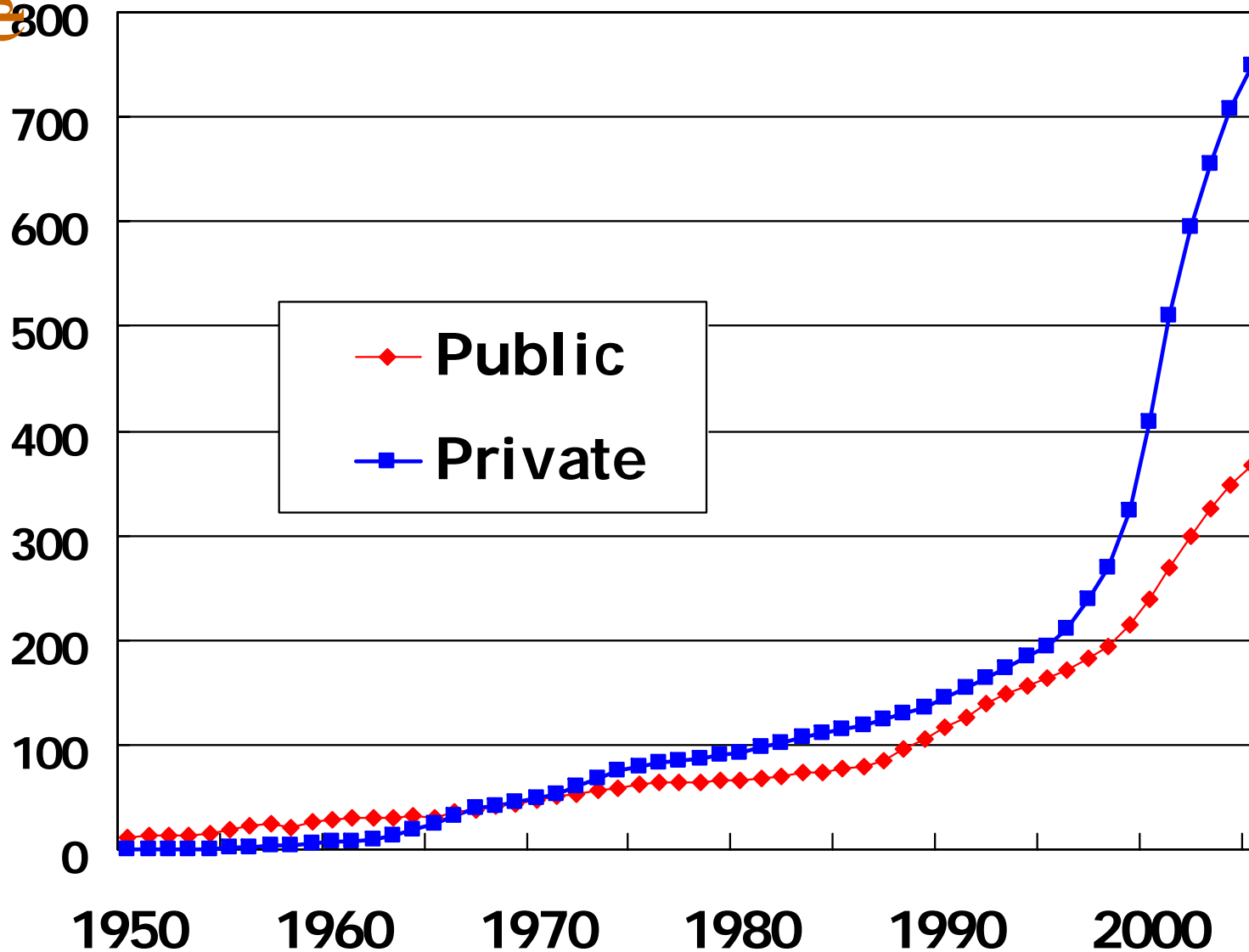
- **Number of Higher Education Institutions**
 - 1951: One university and three colleges
 - 2006: 147 universities and colleges
- **Number of Students**
 - 1951: 6,665
 - 2006: 1,159,223

