Teacher In A Digital Age

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Abstract- Teachers, instructors and faculty are facing the change never known before, with often larger classes, more diverse students, demands from government and employers who want more accountability and the development of graduates who are available for work, and above all, we all have to cope with ever changing technology. To handle this changing nature, teachers and instructors needs a base of theory and practical knowledge that will provide a solid foundation for their teaching, no matter what changes or pressures they face. Technology is heading forward to heavy changes in the economy, in the way we communicate and relate to each other, and increasingly in the way we learn. Yet our educational systems were built largely for another age, based around an industrial rather than a digital age. Thus teachers and instructors are faced with a heavy challenge of change. How we may ensure that we are developing the kinds of graduates from our courses and programs that are fit for an increasingly volatile, uncertain, complex and ambiguous future? What should we continue to protect in our teaching methods (and institutions), and what else needs to change?

Keywords- Teachers, Instructors, Faculty, Employers, Digital Age, Graduates, Volatile, Ambiguous

I. INTRODUCTION

Digital technology makes educational content easier to find, to access, to manipulate and remix, and to spread widely. All these steps are central to teaching, scholarship, and study. Together, they represent a dynamic process of "digital learning."

Technology nowadays has entered into every part of life. In this age of technology, the digital revolution has influenced almost everything from our work at our organizations to our daily routines. It is changing the way children and young people play, access information, communicate with each other, learn, relearn and unlearn. But now this revolution has greatly entered in the Education sector and that is also at all levels i.e. school, College and University level.

In the digital age, teachers need to keep updated themselves with evolving technology, know what digital tools are best suited to their students, and use them effectively in their classrooms. Despite all the latest modern technology that helps educators discover knowledge, it is a teacher's personal ability that holds the key to unlocking the remarkable potential in every student. Even today, the quality of teaching is contributing the most to a student's success in school. The role of teachers, therefore, is more vital than ever before. Students of today are getting ready to become global citizens of tomorrow. They are living in a revolutionary digital age, where the cyber world has overlaid itself upon the real world. The internet and social media have made the world smaller and flatter and altered mind-sets and belief systems. It comes as no surprise then that the processes and patterns of education are being transformed dramatically.

In such a scenario, teachers have no option but to progress as well. They must keep updated themselves to the modern, thinking-oriented global processes of education if they wish to continue inspiring young minds and equip them with skills that can be valuable in the future. Sometimes, it is also the responsibility of educational institutes to ensure that teachers get engaged in continuous professional learning and apply that learning to enhance student achievement.

II. CHALLENGES IN FRONT OF TEACHERS IN DIGITAL AGE

In this digital age, teachers are distressing with new challenges every day in respect of students, their individual needs, new hardware and software and own developmental needs.

Despite considerable resources allocated to integrating technology in the classroom, many teachers have struggled with disturbances that devices can bring, had their work negatively impacted or have not used technologies effectively. And many pre-service teachers witness introducing new technologies as a future teaching barrier.

Here are some of the challenges faced by teachers in digital age.

• Diverse Students

Nothing has changed more than students themselves in this technological era in the last 10-20 years. Technology has facilitated in numerous ways to the students. Students have now got access to variety of 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 really changed the way in which a student understands any concept. An average teacher who himself is not techno savvy, can't get recognition and respect from these kinds of students. Moreover, because of Globalization of Education in the last decade has greatly impacted 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 important in the class rooms. A teacher's role in such a scenario has become very important and precise.

• Digital natives

A student these days are always 'on' while learning. 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 pay attention or even care what teacher is teaching in the class if it is no way in addition to what is available on the internet. Facility of digitalization in classes also does not guarantee that students 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 involved in social media where their life revolves around such media in being happening around.

Knowledge Based Job Market

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

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 get familiar 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 severe kind of where he/she is afraid of hit by new technologies and education needs every additional day.

• Access

Of all the criteria in determining choice of technology, this is perhaps the most discriminating. No matter how powerful in educational terms a particular medium or technology may be, if students are not able to access it in a convenient and affordable manner they cannot learn from it. Thus video streaming may seem to be a great idea to get lectures to students off campus, but if they do not have Internet access at home, or if it takes many hours or a day's wages to download, then forget it. Difficulty of access is a particular restriction on using MOOCs in developing countries.

- [1] Any teacher or instructor who tends to use computers, tablets or mobile phones for teaching purposes needs answers to a number of questions:
- [2] What is the policy of institution with regard to students' access to a computer, tablets or mobile phones?
- [3] Can students use any device or is there a limited set of devices that the institution will support?
- [4] Is the medium or software chosen for teaching consistent with all makes of devices students might use?
- [5] Is the network acceptable to support any extra students that this initiative will add?
- [6] Who else in the educational institution needs to know that you are requiring students to use particular devices?

• Time management

Sorting out ICT (Information and Communication Technology) extends inside the time accessible is testing commonly the time accessible for utilizing a PC is a most extreme of 45 minutes and numerous understudies invest an extent of this energy essentially recalling where they were up to from the previous week. A significant piece of ICT instructor work subsequently is to keep students concentrated and on tracks. Researchers found that teachers are not trained to an acceptable extent for using ICT tools effectively. There is a lack of training and resources in this area. Teacher training institutions do provide pupil teacher with training in ICT but it seems like that there is a lack of adequacy which reflect in their teaching. Teachers spend more than enough time in managerial task rather than teaching- learning process.

