

SOME INITIATIVES ON ICT ENABLED TEACHER EDUCATION IN IRAN

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ABSTRACT

Like any other part of the world, the ICT revolution has influenced almost every aspect of public life in Iran including education. As a developing nation, the need to take appropriate measures to overcome the digital divide is being felt more urgently in Iran as compared to any other country. Iran is not a late starter by any means in this regard. The Government of Iran has initiated multiple actions to keep pace with the latest developments in information technology. The very fact that a large number of professionals engaged in knowledge industry the world over belong to Iran speaks highly of the Iran initiatives in IT education. However, this is only indicative of the qualitative aspect. In terms of quantity, a large number of people are yet to be covered to make a real breakthrough. It is being increasingly realized that a faster way of achieving competency in this field is to integrate it with general education at all levels. For this, the training of teachers in ICT skills is a must. The various schemes and programs have been launched both at government and non-governmental levels to develop ICT skills in teachers. Various universities in Iran have designed specific courses for this purpose. However, in a big country like Iran with millions of teachers at different levels, it is indeed difficult to produce ICT-enabled teachers at a large scale within a short period. The problems are complex and issues are numerous. The paper presents an overview of some of the initiatives in this area and highlights the relevant issues, and at the same time indicates directions for future course of action.

Key words: ICT, teacher education, computer education

INTRODUCTION

Emergence of Information & Communication Technology is a significant event in the contemporary history. It has brought in a new era in our civilization in which digitization has almost become a cult, because it has influenced every facet of human life including education. As far as education is concerned, with use of ICT a basic transformation is taking place in the way our teachers teach and students learn. As the world is going more and more digital, the need for overcoming or at least minimizing the Digital Divide is being strongly felt for creating a more equitable world order. In this digital era it is important to keep pace with rapid changes that are taking place in the world, especially for a developing country like Iran with strong emphasis on knowledge sector. For this, changes ought to be introduced in our education system and more specifically in the teaching-learning process. Teachers in Iran need to be prepared for imparting the new age education, and hence teacher education program in Iran should integrate ICT component in such a way that teachers are enabled to face the new demands in the profession.

The experts in the field of education are aware about this need and efforts are on to introduce ICT component in teacher education program. Even a cursory look at the B.Ed/ M.Ed syllabus of quite a few Iran universities will demonstrate this trend. But the efforts are generally of a sporadic nature and ICT is mostly introduced as optional parts. Possibly it is for this reason that teacher

education in Iran could not make significant impact in the changing scenario of education. What is needed is to design teacher education programs that make a balance between traditional pedagogy and ICT – a judicious mixture of both. Although such attempts are rare in the total Iran context, some of the recent initiatives are reported here as illustrative cases.

INITIATIVE AT THE UNIVERSITY LEVEL

Some Faculties of Education with collaboration of ministry of Education have been established the program, aims at developing IT skills in teachers by incorporating ICT components with conventional teacher education in-puts. It is essentially an enabling mechanism to make teachers truly computer savvy and thus professionally more competent.

Eligibility : Four years Graduation or equivalent

Medium of instruction : Farsi

Delivery : Distance mode

Duration : 2 semesters

Weightage : 32 credits

PROGRAM STRUCTURE

| First | | |
|----------------------|------------------------------------|-----------|
| Course | Title | Credit |
| BE01 | Educational Psychology | 4 |
| BE02 | Education and teacher function | 4 |
| BE03 | Evolution of Teaching Technologies | 2 |
| BE04 | Computer Fundamentals | 2 |
| BE05 | Internet and Education | 2 |
| BE06 | TV and Satellite based Education | 2 |
| Total Credits | | 16 |

| Second | | |
|----------------------|--------------------------------------------------------------------------------------------------------------------------|-----------|
| Course | Title | Credit |
| BEO7 | Elements of Instructional Design and Content Development | 4 |
| BE08 | Elective Group 1: BE0801 Methodology of science teaching Group 2: BE0802 Methodology of non-science teaching | 4 |
| BE09 | Educational Evaluation | 4 |
| BE10 | Project | 4 |
| Total Credits | | 32 |

In addition, Department of Education at the University offers a course in Master in Educational Technology – Computer Applications. (MET –CA) The course aims at developing teachers, trainers, instructional designers for Distance learning mode specially for teaching through

Interactive Multimedia (CBT) and On line learning (WBT). This is the only Masters level formal course offered in Iran in Instructional design for CBT and WBT.

