Region Picture- South Asia with a focus on Nepal

IDE 772: Instructional Technologies for International Settings

By Prabesh Devkota

SUBMITTED TO

Jing Lei, Ph.D., Professor and Department Chair at Syracuse University

Nepal

Current Situation

- Distance education (with the help of internet), open schools and self-learning have all been introduced in Nepal at the school level. Education system is highly influenced by content and examination driven practices, which tends to be based on traditional approaches that do not use technology.

- Policy wise, changes have been made to modernize, however, when we come down to implementation, little has changed (especially in public sector).

- Most of the ICT use in education comes from programs run by NGOs or by the private schooling sector operating in a competitive environment (Shields, 2011).

- Nepal is getting into the global Internet culture of learning, as many students from Nepal have been a part of platforms like MOOCs. Nepali students have been taking degrees from different foreign Universities through distance learning for almost two decades now.

- Two Universities within Nepal, Kathmandu University and Tribhuvan University are providing distance education in both pure and blended forms.

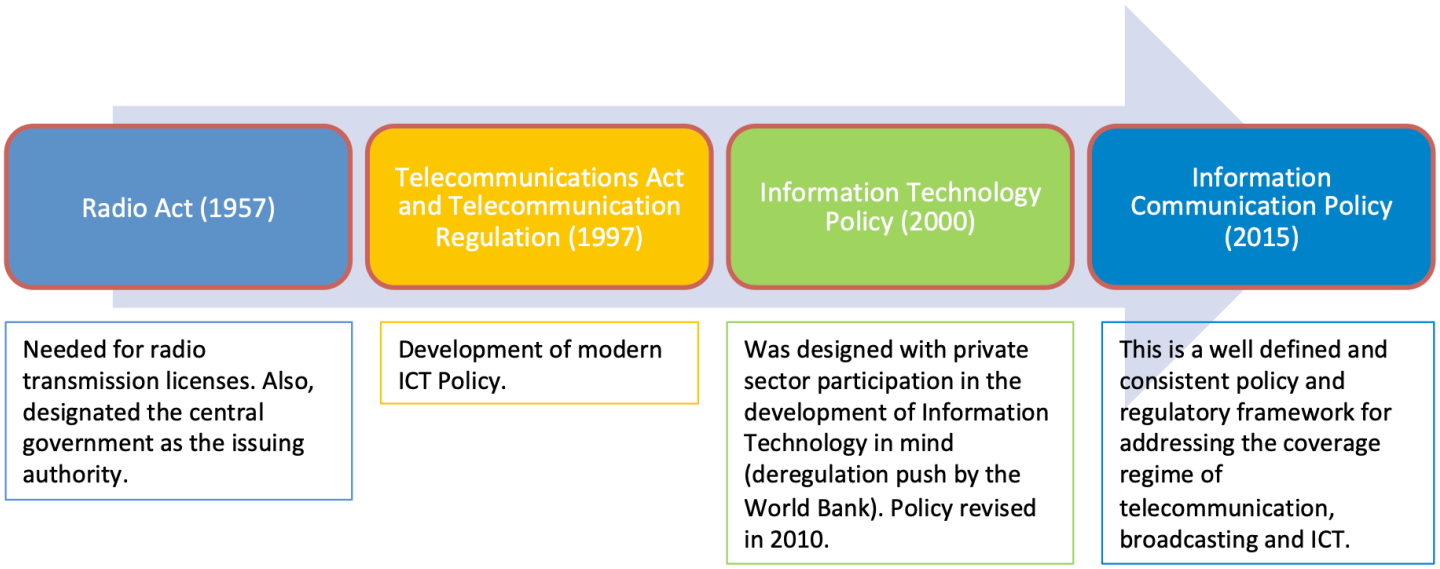
- Access to technology is an issue (especially in rural areas), however, for mobile-based instructions, this might not be such a big issue. The penetration of cellular based mobile devices is very high in the country (there are 123.17 mobile-cellular telephone subscriptions per 100 inhabitants in Nepal in 2017, according to the International Telecommunications Union).

