Teacher in a Digital Era

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Abstract

Technology nowadays has entered into every walk of life. In this era of technology, the digital revolution has transformed almost everything from our work at our organizations to our daily routines. It is transforming the way children and young people play, access information, communicate with each other, learn, relearn and unlearn. But now this revolution has profoundly entered in the Education sector and that is also at all levels i.e. school level, College level and University level. Now we talk of use of Interactive smart boards, hybrid or blended learning, flipped classrooms and digital libraries etc. during teaching learning processes. Due to this, most of the teaching and learning processes in the classrooms these days are changing from autocratic style to democratic or participatory style where learners play an active role. On the other hand, Teachers, Instructors and Higher Faculties are facing unprecedented changes with often larger classes, more diverse students with diverse needs, demands from State, Society and employers who want more accountability and above all, all this with ever changing technology. To handle change of this nature, the role of a teacher and instructor becomes more challenging and demanding and hence requires attention. Thus the teachers in this ever changing digital era need a good balance of theoretical and practical knowledge to provide a solid foundation for their teaching.

Index terms—

1 Introduction

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2 II. Challenges in Front of Teachers in Digital Age

In this digital age, teachers are confronting with new challenges every day in respect of students, their individual needs, new hardwares and softwares and own developmental needs.

3   Diverse Students

Nothing has changed more than students themselves in this technological era in the last 10-20 years. Technology has facilitated in multi fold ways to the students. Students have now got access to multiple knowledge via internet on their laptops, mobile phones and Tablets etc. A student is also curious by nature. As a result of that, students have become? More knowledgeable ? More Interrogative ? More Competitive

? And more demanding from their teachers. It has changed the way in which a student understands any concept. An average teacher who himself is not tech savvy, can't get recognition and respect from these kinds of students. Moreover due to Globalization of Education in the last decade has put a greater impact on the type of students available in the classrooms. Now we have more diverse students in the classes with diversity reflecting in their family backgrounds, economic conditions, physical conditions, traditions, cultures, Languages and ways of doing things etc. This diversity has gone prominent with RTE Act, 2009 where all schools have been directed to have inclusive classroom settings which have made this diversity more prominent in the class rooms. A teacher's role in such a scenario has become utmost important and stringent.

4   Pupil-Teacher ratio

In India and most of the other countries of the World, Government bodies have fixed pupil teacher ratio to near about 40. But there are institutions that have more than 40 students sitting in one class making the teaching learning situation even more nagging for the teacher. In India, a survey has been conducted by IBM at various levels to record the actual no. of students per teacher present in the classrooms. It has been found that the current ratio for Primary, Secondary and Higher secondary Education T Author: Department of Education, Guru Nanak Dev University. e-mail: manishash79@gmail.com stands at 1:43, 1:34 and 1:34 respectively where 1.4% of the Primary schools have no teachers while 19% have single teacher and 43% have two teachers. 0.9% of the primary schools have a teacher-student ratio of worse than 1:100 and another 26% have a ratio of worse than 1:60. For a single teacher to give personalized learning solutions is the thing which is not possible for this much strength of students in one class. As student number increases, teacher regress to a greater extent on information transmission and curriculum completion than on questioning, exploration of ideas, discussions and the development of critical or original thinking. Yet these are the very skills which are to be developed in students in a knowledge-based society's classroom.

5   Digital natives

A student these days are never alone while learning. They are always 'on'. They always have their digital natives around them on facebook, twitter, Instagrams, YouTube, WeChat etc. with the help of whole lot of applications (apps) such as iPads, mobile phones and tablets etc. So they don't even care what teacher is teaching in the class if it is no way in addition to what is available on the internet. Facilitating digitalization in classes also does not guarantee that children will use it only for classroom lectures. They may use it for various other things like chatting, being socially happening, playing video games, watching movies and commenting around etc. Most students these days come to schools, colleges and Universities well immersed in social media where their life revolves around such media in being happening around. For such cases, commentators like Mark Prensky (2001) argue that digital natives learn and think fundamentally differently.

6   Knowledge Based Job Market

Knowledge Based Job Market is becoming demanding day by day. While appointing personnel, their demands have not just got limited to good manual skills but good technological skills as well. It is a real tough task for a teacher to prepare students for the oneous professional needs and rigorous job market which is dynamic in nature. New technologies, methods and processes are entering in every field at a much more faster rate than anyone could train. Curriculum in schools, colleges and universities are not changing in that speed to keep pace with changing technology.

7   Lifelong Learning

Education sector nowadays have become lifelong learning market where new courses, workshops and seminar are taking place in order to make teachers as well as students to well verse with the changing technologies in the field of teaching learning as well as job market. So the situation of a teacher has become more of draconian kind of where she is afraid of hit by new technologies and education needs every additional day.

8   Job Issues

A teacher herself is also an employee of an organization called school or college or university. So there are certain her own professional needs which are posing new challenging in front of her every coming day. A teacher is engaged in multiple and multi-level tasking in any school, college and University that they have either less or no time for innovations in their teaching. A report by Yashpal Committee "Learning Without Burden" has extensively highlighted the ills of the present education system. Briefly it talks of how education system has now become more centralized, examination driven, joyless, impersonal and utterly irrelevant to the child's world. It

deprives teachers of the freedom to organize teaching learning and meaningful participation of students in the classrooms.

