The Integration of Information and Communication Technology (ICT) into Development of Future Teacher Education Program in Teachers Education Institutions (TEI) in Indonesia.
• SELF-EVALUATION of UPI which have developed ICT
• Mapping of Teaching Staff and Pre-service Teacher ICT Competences
• ICT 4 EDUCATION in UPI
SELF EVALUATION

Policy

Human Resources

Organization

Infrastructure

ICT Programs in UPI

Next Generation Teacher’s Project
• ICT culture transformation through Management Change,
• ICT infrastructure development which supports management implementation, teaching-learning process, research, and community services,
• optimal and integrated UPI management process definition,
• intensive communication during the implementation to minimize discrepancies between needs and system function.
**ISSUES**

EXISTING PROGRAMS

**TEACHERS PROFILE**
- 1313 lecturer
- Majority Master Degree
- Lecturer student ratio 1:20
- 62 professor and 333 below lecturer
- about 70% basic ICT concept & skill

**STUDENTS PROFILE**
- 25,762 students increase to 30,000 this year
- 5,447 Diploma 2, 6 Diploma 3, 12,415 S1, 1,197 Masters, 564 Doctorates.
- Since 2003 use ICT as a part of learning process

**EMPLOYEE’S PROFILE**
- 715 employee’s
- Spread in 6 Faculty, 1 post graduate program and other supporting unit
- Majority Senior High school Education level
- Not more than 10% have basic ICT concept & skill
Academic Staff by Level of Education

- Basic: 518
- Master: 645
- Doctoral: 150

ICT Literacy
- Basic concept & skill: 70%
- Information Processing: 27%
- Problem Solving: 3%
Students Profile

Issues: Existing Programs

Number of Students by Education Program
- Education Program: 19,629
- Non Education Programs: 3,159

Number of Students by Strata:
- D2: 6%
- D3: 3%
- S1: 28%
- S2: 0%
- S3: 63%

Number Student Use of ICT by Enrolled Year:
- 2001: 49
- 2002: 44
- 2003: 98
- 2004: 1879
- 2005: 2770
- 2006: 3567
- 2007: 4895

Next Generation Teacher's Project
ORGANIZATION

DIV. OF ICT SERVICE
- Student Computing
- Internet
- ID and Multimedia
- E-learning
- ICT Based Telecom

DIV. OF ICT ENGINEERING
- Information
- Software
- Infrastructure
- Training

DIV. OF INFORMATION SYSTEM
- Academic
- Finance
- Asset and Facilities
- Human Resources

ICT Directorate

Computer Center Unit
Information System Bureau
UPInet
Student Computing Unit
Instructional Media Development and Service

Issues
Existing
Programs

Next Generation Teacher’s Project
• Technology
  • **Fiber Optic Cable** Backbone – **RG8** LAN Cable –
  • **VDSL Intranet Cable** Backup – **wireless** link backup **2.4 GHz 802.11 b/g** – Outdoor - indoor **wifi** – **VPN IP MPLS**
  intercity WAN for regional campuses.

• Network
  • **LAN** in all buildings (10-100-1000 Mbps)
  • **WAN** connecting 1 central campus with 6 separate local campuses in 6 cities in Jawa Barat Province (3 Mbps –
  1.5 Mbps backhaul and 256 Kbps in each regional campuses)
  • **Intranet** Central and Regional Campus
  • **Internet** international and IIX connection (8 Mbps symmetric).

• Server
  • DNS Server, Proxy Server, Router, Web Server, Mail Server, Database server, Information Managements Application
  Server, Multimedia Learning Resources Server, Communication Server, Multi Platform Conferencing Unit,

• Work Station – Computer
  • 400 Unit in UPI net, 50 Unit in Computer Science Department, each 25 Unit in 6 Regional Campuses, 25 Unit in
  Educational Science Faculty, and about 5 Unit in 169 institution (department, bureau, etc) in UPI.

• Software – Computer Application
  • Microsoft Campus Agreement containing (Microsoft Windows Server, Windows XP Windows Vista Business,
  Microsoft SQL, Microsoft Office, Microsoft Student, etc.
  • Programming software like Delphi, Microsoft Visual Studio, etc.
  • Web development and Graphic design like PHP, Corel Draw Family, Macromedia, Adobe, etc
  • Our own software (develop by software engineer in UPI)

• Other ICT Facilities
  • Multimedia room in every faculty facilitated with video conference devices from Polycom
  (Polycom VSX 8000, V 500 client, DLP Projector, and wifi)
  • ETS online TOEFL testing facilities in language center.
  • Training Facilities with 70 unit of computers
  • Mini Multimedia Production Studio with digital recording and editing devices.
ICT Programs in UPI

- **ICT Infrastructure**

- **UPI Integrated Information Management System**
  - Academic – Finance – Asset and Facilities – HR

- **Student Computing Support System**
  - Access Control System – Computing Services – Security system – Communication Services

- **ICT Training**
  - Distance Education Program – Regular Programs – In House Training Programs – Public Training Services
  - Microsoft Training – Cisco Training (on process)

- **Web Application Development**

- **Research and Development**
  - Virtual Laboratory – e-learning System – Online Testing Administration – Video Teleconference – IP based telecommunication system

- **Partnership Program**
  - Microsoft – PT. Telkom Indonesia Tbk (Indonesia National Telecommunication Provider) – Acer Indonesia – HP-Compact Indonesia – CISCO – UNESCO – etc.