

Teacher in the knowledge society: pedagogic issues

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Teacher in the Knowledge Society- Pedagogic Issues

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Introduction:

The role of the teacher in the society has undergone substantial changes over time. Traditionally, the concept of teacher as Guru is one who is regarded as having great knowledge, wisdom, and authority in a certain area, and who uses it to guide others. Guru's role went beyond the context of an educational or training context to the whole society and people often considered him/her as then source of knowledge and wisdom in all walks of life in a community. Thus, teachers have been viewed as purveyors of content knowledge and academic skills. Even in recent times the teacher has been considered as the single most important resource in most classrooms followed by the prescribed textbook. The teaching-learning process has been teacher-centred with passive participation of learners. Generally seen as dispensers of knowledge, teachers are increasingly being perceived as facilitators or managers of knowledge and even considered as co-learners with their students in the learning environment. Learning theories have been mostly advocating the need for individualised learning and learner centred curricular transaction with emphasis on cooperative and collaborative reflective learning. In the last few decades stress has also been made based on 'constructivism' that learning is an individual and personal event but each learner is actively involved in a joint enterprise with the teacher and other learners of creating ("constructing") new meanings. A major idea in constructivist thought is that learning is affected by social interaction.

Developments in Education:

The following trends in education of relatively recent origin have great significance in developing a new perspective of education and are impacting on the way educational systems are undergoing transformation.

- Many learners will move into a **variety of different, possibly unrelated fields** over the course of their lifetime.
- Formal education no longer comprises the majority of our learning, its place being taken increasingly by **informal learning which emerging as a significant aspect of the total learning experience.**

- **Learning is a continual process**, lasting for a lifetime and includes also the work related activities are no longer separate.
- Ever increasing possibilities created by **the developments and applications of technology can make it possible the required learning practices** expected by learning theories.
- **Know-how** and **know-what** is being supplemented with **know-where** in the educational context.

The major causes for the trends indicated above have been the developments that happened in the understanding of the learning process and the changed place of education to deal with complex life and occupational requirements of people and also the fast developments that occurred in technology. It is considered that 'education' and 'technology' are the two factors more than any which equalises human beings and allows each individual to learn, develop and attain one's own ambitions in an individualised way. The developments in education and technology in the last over fifty years has dramatically changed the learning environment and the role and place of teacher in it.

Knowledge Society and Learning Society:

The notion 'knowledge society' acknowledges the strength of the brain over other powers- economic or military or political. The development of a country in the present day world is determined by its ability to make best use of its brainpower. This capability is thus depends on the development of the human resource of a country. Every citizen will have the conducive environment to learn and train oneself thereby strengthen the brain power. The knowledge society thus will have to go hand in hand with a 'Learning Society'

A learning society considers 'learning' to be a comprehensive and life long process (Learning; Treasure Within, UNESCO,1996). The trends one finds or expected to find in Learning Society (European Community, 1995) are the following:

- **New ways of organizing learning:** Technology is changing where and when learning takes place and also how it is supported and funded. New groups can come together virtually based on a common interest or professional cutting across geographical distances and age.
- **New pedagogy:** By removing learning from traditional classroom and school contexts, new models that use technology increasingly focus on participation and negotiation rather than direction and instruction. There are increased opportunities for students to act as mentors for other students or to support teachers giving them new insight into the education system and greater independence as learners.

- **New relationships:** Connectivity is supporting new learner-mentor relationships beyond classroom or school walls. Education is becoming not just the 'concern' of teachers and parents, but of learners and a wider, distributed community network of support.
- **A more sophisticated, integrated learning mix:** Technology allows access to the learning that takes place outside traditional classroom settings, whether at home, within local communities, or within the global community. The learning can be formal or informal, reflecting either standard curricula or learning that is initiated by the interests and enthusiasms of the learners themselves.
- **Richer assessments and evaluations:** New forms of assessment, including development of e-portfolios, simulations, and formative assessment with immediate feedback, can make a contribution to understanding each learner's development, understanding, and future direction. Learners are being given more control over what is assessed, and when and how the results are used.

Learning now goes beyond that of formal educational institutions and definite age groups. A model for workplace learning is presented by Svensson et.al. (2004), which intends to integrate formal and informal learning with the use of e-learning. An important underlying assumption is that the integration of formal and informal learning is necessary in order to create desirable competencies, from both an individual and an organisational perspective.

Forman et.al (2002) argues that E-learning should replace what Freire calls the banking concept of education, which is at odds with other 21st century approaches such as lifelong learning, open and flexible learning and the accreditation of prior learning (APL) to name only a few. These developments are facilitating the occurrence of learning even outside educational institutions making shift to learners wherever they are.

