





# ICT-enhanced Innovative Pedagogy in TVET

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Current Priorities in Technical and Vocational Education and Training

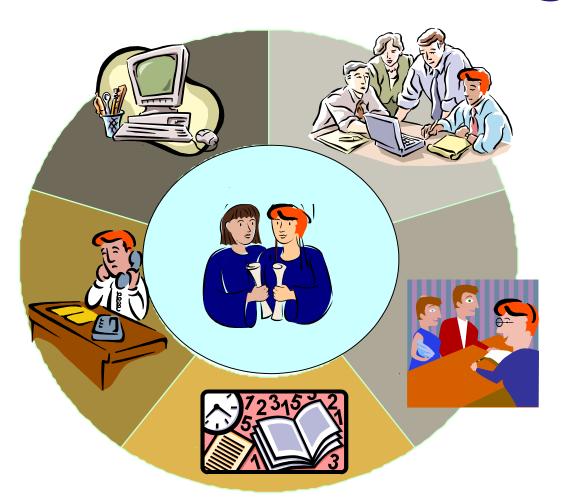


# Trends in Technology-enhanced Learning

Hybrid Personal Learning Environment (HPLE)



# **Blended-learning Methods**



**Classroom teaching** 

**On-the-job learning** 

**Guided self-studies** 

Teamwork

Distance learning by E-Learning

On Job Practical training

Blended-Learning packages Practice

Practical training nd learning

- reaffing Path

Professional Learning Path

Professional Learning Path



Competencebased Qualification

Teacher orchestrating the Learning process



Century Blended Learning Model

# Vast differences across Asia

- All countries already are teaching very basic ICT skills (operating, word processing, spreadsheets, etc. in information technology)
- Some countries have advanced in the implementation of ICT and ICT pedagogy in TVET to include all (e.g., Korea) while some others can assure these trainings only to a few (e.g., Bangladesh)
- A strong tradition of informal apprenticeships in some countries (e.g., Nepal, Sri Lanka) reduces opportunities
- Potential of regional learning centres for best practices is being explored in some countries (e.g., India)



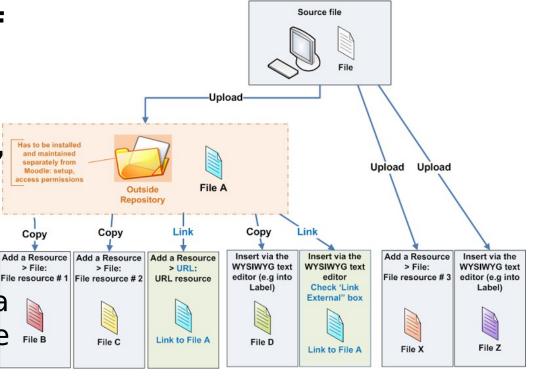
## Three generations of ICT pedagogy in TVET

1. Generation:
Repository use of
e-materials,
courses and
blended learning,
online courses

 In all countries at some level

 South Korea, Australia and Singapore are the leaders, with established systems

Others lie in between



## Three generations of ICT pedagogy in TVET

# 2. Generation: Interactive e-learning environments, blended learning

Korea and Australia
 (eLearning strategy,
 blended learning tools) well established systems, pilots
 in several countries



- Regional learning centers in The National Institute of Open Schooling
  - The vocational education program offers 80 courses of various lengths in agriculture, engineering and technology, health, home science and hospitality, computers and information technology, business and commerce, and teacher training. More than 20,000 learners are admitted annually, and almost 80,000 learners have been certified in vocational courses since 2000.



#### Online Vocational Admission - 2015-16

<u>e Vocational Admission for IT</u> Essentials: PC Hardware oftware In Collaboration With CISCO	
	Admission Dates : From 01 Aug'2015 - 31st Dec, 2015.
e Vocational Admission for all learners:	This stream for online Vocational Admission is Open for all the Learners from as per the laid down
ow the Status by providing the Reference Number click	eligibility criteria for Vocational Courses mentioned in the prospectus.  Admission Dates: From 01 Aug'2015 - 31st Dec, 2015.
	List of the AVI (Study Centre) (Vocational Education) - Course & State Wise

#### d Links

Prospectus for Northern Region Allahabad, Bhopal, Chandigarh, Dehradun, Delhi, Dharamshala, Jaipur, Raipur 2015-16 (English) (11.9 MB)
Prospectus for Southern, Western & Eastern Region Bengaluru, Bhubaneshwar, Chennai, Gandhinagar, Guwahati, Hyderabad, Visakapatnam, Kochi, Kolkata, Pa
Pune, Ranchi 2015-16 (English) (12.1 MB)

Name for Mospital Courses (2015-16) (English) (124 KB)

Admission Form for Vocational Courses (2015-16)(English)(134 KB)