Major Education Technology Players

- Ministry of Education

- National Planning Commission
- NGOs involved in education technology and ICT
- Private sector involved in education technology and ICT
- International development partners like the USAID

Evolution of the ICT Policy Framework in Nepal



Challenges

- Access to technology, training in its use, institutional support and inconsistency in program/policy implementation are the most prominent challenges.

- Another often overlooked challenge is that even though hardware resources may have made it into use for students, there are costs associated with acquiring and using educational software's, which may turn out to be difficult to meet.

- Further, there are more intrinsic barriers such as people's perception of the use of technology and their willingness to change.

- In implementation of educational projects or interventions in places of South Asia like Nepal, the main obstacle might be to be able to design instructions for the use with technology.

Required Attributes for Successful Education Technology usage

- Online mode of delivery responsive to handheld mobile devices with low cost data transmission is the best way to reach the online learners considering the barriers (physical topography and otherwise) at the present time.

- A strong belief in the value of technology for learning, along with a firm willingness to be open to personal learning is important for using a digital environment for teachers.

- A curricular approach that utilizes multiple representations, both by using ICT and traditional methods, which give student's access to different facets of knowledge required in developing deep understanding (Gautam, 2017).

- Even in a lower resourced setting, devices providing simple browser access can provide rich educational platforms for learners, when used in combination with traditional methods. This is a highly feasible way to use technology at present.

- Another necessary attribute is to have software's to be free to use and able to run independently without any or much access to the Internet for ICT educational technology use in Nepal.

- Creating learning materials and activities for use in technology, while also adapting the instructional needs for different contexts or different groups of learners is necessary (Tsai, C.C., 2012).

Regional Comparison

	Fixed telephone subscriptions per 100 inhabitants		Mobile-cellular telephone subscription per 100 inhabitants		Fixed-broadband subscription per 100 inhabitants	
Year	**2000**	**2017**	**2000**	**2017**	**2000**	**2017**
Nepal	1.12	2.94	0.04	123.17	NA	1.72
Bangladesh	0.37	0.43	0.21	91.63	NA	4.43
India	3.08	1.73	0.34	87.28	NA	1.33
Pakistan	2.2	1.49	0.22	73.86	NA	0.93
Sri Lanka	4.09	12.47	2.29	135.07	NA	5.85
Korea, Rep of[1]	54.58	52.66	56.59	124.86	8.17	41.58

	ICT Development Index Score 2010	ICT Development Index Score 2017	Percentage Increase (2000-2017) in score	Global Ranking 2017	Relative Regional Ranking 2017
Nepal	1.75	2.88	65%	140	3
Bangladesh	1.61	2.53	57%	147	4
India	2.14	3.03	42%	134	2
Pakistan	1.79	2.42	35%	148	5
Sri Lanka	2.97	3.91	32%	117	1
Korea, Rep of	8.64	8.85	2%	2	

From the above tables ("Global ICT Developments, 2001-2018", 2018), we can see that Nepal lies somewhere in the middle in ICT development regionally. Also Nepal has done tremendous improvement in this area since 2000, especially in terms of cellular mobile technology. However, as seen by the usage of fixed broadband usage, non-cellular mobile ICT technology is still not used at an impressive level.

[1] Korea (Republic of) has been mentioned just as a point of reference to what the best countries in terms of ICT development are doing in the world.

When we juxtapose the countries of South Asia to the Rep. of Korea, it is clear that the region as a whole has quiet a long way to go to become among the best. Within the South Asian nations, Sri Lanka leads in most indexes of ICT.

	Percentage of Households with computers in 2016	Percentage of the population with access to internet in 2017
Nepal	8.2	21
Bangladesh	6.88	18
India	12.96	34
Pakistan	15.9	16
Sri Lanka	17.77	34
Korea, Rep of	78.25	95

From the above table, we can see that in Nepal, a fifth of the population has access to the Internet (as of 2017), and less than 10% of households have computers (in 2016). Countries like Sri Lanka and India are doing relatively better in both these measures.

We can observe from the information in the table and the earlier literature that most Internet access in Nepal is a result of cellular mobile, rather than other technologies. This leads us to infer that education technology that is mobile based (and uses mobile data) might be the most appropriate technology for the overall population at present.

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