Changing Landscape of Learning in Higher Education – MOOC's and Beyond

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Assumptions

- Higher Education should be Higher in terms of Learning
- It should promote self-learning
- Self – learners have purpose and a passion for learning
- Technology has really transformed the landscape of learning
- It has all potential to create self-learning environment.
- Self-learning in digital era is the way of learning in 21st century

Higher Education – *A Big Giant*

- A University is a place where new ideas germinate, strike roots and grow tall and sturdy.

- By giving people access to knowledge and the tools for increasing and diversifying their knowledge, higher education expands people's productivity, as well as national capacity and competitiveness.

Human Development Model
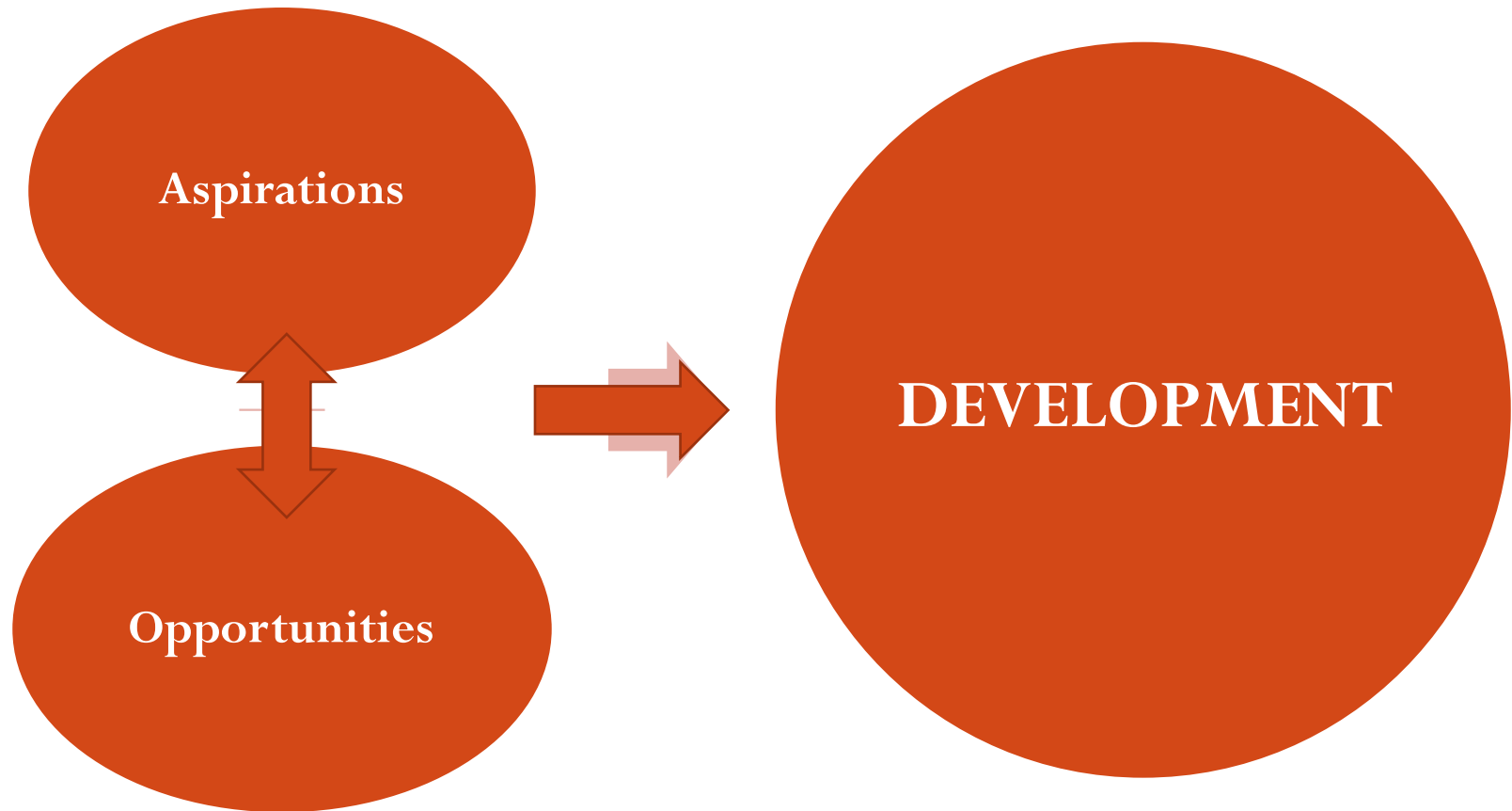
Higher Education and Research Institutions and a Critical Mass of Skilled and Educated People are Essential to ensure Genuine Sustainable Development

