

## Joining the Learning Lab Consortium

Learning Lab is in the process of building its consortium of stakeholders. If your organization would like to participate, or you would like more information, please contact us as below:

### **Learning Lab Initiative**

Center for Knowledge Societies  
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# Learning LAB INITIATIVE



# What is Learning Lab

## Multi-Channel Learning

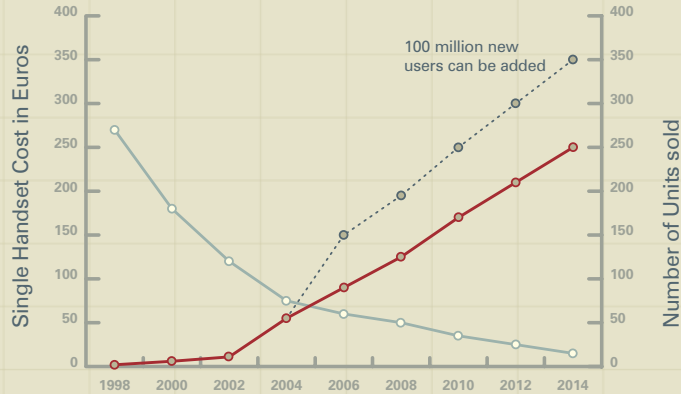
Over the last half-century distance education through radio has emerged as a reliable and low cost means of improving the quality and reach of education in rural areas that lack trained teachers and other institutional resources.

**Interactive Radio Instruction (IRI)** is a technique through which a radio serves as a remote classroom teacher and conducts exercises, questions and answers, songs and other collective activities with students. A teaching assistant or adult from the community usually supervises these sessions. Flipbooks, posters, television, flash cards and other visual and interactive media can complement IRI.

These multiple channels reinforce the overall learning process. The use of especially configured mobile devices would vastly improve such initiatives by increasing the interactivity and expressiveness of these techniques.

Learning Lab is a new open standards consortium that seeks to explore innovative ways to use mobile devices for education in developing country contexts. In many parts of the developing world the number of mobile phone users has seen exponential growth. New users from radically different environments appear to experience less difficulty using a mobile device than a desktop computer. By making learning oriented content, activity and experiences possible on a mobile platform, we hope to improve both the quality and reach of existing educational resources.

## Handset sales rise even as prices fall



## Planning for Future Diffusion

More than half of India's billion-strong population is under the age of 25. There are 164 million Indian students in Kindergarten through Grade 8. Even at current price points about 15% of these students could afford such a learning device. As the cost of devices continues to fall, and mobile device diffusion achieves maturity, more and more students will find it affordable and convenient to use mobile devices in their everyday lives.

# Timeline and Activity Area

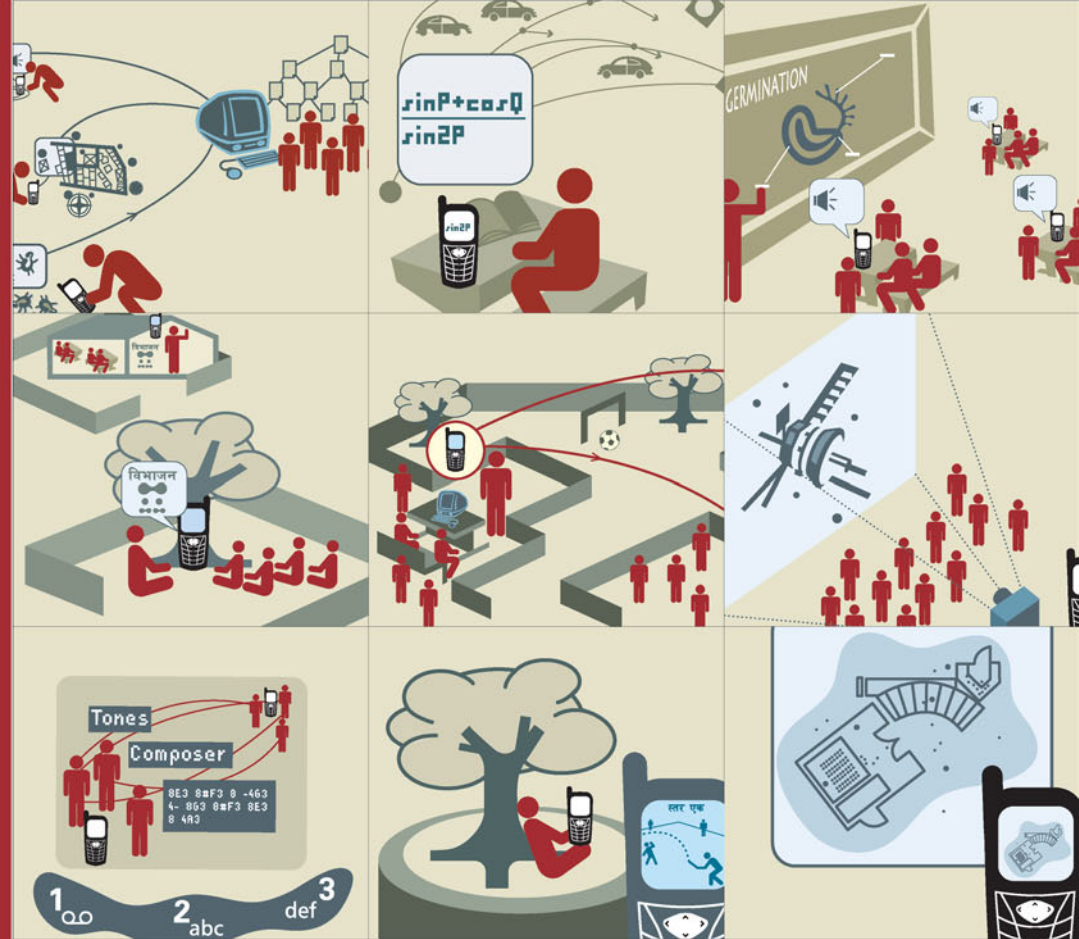
Learning Lab will proceed through several planned phases. In **Phase 1** we will explore ways of re-purposing available handset and network capabilities for learning activities. This may include the use of simple voice calls, Short Messaging Service (SMS), call in audio text servers and computers. In **Phase 2** we will address the emerging capabilities of mobile devices including visual and aural capture, audio message exchange and Push-to-talk on Cellular (PoC). Finally, in **Phase 3** we will explore cell broadcast, off grid scenarios and other advanced concepts.

