

The infrastructure and policy of Mongolian e-learning and distance learning

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Content

- Brief on e-Learning and distance learning
- Infrastructure situation
- Policy brief



E-learning and distance learning

- E-Learning is a general term used to refer to computer enhanced learning.
- **Distance education**, or distance learning, is a field of education that focuses on the 1) pedagogy, 2) technology, and 3) instructional systems design that are effectively incorporated in delivering education to students who are not physically "on site" to receive their education.



E-learning and distance learning

- Instead, teachers and students may communicate asynchronously (at times of their own choosing) by exchanging printed or electronic media, or through technology that allows them to communicate in real time (synchronously).
- Distance education courses that require a physical on-site presence for any reason including the taking of examinations is considered to be a hybrid or blended course or program.

Types of the Open and distance learning

1. Correspondence conducted through regular mail
2. Internet conducted either synchronously or asynchronously
3. Tele-course/Broadcast where content is delivered via radio or television
4. CD-ROM where the student interacts with computer content stored on a CD-ROM
5. Pocket PC/Mobile Learning where the student accesses course content stored on a mobile device or through a wireless server

Infrastructure

1. Correspondence conducted through regular mail
 - Current postal delivery network: Intercity postal delivery is conducted by plane to 9 Aimags, by train to 5 aimags, by road vehicles to 4 aimags and by mixed means of transport to 2-5 times per week.



Infrastructure

1. Correspondence conducted through regular mail
 - Postal Department of the Ministry of Road, Transportation, and Tourism is in charge of postal issue.
 - Recently, Integrated postal reform and development plan (IPDP) 2007-2010 has been developed and approved by Government cabinet.



Infrastructure

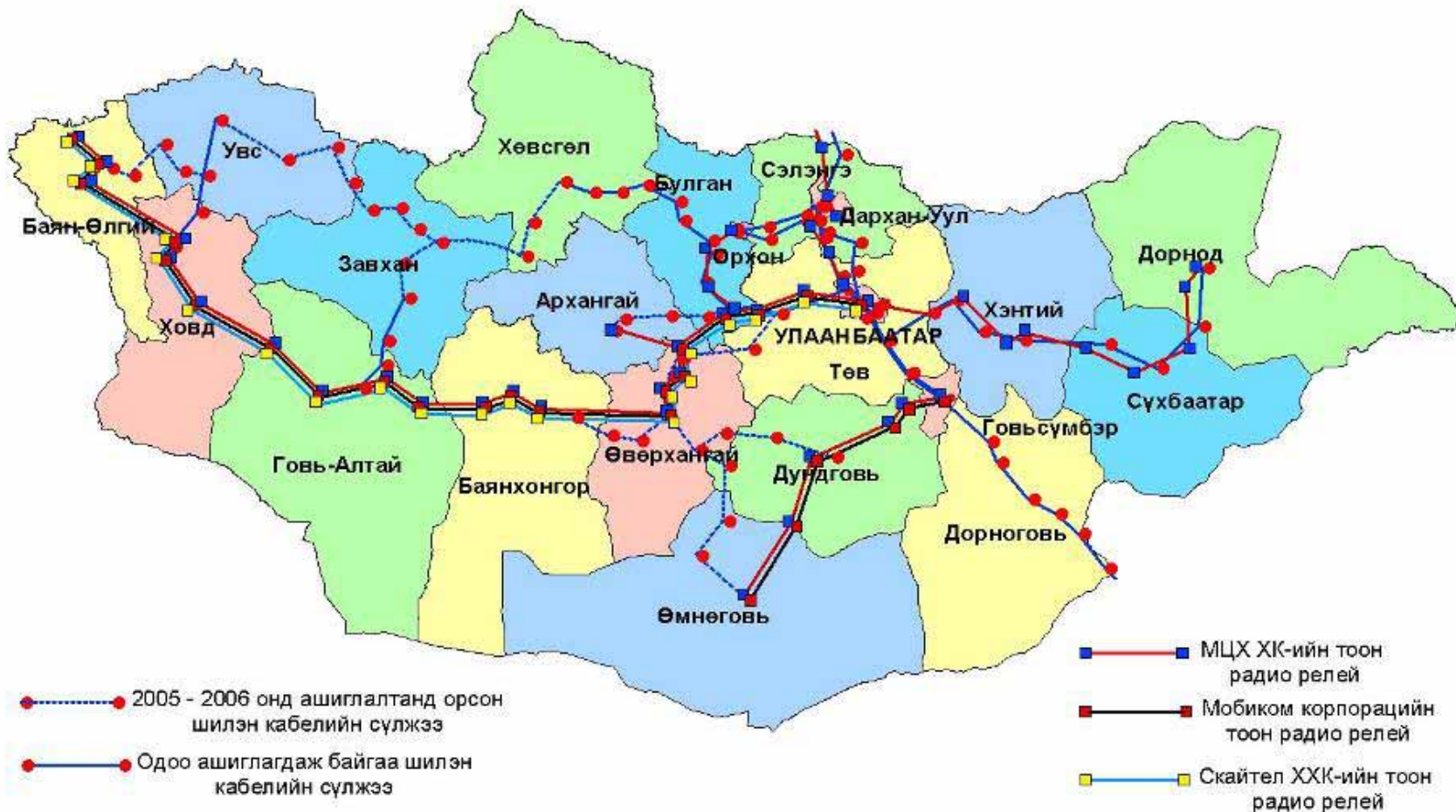
1. Correspondence conducted through regular mail
 - Amendment to the Postal law has been enacted by Parliament.
 - There totally 15 sub-strategies have been identified and now under implementation stage.



