India’s National Mission on Education through ICT

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Panel 3: Practice Driven Research, Teacher Professional Development and Policy of ICT in Education
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*Come visit us
Education in India

• Problem – Large numbers
  – students, teacher training required, geographical spread

• Opportunities – Large numbers
  – content development, infrastructure development, teacher development programs, research

• There are many individual and institutional projects.

• Here we present a few examples from the largest unified national level effort – NMEICT.
National Mission on Education Through ICT (NMEICT)

- Policy: Government of India is committed to supporting education through effective use of ICT.
- 100+ projects, 20+ institutions, Rs 6000 crore (~1 billion USD)
- All content under Open Education Resources
- Technology developed under FOSS
- www.sakshat.ac.in
NMEICT Projects

Content generation for higher education

http://nptel.iitm.ac.in/

300 video & web courses (1000 more proposed), 40 hours each

http://oscar.iitb.ac.in

300 animations, simulations

Instructional Design workshops

http://www.vlab.co.in

Virtual Labs
NMEICT Projects
Computer tools literacy

www.spoken-tutorial.org
300+ tutorials
20 Indian Languages

www.fossee.in
500 workshops in Scilab, Python
NMEICT Projects
Teach 10000 Teachers

- 2-4 week long workshops
- Blended mode
- 15 workshops - each 1000 - 10000 teachers
- http://www.it.iitb.ac.in/nmeict/
NMEICT Projects
Technology Development

• Akash : the $35 tablet!

• A-View : Interactive e-learning software
  http://aview.amrita.ac.in/

All specifications in Open Standards
Practice Driven Research

Educational Technology Research (PhD) in design, implementation and evaluation of NMEICT Projects

Sample PhD thesis titles:
• Design considerations for e-learning animation
• Development of guidelines to design and evaluate Virtual Labs
• Development and assessment of engineering design competencies
• Automation in constructing customized textbooks from lecture transcripts
• Interactive Visualizations in Engineering Education
• A collaborative approach for programming efficacy using Spoken Tutorials
• A framework for scaffolding to teach programming to Hindi-medium learners
• Customized evaluation framework for learning objects
Take-away

India has lot of:

• Govt support for this mission.
• Investment in teacher training
• Current work in development
• Ongoing research

Going ahead:

• Large scale implementation
• Evaluation from multiple perspectives
Come Visit Us

Openings:
Faculty - Short & long-term visits
Students – PhD / Post-doc in ET

Contact us:
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