Provost Roles in 2050

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Provost and Executive Vice President

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Questions

Session 6 The role of present and future provosts as facilitators and transformers

1) What will the provost's portfolio look like in 2050?

2) How can APRU provosts better support academic and strategic planning and development?

3) How can the provost's office better support institution missions e.g. transdisciplinary research, interdisciplinary, diversity, tenure and promotion, staff mobility?
1.1. University’s Roles in the Future?

- Defense & Industrial Technologies, Businesses
- Massive Demand of Skilled Labor
- Education for Selected Persons
- Research Universities
  - Education to Employment
  - Department System
- Mass Education

Middle Ages | Industrial Revolution | Second World War | 4th Industrial Revolution
1.2. Changes in Higher Education

Technology Revolution
- AI & Quantum Computing,
- High-Speed Network,
- Automation (Professional Jobs),
- Smart Learning

Job Market/Industry Changes
- Less Labor/Employment/Work,
- Professional Jobs Decrease,
- Mass Customized Services

Social Changes
- Aging & Prolonged Lifespan
- Globally Networked
- Social Inequality & Gap

University Changes
- Potential Students
- Governance
- Teaching & Learning Method
- Roles of Professors
1.3. New Ecology of Higher Education

Universities are NOT sole providers of lectures, credits, and degrees!

Publishers

MOOC
- Coursera, edX, Udacity, …

Universities

Learning Contents (e-Learning/Lecturing)

Credits, Degrees

e-Learning/Lecturing Nano-Degrees

Industry, Lifelong Learners

Students

Education to Employment
1.4. Challenges in Higher Education

Transdisciplinary / Convergence Issues

Dynamically Changing Skills & Knowledge

Demand on New Talents
Creative Problem Definition & Solving, Teamwork, Comm., Leadership

New Revenue Model
Tuition
Contents & Services Provider
2. Conventional University Biz Model

Accreditation
Credit/Grades/Degrees

Mass Education
Delivery of Well-Defined & Standardized Information & Knowledge

Academic/Industrial Research

Platform (Physical/Human) for Education & Research

Barriers
2. Educational Transformation

- Transdisciplinary Education
- Smart & Creative Education
- Educational Contents & Service Provider
2-1. Transdisciplinary Education

Flexible, Dynamic Combination of Course Modules by Breaking Department Barriers

**Personalized Modular Curriculum**

<table>
<thead>
<tr>
<th>Advanced Transdisciplinary Courses</th>
<th>Basic Transdisciplinary</th>
<th>Basic Mandatory</th>
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<tbody>
<tr>
<td>Third/fourth year</td>
<td>First/second year</td>
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<tr>
<th>Internship</th>
<th>Graduation research</th>
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<tr>
<th>Type</th>
<th>Course</th>
<th>Student guidance</th>
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<tbody>
<tr>
<td>Research</td>
<td>Seminar, Basic lab, Team URP, Internship or Graduation research</td>
<td>Focus on areas of interest (Mentor)</td>
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<tr>
<td>Advanced Transdisciplinary</td>
<td>Health Care, Energy, Urban environment, Precision engineering, etc.</td>
<td>Course design (Mentor)</td>
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<tr>
<td>Basic Transdisciplinary</td>
<td>Modern physics, organic-biochemistry, Economics, Molecular biology, Applied mathematical modeling, Dynamics, Transdisciplinary programming, Signals and systems, Materials science, etc.</td>
<td>Course design guidance, themed seminar (Academic Advisor, Mentor)</td>
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<tr>
<td>Basic/General</td>
<td>Mandatory general, Humanities and social sciences, Basic mandatory, Basic elective</td>
<td>Freshmen program</td>
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2-2. Smart & Creative Education

Creative Teaching & Learning
No Conventional Lecturing!

- Interactive Smart Learning
- On-line in Advance

Flipped Learning

Smart MOOC
(Smart/Interactive Massive Open Online Course)

Virtual University
(Real-Time Online Interactive Classes)

Smart Learning Infrastructure
(Teamwork-based Classrooms, Smart Teamwork Rooms, Networked Classrooms, Smart Studios, Smart LMS)
2-3. Learning Contents & Service Provider

MOOCs

Students

Publishers

Industry, Lifelong Learners

Learning Contents
(Lecture Videos, Exercises, Labs, ...),
Assessment & Accreditation
(Credits, Degrees)

Collaborate, Compete, Trade

Credits, Degrees, Learning Contents, Learning Experiences

Commoditized

Learning Contents

University

Educational Contents & Services Provider
3-1. Roles of Provost on Education in 2050

Chief Operation Officer (COO) for Educational Business

- Learning Contents Production
- Learning Experience Provision
- Learning Business Develop. & Marketing
3-2. Roles of Provost on Education in 2050

Chief Educational Innovator

Teaching & Learning Methods

Education Systems

Innovative Curriculum
Innovation in Education
Future of Physical University vs Virtual University, New Educational Pedagogy, Reskilling and Upskilling of Work Force, Continuing Education, Failure Preparation

Innovation in Research
Cross/Multi-Disciplinary Research

Innovation in Technology Commercialization
How to accelerate technology transfer, Social Entrepreneurship, Tech-Based Startups, How universities can help industry to retrain their employees?

Triplehelix of Innovation: University, Industry and Government
Role of University, Industry and Government for the Era of 4th Industrial Revolution