Information and Communication Technology

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ABSTRACT

This approach is the complete contrast with the conventional methods of education and entrepreneurship development but requires the candidates to have ICT literacy and interest in self-improvement. Need and urgency of educating large masses can not be under estimated, when the country is poised for rapid growth. However, even after so many years of hard efforts a significant percentage of child population remains uneducated and high dropout rates even at middle and secondary level educations remains a complex problem along with the fact that ICT literacy and education in a wider sense has not taken root. The recent reports dealing with Seelampur (Delhi) UNESCO inspired project on ICT based education have categorically and convincingly demonstrated, that it can be used to unlock the subject understanding capabilities and entrepreneurship idea generation potentials of the participants, not possible through standard education or distance education methods These new ICT based methods rely on collaborate learning, "ICT Literacy" and use the self organization mechanism for understanding or new knowledge creation. The idea and the technology behind this approach through promising have not been fully understood as yet . Therefore, it is proposed to take up activities in this direction at two different levels as a part of the project proposition. To study evolve and promote the mechanism of "Self Organization" in learning through deconstruction of information through ICT literacy based approach on the web and local enrolment , leading to construction of new domain knowledge and development of participants capabilities towards entrepreneurship. To take up the development of tools and technologies for creating the course work based on the ICT literacy approach for the collaborative and interactive learning environment. To evolve methods of localizing the information, and the introduction of local idioms for the education of ethnic linguistic and gender groups.(This is considered important in ICT based approach of education).

Keywords: *Digital enterprises, NPTEL approach, global monitoring, innovation network.*

1. INTRODUCTION

THE basic convergence between data processing /computing, communication and digital media has taken place in the last decade. Organisations all over the world have capitalized on the efficiency gains and new possibilities thus created through, e-commerce, digital multimedia and virtualisation of information etc.This has created new possibilities of globalisation and outsourcing of research, design and development activities and creation of more real-time response organizations and work practices.

However, while the gains due to initial convergence may be continuing , a second wave of convergence is taking place in various old and new application areas like fashion and apparels design, animation and games, health care, e-governance, b.p.o. operations etc, in terms of more coordinated visualization, design , manufacturing and marketing. The ever increasing level of interaction between these organization is leading to transformation of companies into a virtual organizations with high degree of synergy in their combined operations.

It is proposed to start at the New University, U.P. a digital enterprises integration centre where new values education design produced development and marketing are generated through the process of unification of core digital technologies forming the back-bone of variety of digitally hosted professions, technologies. This is to be achieved through the use of digital enterprises integration technologies, new visualization methods, implementation of network supporting user "experience creation" environment,

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and interactive ICT based group learning and entrepreneurship development etc[1].

It is also proposed that all education, man power training, product and services development or entrepreneurship development activities will be carried out with the support of local organizations and to with the involvement of participants from the surrounding area leading to batter chances of creation of incubation centers and entrepreneurship parks.

2. DIGITAL ENTERPRISES INTEGRATION PLAN

The proposed plan relies on first creating establishing a knowledge base and across the professions capability in understanding the digital basis of enterprises through the creation of a digital technologies/enterprises center and then using the center as a main resource for further evolution .This centre may have faculty specialized in variety of areas like communication network, computer graphics and visualization, modeling and simulation, embedded septum's, operations and marketing etc. Through interaction of this core faculty with faculty at departments of New University and outside, business people, students and entrepreneurs and local organizations synergies will emerge and the direction and growth of the centre will be determined and further training , product development and entrepreneurship ideas may evolve in that direction[2].

It is further proposed that in the beginning there could be upto five areas of concentrations of activities.
1. e-governance and e-commerce
2. Virtual Enterprises and BPO operations
3. Digital Arts (Products, Fashion , Games, Animation etc)
4. e-Health Management
5. ICT based Distance Education

These centers may be further sub-divided into smaller more focused units, specifically targeted to areas where private funding may be possible and innovation, growth and entrepreneurship potentials exist in products, services and experience provisioning at global levels
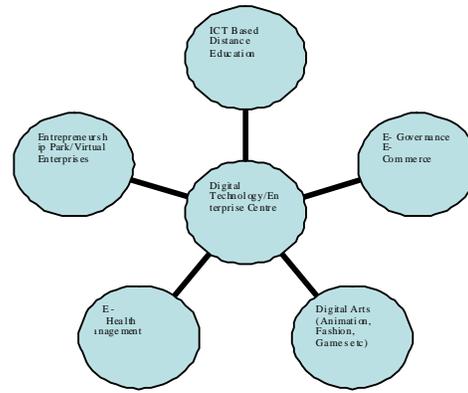

Fig. 1: Digital Enterprises Core and Its Centre

The five areas targeted above have been known to be in the fore front [3] for very high rate of business growth and job creation potentials, both at the national and international level.

Most of the proposed programmers of education / training / entrepreneurship development will be typically of six month duration, or in some case of one year duration, and will be organized with the help of national and international experts, industries and other universities. As a requirement these programmes will be evolved to stress not only on the technology but also on the relevant contents of product development, skills entrancement, business development, marketing and managing ideas, particularly through the use of Internet[3].

Courses will also strive to provide information on financing and venture capital availability, issues in entrepreneurship and IPR etc.

3. ICT BASED NEW UNIVERSITY :

New University though new is already a diversified university in terms of education and training and is set to receive World Bank aid and to transform itself into a modern teaching / research and entrepreneurship university.It plans to specially forces on expected emergence of India as a "Service Economy",by emphasizing on Enterprise Integration and Web-Services Department. In the first phase itself complete computer networking for the students and faculty is being implemented to provide international ambience and learning opportunities.