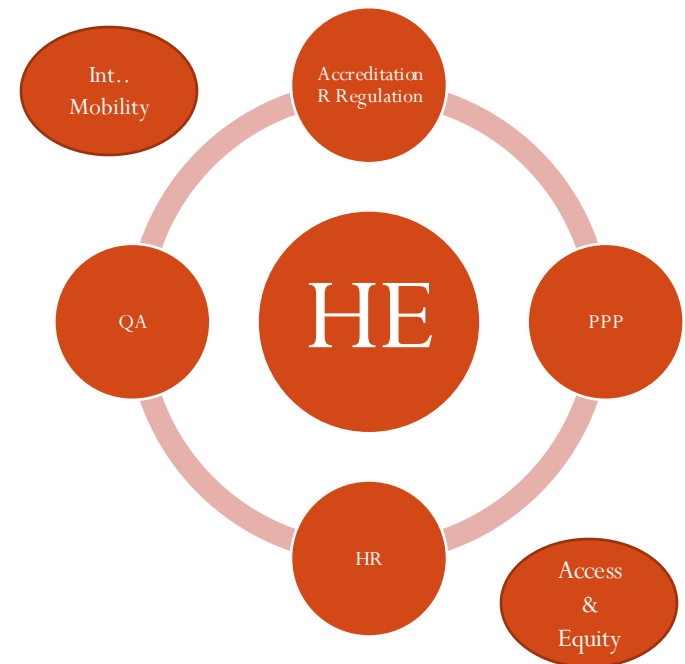# HIGHER EDUCATION LANDSCAPE

TEACHING

- **INNOVATION**

RESEARCH

- **TRANSFORMATION**

EXTENSION

- **ENGAGEMENT**

SIX CONCERNS

- Access and Equity

- Quality Assurance

- Accreditation and Regulation

- Public Private Partnership

- Human Resources and Staffing

- International Mobility and Studying Abroad

Current Scenario of Indian Higher Education

- The current higher education system in India is massive with over 30.5 million students enrolled across more than 45,000 institutions with a Gross enrolment ratio (2013–14) 22.5% of which enrolment in regular brick and mortar institutions is 84% and Distance education is 16%.

- The institutional capacity for higher education includes Colleges (33,023), Diploma-granting institutions (12,748), Institutions of National Importance (73+) and Universities (737).