Infrastructure

2. Internet conducted either synchronously or asynchronously
 - Information and communication backbone network of Mongolia has been fully converted in digital technology by last year.
 - Now in Aimag center level, the backbone network capacity is considered as same as in UB.

Монгол Улсын дамжуулах байгууламжийн нэгдсэн сүлжээ





Infrastructure

- Next step will be for Soum level!
- In 2008, ICTA is planning to lay down fiber optic links to more than 30 soums.
- In near future, 50 more Soums will be connected through high speed digital links (most likely in 2009).
- By 2010 all soums will be connected through high speed digital links.

Infrastructure

3. Tele-course/Broadcast where content is delivered via radio or television
 - There are 4 TV channels, and 4 FM's broadcasted in the air through the satellite system.
 - However, for time being, only 3 TV's are in air. The Education TV is licensed for educational purpose, and now in preparation to be broadcasted.

Infrastructure

3. Tele-course/Broadcast where content is delivered via radio or television
 - There are MNTV, UBS, TV25, TV5, TV9, Education TVs licensed for public air broadcasting.
 - However, MNTV, and one of UBS or TV25 (they alternate on daily basis), and one of TV5 or TV9 (they also alternate) can be viewed by some citizen's at given time.

Infrastructure

3. Tele-course/Broadcast where content is delivered via radio or television
 - ICTA is planning to upgrade current transmission system of TV broadcasting, and to make the system for 8-10 TV channels broadcasting by 2007 or 2008.
 - Then at least 4 more channels will be available for countrywide broadcasting.



Infrastructure

4. CD-ROM where the student interacts with computer content stored on a CD-ROM
5. Pocket PC/Mobile Learning where the student accesses course content stored on a mobile device or through a wireless server



Policy issues

- Law on Education, 2002.
- National programme on distance education, 2002-2010.
- “E-Mongolia” programme for 2005-2010.
- Draft laws package for ICT matter



E-Mongolia programme

- E-Mongolia programme, which is the Government mid-term strategy for ICT development in Mongolia, has identified 22 sub strategies.
- And one of them is e-education strategy.



Goals to achieve

- Achievement of an average international ICT literacy level by 2012 (80% of all capable people) 70 % of Soums, 100% of province centers, all cities and towns will have in distance learning system by 2012.
- Creation of the model e-schools (50 % of schools will have e-school capability by 2012)
- Development of R&D

Goal-1

Development of the mechanism for the management of information technology policy and the administration of effective education

- Create an administration system and the shared application of educational resources in order to reduce duplicate investment, and use educational resources efficiently and for the maximum benefit of students
- Enhance the capabilities of organizations and agencies involved in the development of education technology, whose duties are to promote and support student centered learning

Goal-2

Development of an equitable information infrastructure for education

- Expedite the development and provision of equitable telecommunication infrastructure service
- Develop an effective IT network for education at a reasonable price
- Provide complete IT utility in every school in order to move into e-school. By 2012 every 10 student in a high school will have a PC. By 2012 every teacher will have a PC (10% of them notebook)
- Transfer every content to electronic means

Goal-3

Development of the human resource

- Develop and train personnel and education related human resource at all levels to increase their ICT knowledge and skills
- Accelerate the production of graduates, improve the quality of training and develop advanced ICT labor in order to support the rising demand
- Increase the production of postgraduates (masters and PhDs)
- Develop programs for training and life-long learning for knowledge workers



Goal-3

- Extended utilization of distance learning centres to develop public ICT literacy
- Establish multimedia centres in order to develop human resource
- Introduce international standards of ICT education
- Increase the production and training of ICT engineers, qualified specialists in order to success in the world software market