Developments in Technology Mediated Education:

The following areas of technological developments and their use in all forms of education and training are worth mentioning in the emerging

- **Open Distance Learning:** Originating as correspondence education and home study the entire area of open distance learning has matured considerably today allowing the required flexibility and openness for individual learners to pursue education according to one's own needs and convenience supported by appropriate information and communication technologies suiting each community context. Today course offer through ODL ranges from blended modes of delivery to entirely e-learning environments.
- **Open Source Software:** Open-source software is the most prominent example of [open-source](#) development and often compared to (technically defined) [user-generated content](#) or (legally defined) [open content](#) movements. Open-source

technologies are already broadly used across the entire spectrum of the software industry. The Open Source Initiative (OSI) is a non-profit corporation with global scope formed to educate about and advocate for the benefits of open source and to build bridges among different constituencies in the open source . Open source is a development method for software that harnesses the power of distributed peer review and transparency of process. The promise of open source is better quality, higher reliability, more flexibility, lower cost, and an end to predatory vendor lock-in (Wikipedia).

- **Open Educational Resources:** OER movement initiated in the start of this century is slowly but steadily picking up and emerging as a very significant factor in opening up digital resources for use freely by individuals and institutions. Starting with MIT's Open Courseware initiative OER movement has received lot of support and popularity in several countries facilitated by multi-lateral agencies such as UNESCO and Commonwealth of Learning (COL). Incidentally even in the nineties the trend of making available free digitised resources was slowly taking shape and this movement is now really getting momentum with the emergence of wiki initiatives (wikipedia, wikieducator) and initiation of OER. Large projects creating OER content which got completed in teacher education in the last ten years are TESSA, STAMP 2000+
- **Learning Management Systems:** A learning management system (commonly abbreviated as LMS) is a software application for administering e-learning content and managing learning processes including assembling and delivering learning content, personalise content and enable reuse, provide assessment item repositories and administer online tests, etc. Different versions Moodle open source software are in use/available as LMS today the latest being Moodle 2.2 version.
- **Cheaper Computing:** The last decade saw a rapidly decreasing cost in computing systems. Personal Computers and tablets with fast processing and large memory are available for very affordable price today. The OLPC Foundation (Boston) made it possible to provide low cost PCs in schools in many developing countries. National governments have been trying to make low cost computers available mainly for educational institutions. Government of India recently announced the mass production of low cost tablets for a subsidised price of \$35 (being made available for a commercial price of \$60).
- **Improved access to internet:** Broad band connectivity is still a major of concern in many countries. Access to internet is also becoming faster and cheaper in many developing countries.
- **Mobile reach:** Mobile technology is the most affordable hardware in most developing countries and its use within a country is becoming increasingly less. Today it is free to receive message and calls in many developing countries.

Smart phones are also slowly picking up popularity although it is still not very affordable. Cheaper availability of smart phones with telephone and internet facilities will be a revolutionary breakthrough and will impact educational provision significantly.

- **Social Networking:** There is an increasing participation in social networks especially among teens and youth in the last decade. In the U.S. the active unique social network audience grew roughly 29% from 115 million in February 2009 to 149 million in February 2010. There are several social network sites available today for various purposes focusing various age groups. One of the major reasons for increased time share for informal interaction today are the virtual social connections and relationships provided by the Social networking services.

Curriculum and Pedagogy- Changed Role of the Teacher

There is too much to know and too many sources of knowledge outside the classroom in the Learning Society. The availability of variety of technologies allows students themselves to bring within school walls most of the required content for learning. Teachers have a definite role, of course, but they do not simply dispense information to their students. New technologies provide the opportunity for teachers to make learning interactive and collaborative by using a social constructivist approach to teaching and learning. This involves creating a student-centred approach where the teacher takes the role of the facilitator and the students engage in resource based learning and peer learning. Teachers are also intellectual leaders who create opportunities for students to demonstrate what they know and what they know how to do.

The new technologies do provide all required support to making learning an interactive, collaborative and reflective learning process where every individual learner will be in a position to negotiate to create ones own unique learning environment and construct ones own knowledge. The teachers role for this can be come under the following categories:

- **Facilitate identification of learning content** from all sources
- **Guide and facilitate the learner in negotiating one's own learning outcomes and required content**
- **Facilitate individualised learning paths for each learner** according individual needs, learning styles and convenience.
- **Facilitate proactively dialogue and collaborative reflection** among learners by identifying/creating and posing suitable problems/questions
- **Facilitate (reactively) by appropriate inputs to maintain effective interactive process** with emphasis on effective learning of each individual.

- **Participate** in the educational context as a fellow learner
- **Support in identifying possible learning related choices for the learners** and guide them to make individual decisions

It is evident that the nature of functions of the teacher in a learning society will be facilitating each individual to learn 'what one wants', 'how one wants', 'where one wants' and 'when one wants' using all required resources from virtual and real environment, participating in virtual/real interaction with the teacher and other learners in formal and informal learning situations.

Conclusion:

The emerging scenario of educational provision impacted by the notion of a knowledge society supported by characteristics of a Learning Society along with the increased access and reduction in cost various technologies has changed the role of teachers substantially. There is now a need to completely restructure the content and processes in teacher education to make sure that teachers are competent in all the new roles they have to perform in a the new social and educational context.

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