These activities will be intensively monitored to reveal their impact and value. Innovative and suggestive forms of user behavior will be documented and shared with consortium members.

Although a large part of Learning Lab activities are planned for southern and central India, opportunities for testing new concepts and scenarios also exist in Zambia, Uganda, Namibia and Kenya.

# Mobile Learning Scenarios

Through an analysis of field conditions as well as a survey of the emerging capabilities of mobile technologies, we have generated a preliminary set of learning scenarios. They are now ready for testing in actual contexts of use. Through this process other scenarios may emerge. In the next few pages we showcase three diverse ways in which mobile devices can enhance learning.

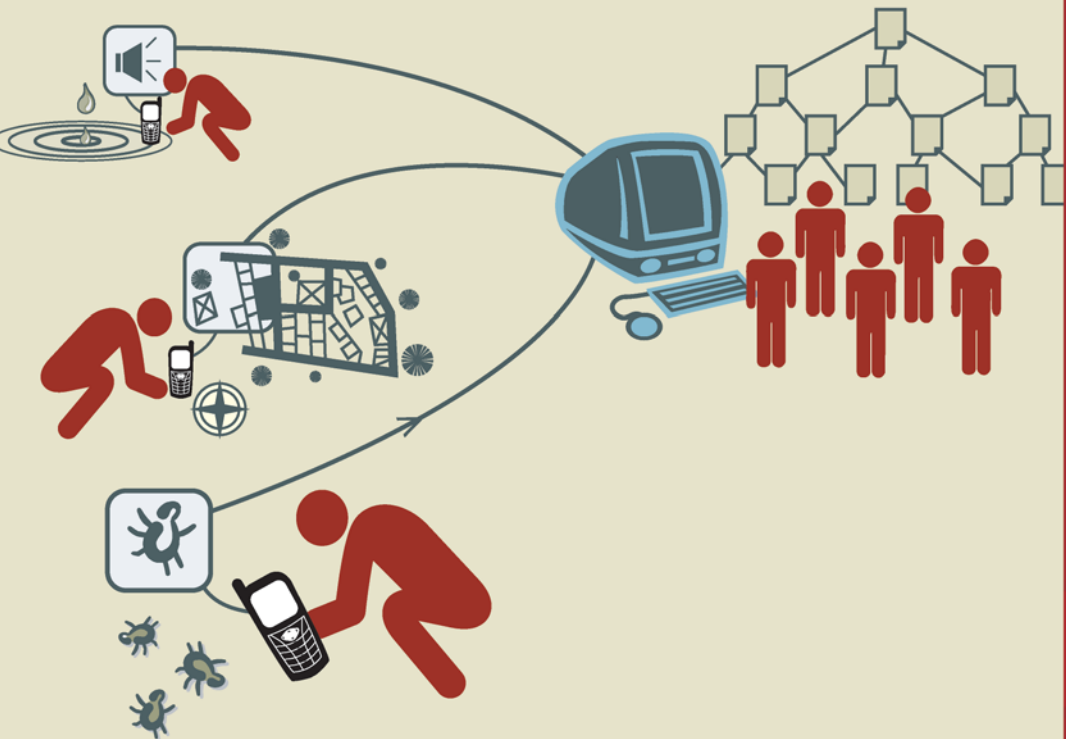




## SCENARIO 1

# Interactive Mobile Instruction

In this scenario mobile devices are used as distributed narrowcasting systems that allow teachers to share their lessons with students at multiple locations.



