
PSYCHOLOGICAL ASPECTS OF TEACHER COMPETENCIES AND CHARACTERISTICS IN 21st CENTURY DIGITAL AGE CLASSROOM

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Abstract: Within the rapid changes in communication techniques, culture, pedagogy, and developments in knowledge, it is vital that educators are familiar with new educational changes, mainly those changes which are connected to technology. Change can be accompanied by psychological fear, and thus some teachers might resist changing. In the digital age, some teachers might be reluctant to change because they feel they are immigrants in the digital. In some of schools, teachers might feel more frustrated because of the digital gap in their schools and because of the digital gap with the students.

This paper aims at exploring the main factors that inhibit teachers from change. Teacher's fear of change is not connected to digital tools only, but also that teachers are worried about the neurological, social and psychological effects of student's overuse of technology. To cope with the digital age, teachers should understand that 21st century learners have different ways of thinking and different practices which are closely connected to technology. Teacher competencies and characteristics may not be comfortable with the digital tools, which would create a gap between digital immigrants and the students who are more comfortable with digital tools.

Keywords: Competencies, Digital age classroom, Psychological, Technology, Tools.

Introduction: Today we are living in the age of information technology. The 21st century is striving for the development of highest technological and informative skills in order to convert the entire world into a global village. The digital technology has brought a revolution in every field, including modern education, which has also emerged as a cost-effective and time saving tool for education. With the advancement of technologies such as computerization, satellite communication, internet, teleconferencing and audio visual aids there can be swift in setting the preferential goals of education and the advancement of knowledge and exploration of information technologies there would be knowledge based society.

Psychological aspects have long been reflected in educational theory and practice. Therefore, we anticipate psychology to contribute to our understanding of the impact of technology on the sequential aspects of teaching and learning in this digital age classroom. How we learn, and how learning and teaching can be made possible, are key to understanding the sequential dimension of e-learning. Developing a psychologically conversant understanding of the sequential aspects and skills required for successful digital arbitrate learning. They consider how time has previously been

addressed in educational theories and evaluate whether these theories retain their psychological validity in the context of e-learning.

According to UNESCO-ICT Competency Standards, the policy goal of the technology literacy approach is to prepare learners and a workforce that is capable of taking up new technologies and improving literacy skills, including the use of hardware and software resources tools. Teachers should be aware of these goals and changes in the curriculum entailed by this approach might include improving basic literacy skills through technology and adding the development of ICT skills into relevant curriculum contexts. Changes in teacher practice involve knowing where and when to use the technology for classroom activities and presentations, for management tasks, acquire knowledge in support of the teachers' own professional development.

Competence and Professionalism: Conceptualizations of teacher competences are linked with visions of professionalism, theories of teaching and learning, quality cultures and socio-cultural perspectives - with tensions between diverse approaches. The differences between theoretical traditions about teaching in (for example) the English-speaking and German-speaking worlds can offer valuable opportunities for dialogue and

integration. An understanding of teacher competences as ‘dynamic combinations of cognitive and meta-cognitive skills’ implies that there are four fundamental aspects: learning to think, feel, know and act as teachers (Gonzalez & Wagenaar, 2005).

Difference between Digital Native Teachers and Digital Immigrant Teachers:

<i>Digital Natives</i>	<i>Digital Immigrants</i>
Fast	Slow
Young	Old
Future	Past or Legacy
Multi-tasking	Logical thinking
Mage	Text
Playful	Serious
Looking forward	Looking backward
Digital	Analogue
Action	Knowledge
Constant connection	Isolation

Digital Competence is an Evolving Concept:

Digital competence is the most recent theory describing technology-related skills. Several terms have been used to explain the skills and competence of using digital technologies, such as technology skills, ICT skills, information technology skills, digital literacy, digital skills, information literacy, and 21st century skills. (Adeyemon, 2009; Krumsvik, 2008).

Competencies of a Teacher in Digital Age Classroom:

Competencies may be defined as personal characteristics such as skills, knowledge, values, attitude that an individual possesses or needs to acquire, in order to perform an activity within specific content, whereas performance may range from basic level of proficiency to the highest levels of excellence. Digital competencies are:

- Technical skills to use digital classroom
- Abilities to critically evaluate digital technologies,
- Abilities to use digital technologies in a meaningful way for working, studying and for various activities in everyday life. and
- Motivation to participate in the digital class about the culture.

