A Life-long e-learning system for foreign vocabulary acquisition

Keiichi Kaneko
Tokyo University of Agriculture and Technology

History of TUAT

Naito-Shinjuku Branch Office (Ministry of Home Affairs)

1874
Agriculture Training Institute
Silk Disease Experiment Section

1886
Tokyo School of Agriculture and Forestry

1914
Tokyo Imperial College of Sericulture

1935
Tokyo Imperial College of Agriculture and Forestry

1944
Tokyo College of Agriculture and Forestry
Tokyo Textile College

1949
Tokyo University of Agriculture and Technology founded

2004
Transformed to National University Corporation Tokyo University of Agriculture and Technology
Fundamental Principles of TUAT

“MORE SENSE”
Mission Oriented Research and Education giving Synergy in Endeavors toward a Sustainable Earth

TUAT Vision
(from Second Mid-Term Goals)

TUAT’s vision for the next 10 years is based on the following fundamental concepts:

『A Science and Technology University that Develops People, Clears the Way for Technology, and Contributes to our World』

① Fostering exceptional talent that will take on a leading role in global society
② Promoting and creating high-level knowledge as a research-oriented university of science and technology
③ Contributing comprehensively to public welfare and a lifestyle of wealth and knowledge through solving global problems that threaten humanity and constructing and developing a basis for industrial technology
Organization

Graduate Schools

- G.S. of Agriculture (Master’s C. 9 departments)
- United G.S. of Agr. Sc. (Doctoral C. 5 departments)
- United G.S. of Veterinary Sc. (Doctoral C.)
- G.S. of Engineering (Master’s C. & Doctoral C. 6 departments)
- G.S. of Bio-Applications and Systems Engineering (Master’s C. & Doctoral C. 2 departments)
- G.S. of Technology Management (Master’s C. 1 department)

Under Graduate Schools

- Faculty of Agriculture (5 departments)
- Faculty of Engineering (8 departments)
Number of Staff and Students

**Staff**
- President: 1
- Vice-President (Trustees): 4
- Auditors: 2
- Faculty: 416
- Technical Staff: 58
- Research Administrator: 6
- Administrative Staff: 150

**Students**
- **Undergraduate:** 3,934
  - Agriculture: 1,414
  - Engineering: 2,520
- **Graduate:** 1,879
  - Agriculture (Master): 387
  - Agriculture (Doctor): 211
  - Engineering (Master): 846
  - Engineering (Doctor): 195
  - BASE (Master): 150
  - BASE (Doctor): 90

**Number of International Students:** 362
- Graduate: 241
- Undergraduate: 58
- Others: 63

*As of May 1st 2012*
Global Partner Universities

- China: 19 Univ.
- Thailand: 6 Univ.
- Vietnam: 5 Univ.
- Philippines: 1 Univ.
- Laos: 1 Univ.
- Cambodia: 2 Univ.
- Malaysia: 1 Univ.
- Myanmar: 1 Univ.
- South Korea: 2 Univ.
- Laos: 1 Univ.

Global Partner Universities

- Middle East: 2
- Asia: 47
- Africa: 3
- Europe: 17
- North America: 7
- South America: 2
Supporting International Students

*i-Center* (International Center)

On campus accommodation

Japanese Language and Intercultural Programs

Field Trip
## Ranking of TUAT in Japan

**Top 400 - The Times Higher Education World University Rankings 2011-2012**

<table>
<thead>
<tr>
<th>Domestic Ranking</th>
<th>World Ranking</th>
<th>University</th>
<th>Overall Score</th>
<th>Teaching</th>
<th>Int’l Outlook</th>
<th>Industry Income</th>
<th>Research</th>
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</thead>
<tbody>
<tr>
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<td>Univ. of Tokyo</td>
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</table>
Patent Income of TUAT

Patent Income No. 1, Surprising Univ. Name and the Secret.

The correct answer is TUAT.

Liberal and innovative school spirit
Dept. Comp. & Inf. Sci.

Intelligent Inf. Support
Image Processing, Pattern Recognition, HI, Robotics

Support for Human Life

Mathematical Modeling & Simulation
Prediction, Inference, Knowledge Extraction, AI, Machine Learning

Implementation of a Real World in a Computer

New Generation IT System
Large-scale & High-speed Computation, Parallel Computation, Fast Network, Dependable System

IT Infrastructure to Support Convenient Life
Global Partners of Dept. CIS

*:* Sister Univ.

• UK
  - Univ. Brighton*, Univ. Birmingham

• Finland
  - Univ. Oulu

• Poland

• Thailand
  - KMUTT*, MU*, CU*

• Vietnam
  - HUST*, HCMUT*, HCMUS*

• China
  - Dalian Univ. Tech.*
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Content

1. Background
2. Vocabulary Learning System
3. Evaluation
4. Function Enhancement
5. Effective Materials
6. Concluding remarks
Why foreign language?

• With progress of globalization, acquisition of foreign languages is getting more important.

• After school education, continuous learning activities are necessary to maintain ability of foreign language communication.

• It is a pleasure of life to talk with overseas friends after retirement.

• Foreign language acquisition is an important target of life-long learning.
Why vocabulary?

• Vocabulary is the foundation of our ability to share our thoughts with others.

• A good vocabulary makes communication easier and more efficient.

• Lexical knowledge is more important than grammatical correctness in communication.

• Lexical errors could be a more serious obstacle in L2 than is commonly believed. (Laufer 1986)
Vocabulary acquisition in foreign language learning has been “neglected”.

Teachers are not “neglecting”, but there is not enough time in the classrooms to “teach” vocabulary.

It is necessary to find ways to promote “autonomous” vocabulary learning outside the classrooms. Life-long learning