- Government of India passed Private Universities Act (Establishment and Maintenance of a Private University Regulations- 2010) of promoting public private partnership for development.
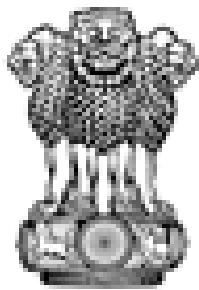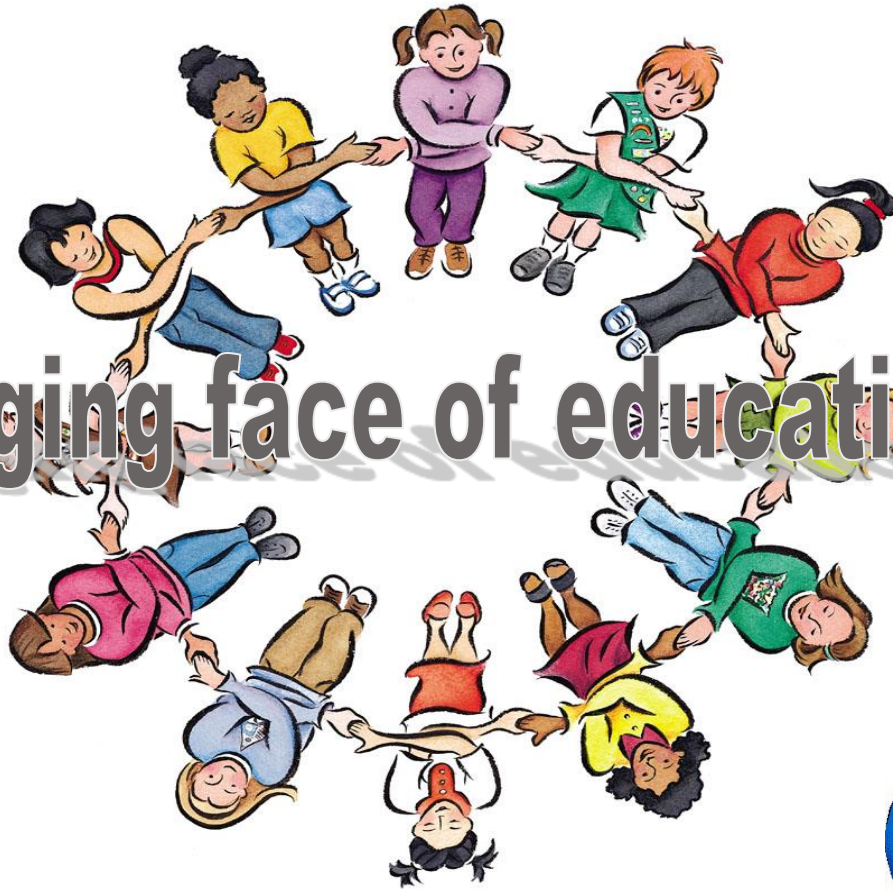
Department of Electronics and Information Technology, Government of India

A programme to transform India into a digitally empowered society and knowledge economy

changing face of education........

Classroom is changing

IT ENABLED CLASSROOMS

Blackboard to Keyboard
- Learning Redefined -

- Open Schooling
- Open and Distance Learning
- Online Course & Resources
- E-Learning
  - Mobile Learning

- Initiatives…
  - NPTEL *(National Program on Technology Enabled Learning)*, NMEICT *(National Mission in Education through ICT)*,
    SWAYAM (*Study Webs of Active Learning for Young Aspiring Minds*) etc …
  - TEQIP *(Technical Education Quality Improvement Program)…* internationalization of Higher Education
  - International Collaboration & Exchange

MOOCs & beyond

- Global Universities and some Indian Universities and Institution of Higher Learning creating provision for ODL, online courseware etc. The focus ….
  - Formal Sector (diplomas and degrees, traditional higher & Voc. Edu)
  - Non-formal Sector (continuing professional and vocational education, formal certifications)
  - Informal Sector (lifelong and adult learning)

- Knowledge of Distributed Intelligence and Technology Enabled Learning facilitating uniform delivery of learning experiences to a vast geography.

- Demand pull in education and educating one-self, empowering self-learning

Agenda for Higher Education

Academic Alliance

Cultural Integrity

Global Citizenship

Research Network

Research Experiences

e-Learning Program for Professional Development of School Principals

Tourist Guide Map - North East, India

Rationale :

Difficult & hilly terrain

Ethnic diversity, rich culture & tradition

Population 50 million

Approx 35 Univ. & Inst of Nat Importance

English speaking population relatively high

Unemployment resulting in migration

NE shares the highest International Boundary

Geographically positioned to take forward

India's Act East Policy

The need to empower and enable

Channelize the latent talent

Role of School Head

Their professional development need

The present mode of training

Use of e-learning

Objectives

- To identify the professional competencies required for the Secondary School Principals in Assam

- To develop an e-learning program for enhancing the Professional Competencies of the Secondary School Principals of Assam.