The Growth of Number of Universities and Colleges

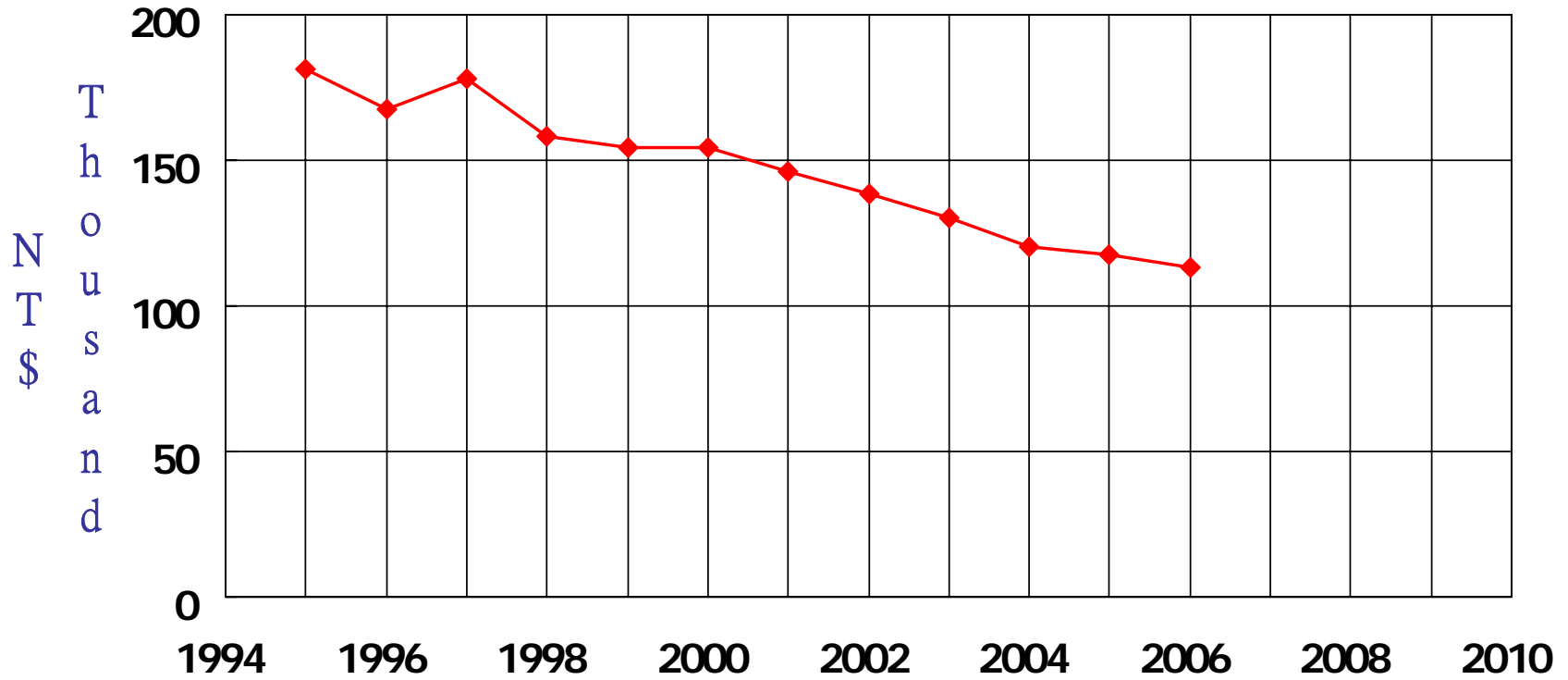


(Thousand)
No.

The Growth of Student Numbers in Universities and Colleges



Government Spending/Student



Background of The “Five-Year Fifty Billion NTD Initiative”

- **The World-Class University Initiative**
(starting from the year of 2005)
 - The desire to elevate at least one university in Taiwan to top 100 world-class status within 5 to 10 years
- **The World-Class Research Centers**
 - To promote several research centers in Taiwan to world-class status within 5 to 10 years
- **Other similar initiatives in Asia**
 - China’s “Project 211, 985” ; Korea’s “Brain Korea 21,” and Japan’s “Top 30”

Strategies : General

- **Upgrade the infrastructure of the university.**
- **Consolidate research units within the university and collaborate with outside institutions.**
- **Emphasize all-around education, including humanities and liberal arts, for future leaders.**
- **Create an efficient, modern multicultural campus to attract top foreign academics.**

Strategies : Specific

- Recruit and give incentive to distinguished teachers and researchers with flexible salary.
- **Provide sufficient aid to outstanding researchers.**
- Establish cutting-edge research centers in key research areas.
- **Mandate a balanced core curriculum including humanities and natural sciences.**
- Increase undergraduate enrollment to meet the growing demands of industries.

