

Chapter 15

ICT–Based Outreach Programs: AIISH Model

Ajish K. Abraham

All India Institute of Speech and Hearing, India

ABSTRACT

To meet the increased demand of speech and hearing professionals in the rural areas of the country, All India Institute of Speech and Hearing, Mysuru started a diploma level program through virtual class rooms connecting AIISH, Mysuru to 11 centres geographically distributed across the country. Being a clinical program, conventional distance learning models were not feasible. The feasible solution was to implement virtual class rooms in these 11 centres where the classes conducted by the experienced faculty at AIISH, Mysuru will be delivered live. The efficacy of the program was analyzed through a survey among the students, which showed positive results. The technology implemented is robust considering its successful operation for the past eight years and hence can be considered as a model for outreach programs with similar objectives. This chapter describes the technological aspects of this model, its implementation and the key factors leading to its success.

INTRODUCTION

2.2% of the 1.21 billion population of our country have one or other kind of disability. 5 million of them were found to have hearing disability and 2 million have speech disability (Censusindia, 2011). Thus about 7 million of them require the services of a clinician trained in Audiology / Speech Language Pathology. World Health Organization (WHO) reports that there are 10,65,452 inhabitants per Audiologist in India compared to 19,603 inhabitants per Audiologist in the USA (WHO, 2012). Majority of these Audiologists are concentrated in major cities and thus most of the towns in the country don't get their services (Easwar et.al, 2013). The situation is worse in rural areas. To bridge this huge gap between the required manpower and the available manpower, Ministry of Health and Family welfare, Govt. of India decided to generate the required manpower through a Diploma program in Hearing Language and Speech (DHLS) through the National program on Prevention & Control of Deafness in 2007. All India Institute of Speech & Hearing (AIISH), Mysuru, the premier institute in the country in the field of Speech & Hearing, was

DOI: 10.4018/978-1-5225-1880-8.ch015

ICT-Based Outreach Programs

given the responsibility to start the DHLS program at 11 centres across the country in three phases. Providing trained faculty to run this program was the biggest challenge considering the non availability of the experienced faculty in the geographical locations selected for the program. The only practical solution was to extend the services of the trained faculty at AIISH, Mysuru to the geographical locations without disturbing their routine duties at AIISH. The decision was to run the program in outreach mode exploring the Information & Communication Technology (ICT). Thus AIISH started reaching out to the nation through the launch of DHLS program in 2007 by linking four centres through ICT in the first phase. Six centres were added to this network in 2008 and another centre in 2009 in the second and third phases respectively. Ever since its inception the DHLS program in outreach mode is running successfully in all the centres. This chapter deals with the technology options considered, technology requirements, selection of appropriate technology, effective deployment of the selected technology, its salient features and evaluation of the efficacy of the model.

ICT OPTIONS

Several technology options were considered in the year 2006, for the AIISH outreach programs. The models considered are analyzed below. The following options were considered and their pros and cons were analysed.

Web - Based Model

This is an asynchronous model in which the facility for live two way interaction is not provided. In this model, the lectures will be webcasted as per a specific schedule. The learner can login to the webcast and listen to the lecture. The lecturer will not be viewing the learner and thus there is no scope for one to one interaction in real time. Interaction with the lecturer is through e-mail, discussion forums or through scheduled online interaction using chat facilities (Deshpande, 2005). Having the advantages of flexibility, convenience and the ability to reach unlimited learners simultaneously, the system requires higher bandwidth for viewing the webcast without interruption. Moreover, active participation of the learner is ruled out.

VSAT Based Model

This is a synchronous model which tries to replicate a conventional class room. The lecture originates from a central station equipped as a studio and is broadcasted to remote classrooms using a Very Small Aperture Terminal (VSAT) network. A student from any of the remote classroom can raise the hand, whenever he wants to interact with the lecture. The technician in each of these remote classrooms clicks an icon at the control desktop provided in the remote classroom which will pop up on the lecturer's monitor Kirthivasan, Baru & Iyer, (2004). When the lecturer allows, the question from the remote centre is broadcast to the central station as well as to other remote centres. This model provides the reach and reliability of service as well as supports live interaction. The limitations are its high cost, complex infrastructure, requirement of skilled manpower at central and remote centres and the constraint on the participant to travel to a remote centre (Kirtivasan & Iyer, 2004).

8 more pages are available in the full version of this document, which may be purchased using the "Add to Cart" button on the publisher's webpage:

www.igi-global.com/chapter/ict-based-outreach-programs/176974

Related Content

Creating a Culture of Assessment: A Case Study for Building a Sustainable Model for Communicating Results to Guide Change

Amy E. Heath and Carrie Barrett (2024). *International Journal of Innovative Teaching and Learning in Higher Education* (pp. 1-15).

www.irma-international.org/article/creating-a-culture-of-assessment/337288

Challenge-Based Learning in Higher Education: A Malmö University Position Paper

Cecilia E. Christersson, Margareta Melin, Pär Widén, Nils Ekelund, Jonas Christensen, Nina Lundegren and Patricia Staaf (2022). *International Journal of Innovative Teaching and Learning in Higher Education* (pp. 1-14).

www.irma-international.org/article/challenge-based-learning-in-higher-education/306650

Intercultural Communication between East and West: Implications for Students on Study Abroad Programs to China

Ping Yang (2016). *Handbook of Research on Study Abroad Programs and Outbound Mobility* (pp. 755-777).

www.irma-international.org/chapter/intercultural-communication-between-east-and-west/164144

Evaluation of Multi-Peer and Self-Assessment in Higher Education: A Brunei Case Study

David Hassell and Kok Yueh Lee (2020). *International Journal of Innovative Teaching and Learning in Higher Education* (pp. 37-53).

www.irma-international.org/article/evaluation-of-multi-peer-and-self-assessment-in-higher-education/245772

Peer assessment in an Online Context: What Do Students Say?

Alda Pereira, Luis Tinoco and Isolina Oliveira (2017). *Innovative Practices for Higher Education Assessment and Measurement* (pp. 248-270).

www.irma-international.org/chapter/peer-assessment-in-an-online-context/159977