Goal-3

- Develop and improve educational curriculum that supports students in the use of ICT in order to increase the knowledge
- Establish a model e-school to support e-schools through Mongolia
- Extended utilization of ICT in “English as a second language” program to obtain world recognized education in Mongolia.
- Promote and support R&D which focuses on the development of knowledge, learning processes, and achievement through knowledge

Goal-4

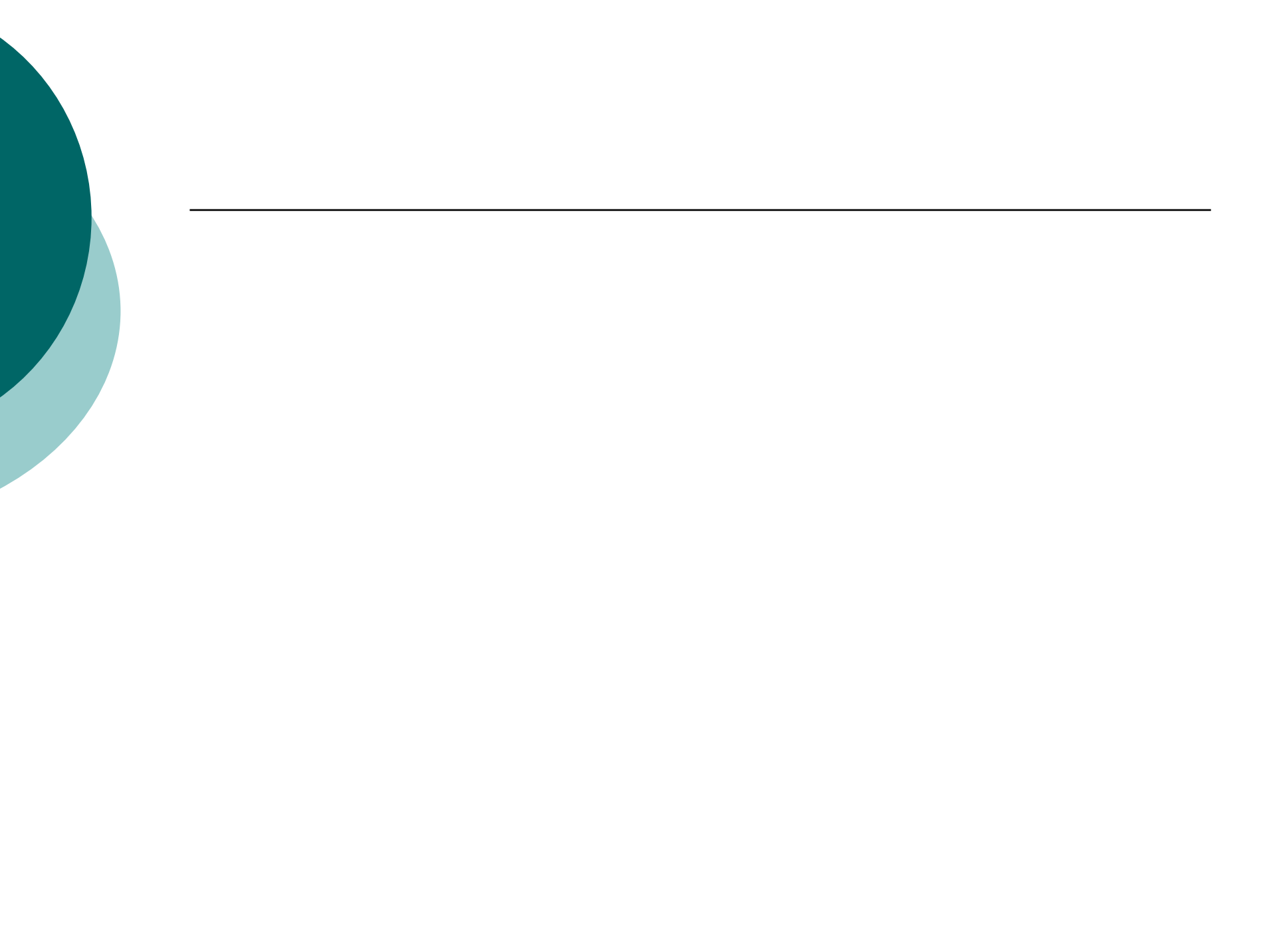
Development of the public ICT literacy

- Introduce International Computer Driving License for public ICT literacy
- Create internet access in the public (community) areas: library, post office, recreation centre etc.
- Support private sector investment in the development of e-education



Goal-4

- Promote media activities devoted to public ICT literacy
- Establish Technology Research and Development Centre, supported by the National Information Technology Park or other related universities.





Thank you for attention!

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