The Annual Budget Allocation Of Five-Year Fifty Billion NTD Initiative

- 12 universities are awarded (T12)
 - 10 national and 2 private universities
 - NTU : 3 billion
 - NCKU : 1.7 billion
 - NTHU : 1 billion
 - NCTU : 0.8 billion

Higher Education at NTU

- Comprehensive, all-round Education
- The MOE/NSC Academic Excellence Initiative (Prior to Five-Year Fifty Billion NTD Initiative)
- Goals

National Taiwan University

(Oldest, Largest, Most Comprehensive)

◆ **11 Colleges**

-- Liberal Arts, Science, Social Science, Medicine, Engineering, Bio-resource & Agriculture, Management, Public Health, Electrical Engineering & Computer Science, Law, Life Science.

◆ **54 Departments , 96 Graduate Institutes**

◆ **Total number of students : 31,540**

-- undergraduate : 17,690 (56.1%)

-- master students : 9,584 (30.4%)

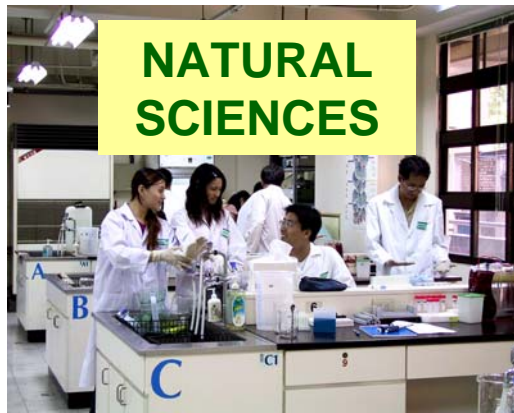
-- Ph.D. students : 4,266 (13.5%)



Comprehensive Education

National Taiwan University

Combine Natural Sciences, Humanities, and Social Sciences to provide an all-round, solid education

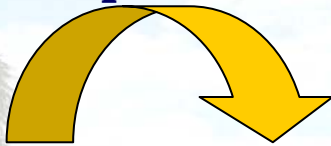


- **Learn professional knowledge and realize personal growth**
- **Promote the study of Chinese and Western classics**
- **Develop a respect for life and a love for mankind**

The MOE/NSC Academic Excellence Initiative

- This is a 4-year, 1.3 billion NT Dollar comprehensive program with 16 research projects covering all major fields of research to mobilize the local academic community.
- The program is cosponsored by The MOE and The NSC of Taiwan.

NTU



- ✓ Acts as the leader of more than 8 projects in the fields of humanities, natural sciences, biology, and engineering
- ✓ Oversees a budget of 45% of the total
- ✓ Aims to become a research university that is “the best in Asia and a recognized leader in the world”

Goals



- ◆ **Secure a place on the list of the world's top 100 universities**
- ◆ **Serve as the chief architect for the building of Taiwan**
- ◆ **Cultivate a deeper respect both for humans and for the environment**
- ◆ **Act as an intellectual gateway to the international community**



The Five-Year Fifty Billion NTD Initiative at National Taiwan University

**A Brief Introduction to
NTU's "Aim for the Top" initiative**



NTU's “Aim for the Top” initiative

- **Overall goals**
- **Strategies**
- **Conclusion**

Overall Goals



- **NTU aims to achieve the following**
 - **Upgrade teaching quality**
 - **Guardian of Positive Human Values**
 - **Cradle of Enlightenment and Leadership**
 - **Improvement of Infrastructure**
 - **The Elevation of 10 to 15 Key Academic Disciplines to World-class Status within 5 years**
 - **Service to the Society**

Upgrade Teaching Quality



- **Quality teaching and learning via**
 - New and revised undergraduate core curriculum with sufficient funding
 - **Creating The Center for Teaching and Development**
 - Providing enough teaching assistants
 - **New modernized classrooms with multi-media facilities**
 - Supporting interdisciplinary programs