- To study the effectiveness of e-learning program in terms of its Relevance, Adaptability and Enrichment among the School Principals.

Research Methodology

- The study was conducted in six phases:

  - **Phase 1** – Identification of Training Needs of the School Principals
  - **Phase II** – Content Development
  - **Phase III** – Validation
  - **Phase IV** – Development of e-Learning Program & Try-out
  - **Phase V** - Implementation of e-Learning Program
  - **Phase VI** – Study Effectiveness of the e-Learning Program

Sampling Technique

Multi-Stage Sampling was used for this study.

Phase	Objective	Sample Size	Sampling Technique *'Criteria'*
I	**Identification of Training Need**	100	**Purposive** *Consistently poor performing*
IV	**Try out**	10	**Convenience** *Proximity* *Availability of technology* *Working knowledge on computers*
V & VI	**Implementation of e-Learning & Study its Effectiveness**	35	**Purposive** *Working knowledge on Computers* *Internet Connectivity* *Districts in close proximity*

Research Tools

PHASE-1

- **Identification of Training Needs of School Principals**
  - **PPDNAQ** - Principals Professional Development Needs Assessment Questionnaire
  - **Unstructured Interview**

PHASE-2 - 5

- **Development of Content for e-learning Program**
  - **Unstructured Interview**
  - **Discussions**

PHASE - 6

- **Effectiveness of the e-learning Program**
  - **Feedback Form**
  - **Unstructured Interview**

Phase – 1

Identification of Training Needs

- Discussions with RMSA, Directorate of Secondary Education, SCERT officials and with retired School Principals

- Participated in 7day workshop conducted by DBI and RMSA for Principals Training.

- Discussions with working Principals and review of related literature gave the framework for developing the questionnaire.

- Developing the Questionnaire and conducting pilot survey.

- Making necessary modifications by incorporating new items and removing repetitive one's .

- Administration of the Principal's Professional Development Need Assessment Questionnaire (PPDNAQ).

- Identification of Training Needs.

PPDNAQ

The Principal's Professional Development Need Assessment Questionnaire (PPDNAQ) initially included a total of 179 items, which was brought down to 149 after pilot study. These items belonged to different areas of school management and leadership:

- **General Management**
- **Curriculum Management**
- **Personnel Management & Community Partnership**
- **Financial and Material Management**
- **Management of Information.**

The above categories were further divided into various dimensions that best describes the Task Responsibility Areas of School Principal.

Against each item was given a 5 point rating scale, to which the responses were sought.

Phase-2 Content Development

Curriculum is the foundation of the teaching-learning process, and the researcher referred to various models of curriculum development namely the Tyler Model, Taba Model etc and formed a base for the content development of the e-Learning Program.

Further, the researcher followed the principles of Adult Learning considering the target of the e-Learning Program.

- Principals are internally motivated and self-directed
- Principals bring life experiences and knowledge to learning
- Principals are goal oriented
- Principals are relevancy oriented
- Principals are practical
- Principals as learners like to be respected

Principles of e-learning were followed during the development of content .

Phase-3 Validation of Content

The content thus prepared for development of self learning modules were distributed to a group of Retired Principals, Academic officers of SEBA, SCERT and consultants of RMSA, Assam.

The researcher engaged with the experts in discussions and conducted unstructured interviews, based upon which specific inputs in context of the content with RMSA, Assam.

Their valuable comments were drawn into making the overall content of the e-Learning program relevant and meaningful.