9 III. Teaching Skills in Digital Age

In the digital era, the teacher plays a key role not as a fellow-learner, but also as a link to the knowledge community, or state of the art in that discipline. Hence in additions to general teaching skills, some more skills are needed to be embibed in a teacher to play his role effectively as a Facilitator of learning.

10 ? Networking Skills

Networking skills facilitate collaborative learning. Not only students, but the teacher too learns and teaches better in a collaborative learning environment. Collaborative Learning Environment of a teacher consists of many individuals and groups. First of all, it is influenced by those Students whom he/she is teaching for the reason that current society is knowledge society. So students already have online access to the material, the teacher wants to teach in the class. Hence they would be having some prior knowledge of the same curriculum influencing and determining what curriculum teacher is taking up in classroom.

Secondly, Teachers of the same subject area who are working in the Institution for the same subject to another sections and classes could be of great help. At the same time, teachers teaching same subject in another schools could be useful in providing knowledge because in digitalized world, it is easy to connect anywhere anytime using Social Media like Skype, We chat, hangouts, yahoo chat, google chat etc. for sharing of knowledge.

Moreover, if the subject matter is the one of the kind like economic policies, foreign policies of a particular country or comparison of certain Govt. Regulations or case studies, communication with Government Department could be of great help in delivery of right subject matter. Many departments of the Government facilitates online access to its archives containing loads of correct information. In addition to this, Government also provides access to online digital libraries free of cost to make authentic information accessible to all.

In addition to that, Communities of practice are a powerful manifestation of informal learning. They generally evolve naturally to address commonly shared interests and problems. By their nature, they tend to exist outside formal educational organisations. Last but not the least, the researchers of that particular subject area could be of a great source to know about latest inventions and discoveries in the area.

11 ? Communications Skills

To the traditional communication skills of reading, speaking and writing coherently and clearly, there is a need to add social media communication skills in this digital age to education. These skills include a no. of technological skills like the ability to create a short YouTube video, conducting Webinars, creating online digital library, preparing online Docs, to capture the demonstration of a process, the ability to reach out through the Internet to a wide community of people with one's ideas, to share information appropriately, to give and take feedback, and to identify trends and ideas from everywhere. A teacher can add to his/her knowledge beyond limits with effective communication skills. Social Media Communication skill is one of the prominent skill with which a teacher can reach out to a distant expert of the area or a learner's community to reach out solutions to various problems in his/her daily lesson plans.

12 ? Thinking skills

Of all the skills needed in a knowledge-based society by a teacher, thinking skills like critical thinking, problem-solving, creativity, originality and strategizing are of the utmost importance. Education is increasingly becoming dependent on the creation of new knowledge, new services and new processes to increase competitiveness and generate knowledge. Teachers are actually in a knowledge hub where it depends totally on the efficiency of a teacher to choose the reliable and accurate data from all the available sources.

13 ? Nurturing skills

The teacher in a nurturing approach keeps the needs and demands of the students first and thereby adopt a highly dedicated and unselfish approach to discuss relevant topics. Nurturing skill of a teacher needs them to hold back the transmission and sharing of their knowledge until the student is ready for it and thus denying to many subject experts their own identity and needs to a larger extent. There is a strong emphasis on the teacher focusing on the interests of the student and delivering contents of knowledge and persuading them to connect to the World on empathizing with how the learner approaches learning. Nurturing in this connection helps the learners to grow with the topic by facing different challenges at different levels and thereby understanding the very spirit of the topic and use it strategically.

14 Teacher's Collaborative

Learning Environment

15   ? Management of Knowledge

Knowledge is dynamic in every aspect. It is not only rapidly changing with new innovations, researches and developments in the field of education over the Internet, but the sources of information are also increasing, with a great deal of variability in terms of reliability or validity of the sources and information. This knowledge can be useful for learners only when teacher has the skills to manage and correlate it. The key skill in a knowledge-based society for a Teacher also like other professions is knowledge management i.e. how to find, analyse, evaluate, use and disseminate information, within a particular context from the knowledge pool. The one who can correlate learners' needs and desires with the objectives of curriculum to achieve desired educational goals is the teacher required in the present digitalized world.

A teacher is the centre of any teaching learning process. In this digital era, a teacher has got a no. of responsibilities in addition to his/her prior role to keep pace with the changing technologies and changing teaching learning environments. A teacher is accountable to the society which trust him/her for shaping its coming generations for better civilizations and to the nation which trust him/her for making its future more bright and progressive. To deal with this accountability, a teacher need to use ICT effectively with its traditional techniques of teaching to facilitate critical and innovative thinking in his/her classrooms and it is only then one can dream of a knowledge society and a better digitalized education World around us.

[Lambert and Williams (1999)] 'A model for selecting educational technologies to improve student learning'. S Lambert , R Williams . *HERDSA Annual International Conference*, (Melbourne, Australia) 1999. July.

[Nel et al. ()] 'Educational Technologies: A Classification and'. C Nel , C Dreyer , Carstens . *Evaluation Journal for Language* 2001. 35 (4) .

[Bates ()] *Technology, e-Learning and Distance Education London*, A W Bates . 2005. New York: Routledge.

[Anderson ()] *The Theory and Practice of Online Learning Athabasca AB*, T Anderson . 2008. Athabasca University Press.

[Bates ()] 'Understanding Web 2.0 and Its Implications for e'. T Bates . *Web 2.0-Based E-Learning Hershey NY: Information Science Reference*, M Lee, C Mccoughlin (ed.) 2011.