The basic features of the course are as follows:

Basic Features of the MET –CA

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|----------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Eligibility | Graduate Women(any stream) from recognized university scoring 50% Marks Skill in English Communication and Comprehension desirable |
| Duration | Two years full-time(Four semesters) |
| Course Content | Concept and scope of Educational Technology Process and Theories of Learning to understand how people learn Theories and models of Instructional design Storyboard development for Educational multimedia Multimedia development process and Application Software such as MS-Office, corel Draw, Photoshop, Macromedia Flash, Director, Author ware etc. Orientation to editing of audio-video-graphics and animations Web-designing using HTML, Dream weaver, etc. Process of Online Course development Orientation towards Programming languages, Visual Basic script Research Methodology Project Seminar |

A Certificate Course in Instructional Design has been launched for a varied group of learners including e-learning professionals, script writers, story board creations ,authoring and of course for training and teaching. The program offerings consist of the following.

- E-learning + traditional instructional methods
- Creating on-line learning experiences
- Developing innovative solutions
- Helping people learn better

Program objectives are: a) Acquisition of professional qualification in Instructional Design, b) Improvement of job skills and self enrichment. Topics covered are as follows:

- **Introduction**
- Learning theories
- Learning styles
- ADDIE Instructional Design Model
- Analysis : Need ,Audience, Task
- Structuring and Content outline
- Instructional objectives
- Bloom's Taxonomy

- Content Types
- Flow and Clarity
- Visualization and Storyboarding
- Assessment
- Technical Writing
- English Writing Tips
- Instructional Strategies/ID Models

In addition to the above mentioned structured programs, Ministry of Education enhance ICT enabled teacher education in Iran. Ministry of Education is working with educators in different states to expand Iran student networking. Schools in Iran have played a key role in the 'Laws of Life Project'. This is supplemented through a special project to use E-learning projects as a means of civic education, which will combine physical exchanges and telecommunications.

CONCLUSION

In the absence of any concrete data base as to how many institutions actually have launched ICT enabled teacher education programs in Iran, initiatives taken by few institutions highlight the special features of each. One common characteristic of these programs is that these are mainly designed focusing the needs of teachers in Distance learning methodology. But in Iran a vast majority of learners belong to conventional institutional education. The efforts to integrate ICT component in the teacher training for conventional schools is virtually non-existent. It is in this area that special attention should be given, if any significant impact is to be made in bridging the Digital Divide in Iran situation. In Iran ICT enabled teacher education has just made a beginning. Iran.

Being a developing country, it is a long drawn and continuous process to achieve the desired level. *"Although the use of ICT in education and teacher training will grow more rapidly than expected, traditional technologies will continue to exist alongside the newer ones. This is because of the tremendous amount of funds it would take to cross the digital divide. Concerted efforts of international organizations and governments will however make significant progress in bridging the chasm."* (Cabanatan 2001).

It is also noted that Instructional Design is the core of most of the available courses, and these are aimed at catering to the needs of a variety of professionals in e-learning industries. This trend in a way minimizes the emphasis on teacher preparation. Instructional Design has emerged as a specialized area within the discipline of education. The courses designed for the specialized purpose may not be applicable generally in teacher education. "Teacher education and training are evolving in ways which reflect instructional design concepts. Instructional design is now being influenced by the current developments in electronic technology and management. Nevertheless, the roots of the instructional design discipline are in the field of educational psychology, and it may be anticipated that designers will continue to draw upon it for new ideas and approaches to the learning process." (Dick 1987) What is needed is a blending of ICT component and teacher education. In this, Ministry of Education has a significant role to play. Many of the ICT enabled teacher education initiatives are outside the purview of these bodies, and hence no linkage is established with teaching profession. This is a lacuna in the way of popularizing ICT enabled teacher education.

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