### SCENARIO 3

## Mobile-2-Desktop Syncing

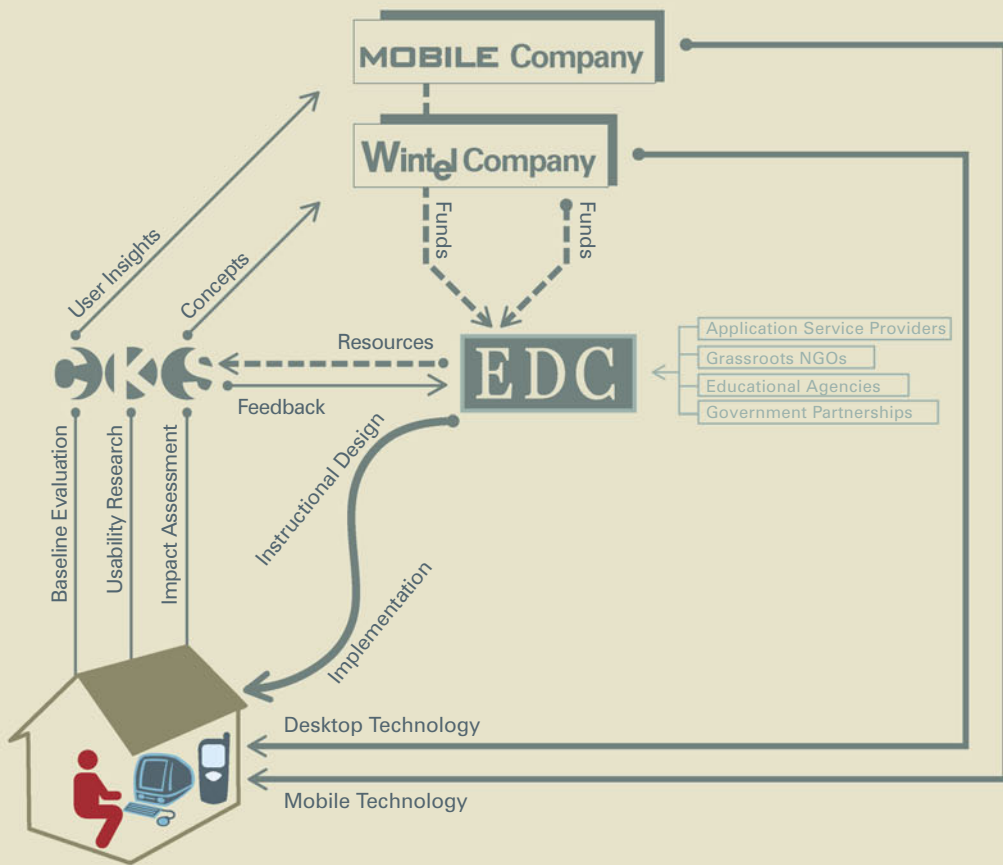
In this scenario we explore the relationship between mobile and desktop devices. Mobile devices are beginning to be equipped with a range of digital photography, audio capture and GPS tracking features. Students could use these capabilities to explore, record and capture data in their local context. Data syncing with a desktop computer at school would aid sharing of information among students, interactive learning and creation of a database of knowledge over time.



## SCENARIO 2

# Educational Gaming

In this scenario educational games are used to impart factual knowledge in an interactive manner. Language, science, mathematical skills and social awareness could be improved through word-based games, puzzles and quizzes.



# Key Stakeholders

## EDC

Educational Development Center (EDC) is an international, non-profit organization with 325 projects spread across 40 countries. Dedicated to enhancing learning and promoting health, EDC has been building bridges among research, policy and practice for over four decades. EDC has several award winning programs and products to its credit and has pioneered the use of Interaction Radio Instruction (IRI). Headquartered in Boston, EDC has branch offices in New York and Washington DC as well as other locations. It opened offices in Bangalore in early 2003, from where it leads the DOT.EDU initiative supported by USAID. It maintains close ties with several state governments in India, and with education policy makers at national and international levels.

## CKS

The Center for Knowledge Societies (CKS) affords insight into the use of Information and Communication Technologies (ICTs) among new user groups in developing country contexts. With offices in Bangalore and New Delhi, CKS has worked for diverse clients around the world. CKS draws its talent from leading departments of design, communication, social science, philosophy, management, human factors, and engineering. CKS personnel use participant observation, culture probes and other innovative social research techniques to illuminate the way in which social practice shapes and is shaped by the design and configuration of technology.