\_ocate (AVI) (Study centre)

ist of Regional Centre

nere is no Agencies/Cyber cafe/ any other institutions recognised or authorised by NIOS for doing Online Admission. You can take Admission yourself on the Internet without involving any middle man and paying any extra amount to such middle man. You may take up help of your friends or family members in filling the Online application Form

#### https://www.youtube.com/watch?v=alKxPFygbss

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## Three generations of ICT pedagogy in TVET

# 3. Generation: Personal Learning Environment (PLE) based student centered learning for life long learning

- Here we are in early days good examples and pilots
- Australian mobile pilots ePortfolio, personalized workplace-based pilots
- Korean Virtual Reality learning environment for car technicians
- Singapore ITE training
- TESDA Training in Philippines







Cambodia

The 500\$ **Training** Center

Without **Computer** nor Internet

#### http://tvetacademy.org/en/







#### Description

#### What do chefs and cooks do?

It all depends. Prep cooks, who are at the bottom of the kitchen totem pole, spend their time getting food items ready for the other chefs. They chop vegetables, prepare meats for cooking and weigh and measure ingredients. Line cooks are responsible primarily for cooking the food along with the sous chefs, who are the head chef's second in command. A head chef is the kitchen boss. He or she not only has to be able to cook food and lead a team of kitchen workers but also has figure out how much food will be needed for the week and order food and supplies At some restaurants, head chefs create the restaurant's menu and adjust it depending on the seasonality or availability of food - so being able to cook am



Success stories

Joyful Nghala, like all intelligent and aspirant young girls, matriculated from high school with dreams of a golden future. The realities of rampant unemployment soon hit home however, and she was forced to find work that didn't promise much prospect. Despite everything, Joyful never lost the wonderful spirit for the local post office gave Joyful the lucky break she ha been longing for : In 2013, Joyful Nghala, was trained chef at the Singita School of Cooking. She successfully completed a challenging 18-month stint in the school's 01:32



Syllabus

#### Cooking Basics

Kitchen Rules For Hygien & Food Safety

**Cooking History** 

Kitchen Organization

#### Kitchen Cutlery & Equipments

Furnitures & Equipement Cutlery and Knife Skills

Clean & Tidy Measurement in Kitchen

https://www.youtube.com/watch?v=Prq

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## The future is here! **SIMULATIONS**



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Improve your RevPAR, Guest Satisfaction and Loyalty

https://www.youtube.com/watch?v=Z4iYNWqUHHc

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# The future is here!

**VIRTUAL TRAINING** 



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# The future is here!

#### **FLIPPED CLASSROOM**



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# The future is here! PLE TO SUPPORT LIFE LONG LEARNING



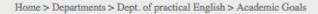
New Leader in the Global Age,

Korea National Open University Graduate School

#### **Departments**

- Dept. of Creative Writing & Literary Contents
- Dept. of Practical English
- Dept. of Practical Chinese
- Dept. of Africa and Francophonie
- Dept. of Japanese Language and Culture
- Dept. of Law
- Dept. of Public Administration
- Dept. of Media Arts and Cultural Contents
- Dept. of Agriculture and Life Science
- Dept. of Home Economics
- Dept. of Computer Science

#### Department Introduction







The central purpose of the Department is to train experts in practical English who can use English in various fields, through cultivating competence in practical English.

For this goal, the Department helps students develop competence in advanced practical English through various practical English courses, and gain acquaintance with teaching-learning methods that can efficiently transmit such capabilities to learners, and with a thorough knowledge of English language and literature that is a background for competence in practical English.

Through these systematic courses, it ultimately aims to foster professionals in practical English, equipped with qualified abilities to actively participate in various social activities.

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# **Change in Teacher's Role**

- Design the contexts
- Updating, adapting
- Use of OER, MOOC



Figure 1. VR-based training system

- Virtual Reality, Augmented Reality
- Organizing school community
- Intensive work with ICT
- Connections
- Communication skills and competences



# Challenges for today's teachers

Today's teachers need to invest in own professional development to keep ahead of the curve. They need to know about:

- On line learning
- Social media in learning
- Collaborative writing
- iPads as learning devices
- Apps for learning
- 3D printing
- Story telling
- E-Mentoring / Peer learning
- Encouraging mobile learning



# Immediate actions needed

- Promotion of New Pedagogies, Environments and Digital Materials to Teacher training and Vocational Colleges,
- Building the Public Private strategical partnership between governments, industry and training centers -> work-based orientation
- Building a national unified quality assurance framework
- Promotion of a New Pedagogical Strategy: Blendedlearning approach in ICT and TVET
- Investment to the TVET training and ICT infrastructure, access to everyone to learning environment and to learning resources



# "Wise teachers create an environment that encourages students to teach themselves". Leonard Roy Frank

# Thank You

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