New Classroom with Multi-media Facility



Digital Table



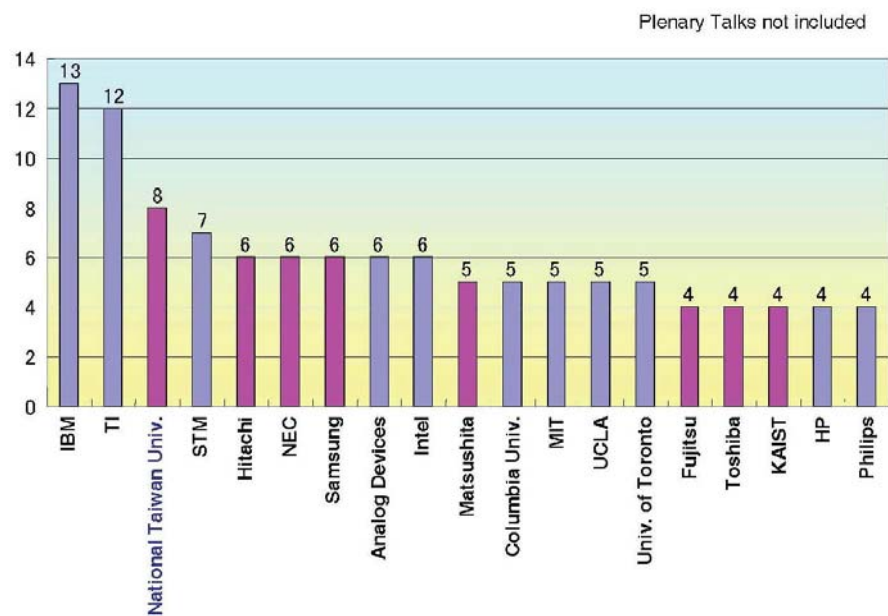
Research



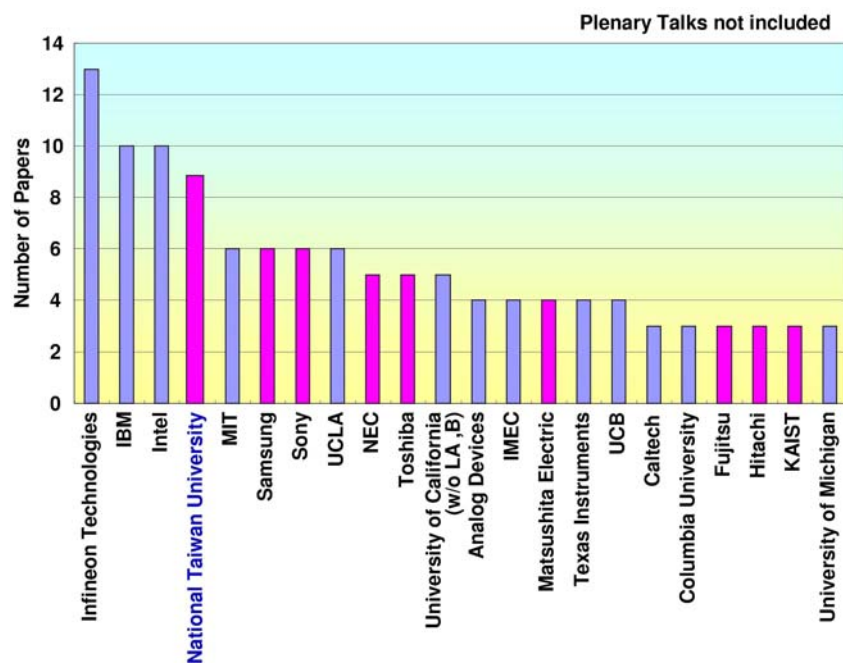
- **Conduct solid research via**
 - **Hiring of nationally and internationally renowned academics by attractive offer**
 - **Identifying key research areas that have the potential to become world-class**
 - **Promoting expert teamwork and interdisciplinary research**

System on Chip (SOC) in NTU

- The number of papers published in world most important International Solid State Circuit Conference (ISSCC) were the first among all research universities in 2005 & 2006



2005 ISSCC



2006 ISSCC

Research



- **Conduct solid research via**
 - **Providing seed money to high risk, innovatory projects no one has ever attempted**
 - **Supporting initial research funding to new faculty members**
 - **Management and consolidation of resources such as postdoc and technician**
 - **Intensifying collaboration with other national research institutions**

A Modern Campus



- **Improve campus infrastructure via**
 - **Upgrading library facilities and resources**
 - **High-speed computing facilities and wireless network**
 - **Building new and modern research facilities, such as animal center, glass house, processing center, brain center, precision machinery factory, etc.**
 - **Extensive renovation of old buildings**
 - **Building a park-like campus**

Internationalization



- **Promote internationalization via**
 - Expanding international academic activities and collaborations
 - Encouraging faculty participation in international academic affairs
 - Improving the existing English curriculum
 - Setting up scholarships for international students
 - Launching International Dual Degree Programs

The Industry Connection



- **Strengthen industry-university collaboration in a way opposite to the tradition**
 - **allocate funding to collaborate with industry to commercialize those technologies which are ready to the market, for example, the Chinese learning software**

Conclusions



- It is a necessity to concentrate limited available resources to a few research universities in order to elevate at least one Taiwanese university to world top 100 status.
- With long time solid funding (beyond 5 years) from government , NTU can be expected to meet this goal within 5 to 10 years.



~Thank You~