Phase-4 Development of e-Learning

It was decided by the researcher to go for development of the software for LMS leading to the development of the e-Learning program; with the help of software developer, instead of going for readily available e-Learning platforms like MOODLE, Articulate, Adobe etc, primarily due to the following reasons:

- The readily available LMS needed a lot of customization in order to match the design requirement of the researcher, and incorporate due flexibility of modifying the same.

- The implementation of the e-Learning program being planned in an offline mode, required the overall program to be included in one CD-ROM, which, in context of available platforms were not possible, as the same needed to be installed in systems.

- Convenience of the researcher to engage with a software developer and get the LMS developed and added with capabilities as per perceived needs.

The Development Process followed ADDIE

ADDIE Model (*source: http://www.csuchico.edu/idts/addie.php***)**
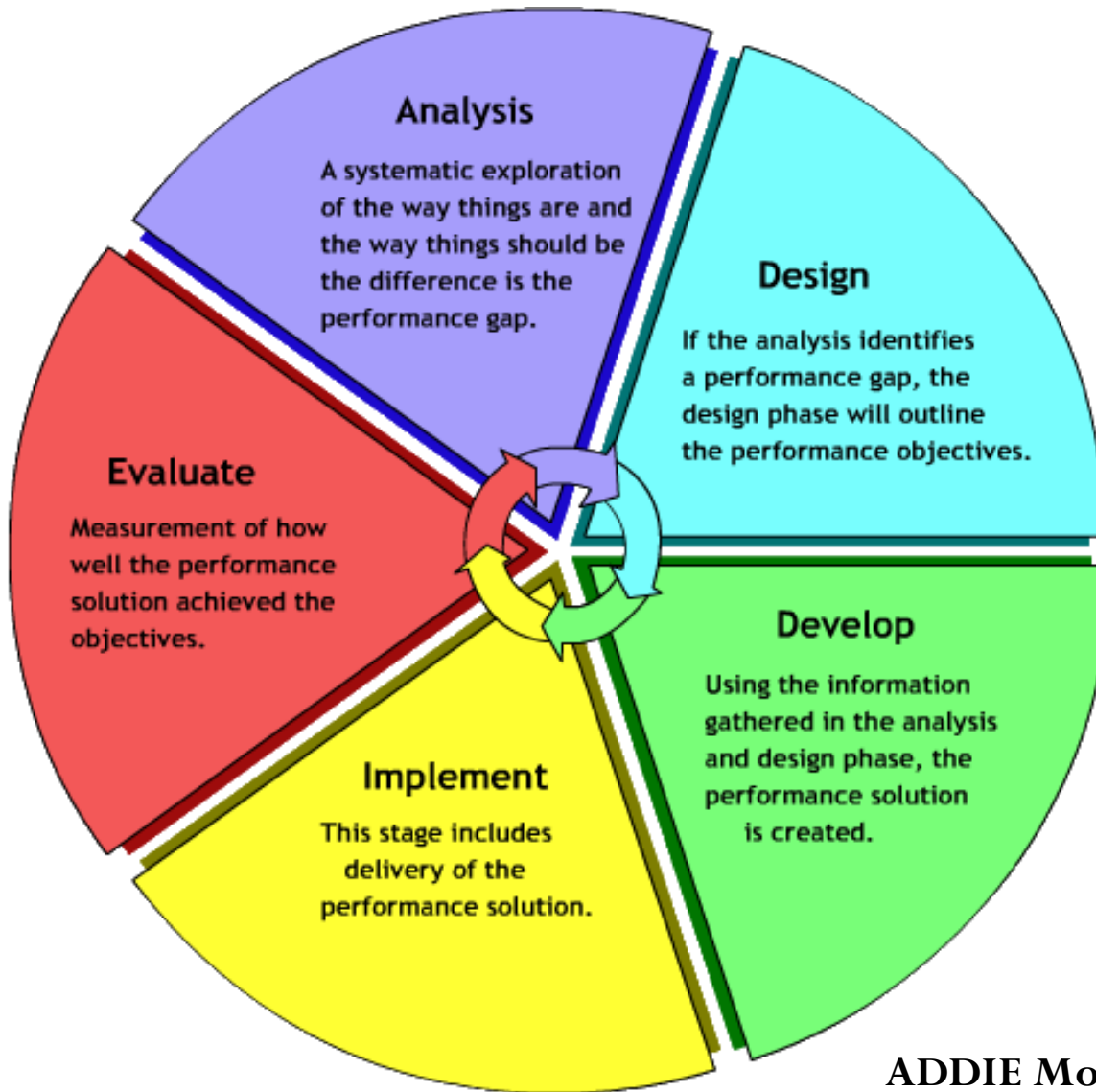
Steps involved during development