As the Digital technologies are expected to continue to be a major source of value creation and remain the on back-bone paradigm for realizing new

products and processes New University has launched itself into these areas by having number of scholars working for their PhDs. In these discipliner.[4]
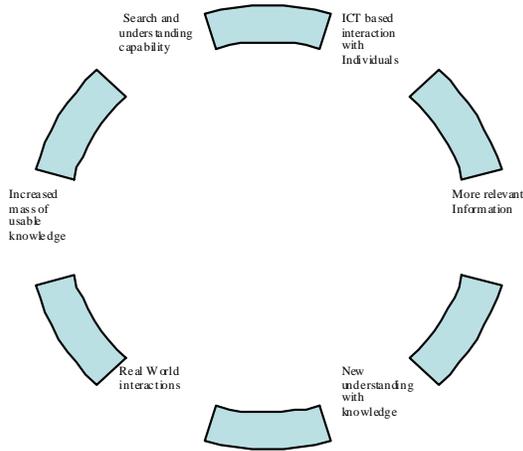

Fig 2 : ICT Based Continuing Education

Being a young university it plans to create new values, not only from teaching and basic research but also through getting into new roles of universities in globalised digital environment for example through :

• Assembling and constructing new knowledge through the network.

• Providing critical mass of intellectual resources.

• Acting as brokers in orchestration and synchronization of knowledge.

• Creating new educational paradigms for education particularly distance education and education of under privileged persons.

University is placing a very heavy store on the development of synergy with its eco-system (surrounding township, population and institutions) in terms of co-evolution of the new university along with its surrounding area. It is expected to provide a sprit of adventure and enquiry, a thrust of global thinking and an atmosphere giving impetus to creativity in variety of fields and encouragement to entrepreneurship in new directions[5].

It plans to specially focus as expected emergence of India as a service economy by emphasizing as Enterprise Integration and Web services development

New University is located in a major north Indian city of U.P. and is conscious of its numerous implied and expressed responsibilities for the city and its

community, as modern university created to open doors and provide employment and entrepreneurship opportunities, through its various programmes. Distance education programmes because of it their tremendous reach continues to remain high on national priorities and accordingly New University is planning to develop and adopt the new emerging format of ICT based education and launch its progremmes using this formet.The core activities of understanding and evolving the technology are already in place. The need for developing these new programmes is further enhanced by the fact that the University has a quota reserved for minorities and their expectations of better future are linked significantly to the performance and capabilities of the University.

New University has a record of extremely rapid growth and transformation and this momentum, is expected to see it through this new phase of evolution into distance education, market driven professional education and ininovites education areas. Its digitally smart faculty has competence to work on and create new values in the market driven applied areas.

4. INTERACTIVE ICT BASED (DISTANCE) EDUCATION

The need and urgency of educating large masses can not be under esitimated, when the country is poised for rapid growth. However, even after so many years of hard efforts a significant percentage of child population remains uneducated and high dropout rates even at middle and secondary level educations remains a complex problem along with the fact that ICT literacy and education in a wider sense has not taken root[6].

Recent trends have stressed the need for the involvement of NGO's who have domain knowledge and persuasive power along with Government agencies in education, and also the role of technology practically the IT technology has been viewed with considerable expectations to energise rather dull and uninteresting conventional environment.

Fig. 3: ICT Based Distance Education

The recent reports [7] dealing with Seelampur (Delhi) UNESCO inspired project on ICT based education have categorically and converingly deemonstreated, that it can be used to unlock the subject understanding capabilities and entrepreneurship idea generation potentials of the participants, not possible through standard education or distance education methods These new ICT based methods rely on collaborate learning, "ICT Literacy" and use the self organization mechanism for understanding or new knowledge creation. The idea and the technology behind this approach through promising have not been fully understood as yet . Therefore, it is proposed to take up activities in this direction at two different levels as a part of the project proposition.

1. To study evolve and promote the mechanism of "Self Organization" in learning through deconstruction of information through ICT literacy based approach on the web and local encronment , leading to construction of new domain knowledge and development of participants capabilities towards entrepreneurship.

2. To take up the development of tools and technologies for creating the course work based on the ICT literacy approach for the collaborative and interactive learning environment.

3. To evolve methods of localizing the information, and the introduction of local idioms for the education of ethnic linguistic and gender groups.(This is considered important in ICT based approach of education)

4. For this, to take up and specially develop the new course work based on the above idea for the under pillaged women in the society.

5. CONCLUSION

While the concept of using ICT or Multimedia in education is will established its power in educating under pillaged people and developing their entrepreneurship ideas has been recently demonstrated successfully by UNESCO price's through their Seelmapur (Delhi) experiments[8]

These ideas are proposed to be further evolved, experimented with and adopted through the proposed project on the lines shown below in the sketch. In the proposition here a concept first a deconstruction of all available knowledge using ICT litersey and level environment and learning groups and then its reconstruction into useful new knowledge and ideas is proposed through a mechanism of self organization [9].

The theory of self organism has been experimented and pub forward by several experts [1,5] as the basic mechanism of generating useful domain knowledge from a given environment .

The basis mechanism ratio on feed-back loop between the earn and the effect in a circular causal way. This means that when a cause creates and effect (in a fore environment) and then the effect further strengthens the cause the circular causality loop starts functioning leadings creation of well defined effects saturations knowledge etc).

As mentioned above the methods is completely dependent as the active participation environment (other persons the group ICT network local professionals and knowledge) both for breaking the available knowledge into parts and also for creating (and testing) useful new structures and knowledge coming cost of it.

This approach is the complete contrast with the conventional methods of education and entrepreneurship development but requires the candidates to have ICT literacy and interest in self-improvement.

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