• Selecting and developing resources

Resources fill in as to give a fortifying setting, structure the learning knowledge and advance freedom, Assets to be adjusted at different stage-test generators, video recording/altering, conferencing, video intelligent whiteboards, virtual learning condition and video instructional exercises. Selecting resources properly keeping in mind the stage and interests of learners is very important and big task. It is the responsibility of the teacher to address each and every student present in the classroom. Teacher should select the resources in such a way that all the students can engage in the learning process. For instance, if there are differently abled students sitting in an ICT classroom, the teacher can use a different way like using a video with caption so that student with hearing inability can read themselves and understand better. Or teacher can develop different software and programs of their own for students who learn at different pace.

• Not everyone has technology at home

Not every students or teachers uses a computer at home, are frequent users, have sufficient data or internet access. There is a digital divide of reduced computer literacy in students from native, lower socioeconomic or regional/rural backgrounds.

This creates challenges for teachers if they have to set different tasks for different students, or if they avoid setting homework with a digital content.

• Introduced technology is not always preferred

Technology isn't always the answer. Pre-service teachers have reflected on having preferences for manual writing (compared to typing) and incidences of doubling up on time writing notes. Students may prefer reading print and teachers can disengage from introducing new technology when they don't feel it adds anything extra.

III. TEACHING SKILLS IN DIGITAL AGE

In the digital age, the teacher plays a vital role not as a associate learner, but also as a link to the knowledge community, or state of the art in that discipline. Hence in addition to general teaching skills, some new skills are needed to be imbibed in a teacher to play his role effectively as a Facilitator of learning.

• Communications Skills

A teacher's communication skills can make all the difference to a student's mental and academic growth. Not every student learns in the same way. Some are god gifted while others learn slowly. Some students need to learn in a different manner. That is where augmented communication skills can prove to be priceless.

To the traditional communication skills of reading, speaking and writing sensibly and clearly, there is a need to add social media communication skills in this digital age to education. These might include creating a short YouTube video to capture the demo of a process or to make a sales pitch, the ability to reach out through the Internet to a wide community of people with someone's ideas, to receive and integrate feedback, to share information properly, and to identify trends and ideas from elsewhere. A teacher can add to his/her knowledge beyond limits with valuable communication skills. Social Media Communication skill is one of the noticeable skill with which a teacher can reach out to a faraway expert of the area or a learner's community to reach out solutions to various problems in his/her daily lesson plans.

• Digital Skills

Most knowledge-based activities depends largely on the use of technology. However the main issue is that these skills need to be embedded within the knowledge domain in which the activity takes place. Here is a list of the 8 digital skills that teachers need to possess to confidently and creatively use the technologies that resonate with their students.

- Ability to use and create any video content
- Ability to create nice visuals
- > Ability to launch a blog or wiki
- Ability to create digital audio content
- Ability to use social media for professional development scenarios
- Ability to use social bookmarking sites to collect resources

- Ability to search the web in an systematic and effective manner
- Ability to grab game-based learning

• Networking Skills

Networking skills facilitate collaborative learning. Not only students, but the teacher too learn and teaches better in a collaborative learning environment. Collaborative learning is an educational approach to teaching and learning that involves groups of learners which work together to solve a problem, complete a task, or create a product. First of all, it is convinced by those Students whom he/she is teaching for the reason that current society is knowledge society. So students are already having 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.



Fig.-1 Collaborative Learning

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/colleges 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 facilitate 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 display of informal learning. They generally unfold naturally to address commonly shared interests and problems. By their nature, they tend to exist outside formal educational organizations. 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.

• Thinking Skills

Of all the skills needed in a knowledge-based society by a teacher, thinking skills like critical thinking, problemsolving, creativity, originality and strategizing are of the extreme importance. Universities in particular have always prided themselves on teaching such intellectual skills, but the move to larger classes and more information transmission, especially at the undergraduate level, challenges this assumption. Education is more 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.

• 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 spreading 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 bigger extent. There is a strong emphasis on the teacher focusing on the interests of the student and delivering contents of knowledge and inducing 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 tactically.

Knowledge Management

This is perhaps the most important of all the skills. Knowledge is not only quickly changing with new research, new developments, and rapid dissemination of ideas and practices over the Internet, but the sources of information are increasing, with a great deal of variability in the reliability or validity of the information. Thus the knowledge that an engineer learns at university can quickly become obsolete. 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 plays a central role in any teaching learning process. In this digital age, a teacher has to undergo 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.

IV. CONCLUSION

Relationships teachers have with their learners, curriculum, and pedagogy are changing rapidly in this time of digital revolution. Digital technologies have allowed teachers to recognize the dreams of early educational theorists. Educators do not need to work in isolation. They have the sufficient knowledge and resources to ease learning by exploring curriculum with their learners. When teachers revisit their relationships with learners, curriculum, and pedagogy in the 21st Century, they create innovative change to the education system and encourage students to flourish in a dynamic and rapidly evolving world. They accept that students must be at the centre of a more personalized approach to learning and they must be given the freedom to follow their individual interests and passions in the classroom.

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