- Detailing the developer in terms of
  - The layout of the page, expected design in terms of navigation
  - Explaining the links to be established
- Provided additional information as solicited by the developer in terms of:
  - Content for different pages and reference links
  - Explaining the positioning of contents in each unit/ module.
- Continuous testing and developing
  - Each development exercise by the developer was subjected to testing (trial-run) by the researcher
  - Such testing followed by remarks from the researcher about necessary changes, if any.

Phase – 5 Implementation of e-Learning Program

Implementation of the e-Learning program involved:

- Orientation of Participating Principals in terms of:
  - the objectives of the e-Learning program
  - demonstrating the use and explaining the navigation & features
  - importance of activities and discussions
  - encouraging the participants to share their experiences
  - explaining about the availability of the researcher, if need be
- Noting down observations made during each orientation
- Clearing doubts and addressing the queries
- Sharing of information on other participants in close vicinity to facilitate peer group discussions
- Explaining the benefits of social networking
- Assessment on progress made

Phase – 6   Study Effectiveness of the e-Learning Program

Feedback forms were used to seek the opinions of the participating principals about their experience in using the e-Learning program.

The feedback form sought to explore into certain indicators of e-Learning- Learner's education background, Computing skills, Type of Learner, their learning style, obstacles they faced during e-Learning, e-content in terms of relevance, user-friendliness, time and pace of learning, fulfillment of purpose etc, Instructional design, collaboration, motivation, attitude and interest, performance (self efficacy) and overall learning experiences.

In order to evaluate the effectiveness of the e-Learning program, the researcher anchored the responses to – user-friendliness, clarity, relevance, self-motivating, self-paced learning, impact on professional enrichment and challenges faced.

Major Findings

Effectiveness of the e-Learning Program

Prior to the launch of this e-learning program during experimentation, the school heads acquired professional training by way of attending 7-day workshop

- Respondents found the e-Learning program to be highly effective in terms of their Professional enrichment

- Respondents rated the e-Learning highly in terms of:
  - User friendliness
  - Relevance of contents
  - Self-paced nature
  - Learning experiences
  - Self-motivating nature
  - Impact on professional learning and learning outcome in terms of
    - Knowledge Transfer
    - Intellectual skills
    - Practical skills and
    - Transferable skills

Major Findings …..*continued*

Effectiveness of the e-Learning Program

- An indirect outcome being the professional enrichment of the learners in terms of learning skills on using technology for professional development.

- **Challenges** in terms of Obstacles and Barriers:
  - Basic computer skill is a necessity for e-Learning and it was observed that the Principals gradually learnt the same.
  - Internet connectivity and power emerged as a major barrier.

- It also emerged that the Principals who opined highly on their self efficacy found e-Learning more effective.

- Combination of multiple media's ensured enrichment of the e-Learning Program

- Facilitating peer-group learning, establishing professional learning groups and access to facilitator enhanced e-Learning effectiveness.

Conclusion

- Essentials of e-Learning –
  - Strategy
  - Purpose
  - Persistence
  - Compassion
  - Accountability
  - Flexibility
  - Self Accommodative
  - Self efficacy
- Challenges – in terms of meeting the requirements of a diverse population in terms of culture, tradition, language etc.

Thank you