The competent teacher in their professional preparation, as well as in their classroom assignments, the teacher chooses the most

appropriate research tools and databases, and applies the most effective search techniques, to produce useful and safe online resources in the classroom. Using common tools and devices such as computers, projectors, and screens videos, slide shows the teacher can set up classroom presentations.

Instructional Strategies includes in Digital Age Classroom:

- Comparing, contrasting & classifying
- Summarizing and note-taking
- Reinforcing effort & giving praise
- Homework and practice
- Nonlinguistic representation
- Cooperative learning
- Setting objectives and providing feedback and
- Testing hypotheses.

As a digital age classroom learning best practice, structured networked collaboration supports the concept of connectivism whereby learning is viewed as a process of creating connections among information sources and developing networks or community of learners or a classroom or a digital environment, or a social structure where ideas are shared with others, thereby “cross-pollinating” the learning environment (Siemens, 2005).

Characteristics of Digital Teachers:

Today’s students need educators who have the knowledge and skill to facilitate their participation in a collaborative, Web-based learning culture. They need teachers who know how to create a learning culture that looks and functions like the real and virtual workspaces of today. Equally important, they need educators who can join forces with their colleagues and communities to transform their schools from teaching organizations into genuine learning organizations. Such teachers would be able to:

Facilitate and inspire students to achieve in the global society:

Teachers must engage today’s digital-age learners if they are to meet the goals of producing the highest percentage of college graduates in the world by 2020.

Enable students to maximize their learning experiences:

Teachers will work within digital technology, empowered learning ecology and must know how to help the resources of this new learning environment to meet their individual learning needs.

Facilitate learning in various modalities:

In an open learning ecology, teachers must embrace a

greater diversity of spaces, times, resources, media, and methods for learning. 21st century learning environments are harmonious, face-to-face and virtual, local and global. The rapid growth of virtual high schools and courses underscores the need for teachers with the skills to teach both in classrooms and online environments to improve learning.

Work as effective members of learning teams: Teachers will be part of learning teams with a wide range of knowledge and skills, whose expertise is orchestrated to improve learning. Teams consisting of novice and accomplished educators, students, and subject matter experts in the community will collaborate in a blend of face-to-face and online learning that turns schools into hubs in networked learning ecology.

Use the full range of digital age learning tools to improve student engagement and achievement: Teachers will draw on digital technology to engage the learning activities for individual student needs. They will contribute to the continued evolution of these tools and develop their knowledge of how to use them to improve learning.

Work with students to create new learning opportunities: Teacher must respect their students' abilities to contribute to the work of their learning team; they need to encourage divergent in- the work of their learning team; they need to encourage divergent inquiry that goes beyond compliance with monolithic learning standards.

Use student data to support student learning and program improvement: Teachers will know research techniques how to collect and interpret student assessment data to enhance and improve teaching effectiveness, school performance, and student growth.

Teachers are lifelong learners: Teachers must continuously engage in formal and informal professional development to upgrade their skills in a rapidly evolving knowledge- and technology-based global society.

Teachers are global educators: Teachers must empower their students to live and work successfully in a globally integrated community. They must engage their students in learning opportunities that extend the boundaries of the classroom and consistently place knowledge acquisition and skill development in a global context.

Work with the leaders to change/make the policies: Teachers should communicate established research-based education principles to college, parents and society at large to continuously improve the educational system.

21st Century Digital Age Classroom includes the following:

- a. Basic Literacy
- b. Scientific Literacy
- c. Economic Literacy
- d. Technological Literacy
- e. Visual Literacy
- f. Information Literacy
- g. Multicultural Literacy
- h. Global Awareness
- i. Creativity and Innovation
- j. Critical thinking and Collaboration

A Thrive for Change the 21st Century Skills: Technology has catapulted us into a knowledge based, global society. It is clear that success in this society will require significantly different skills than in the past (CEO Forum, 2001; International ICT Literacy Panel, 2002). However, policymakers and educators have not yet clearly defined what it means to be "educated" in a Digital Age. The irony of a call for 21st century skills in this era of high stakes testing based on conventional metrics is not lost on teachers. The 21st century digital class room skills should form a major part of the foundation of improvement processes in schools.

Conclusion: The world in which our children live is significantly different from that of yesterday. Today's youngsters use mobiles, laptops, tabs to connect their community and around the globe. The solution lies in public acknowledgement that yesterday's education is not sufficient for today's or future learner and technological environment in order to fully prepare students to thrive in the digital age. Technologies are raising the bar on the competencies needed to succeed in the 21st century. Not providing students with opportunities to develop 21st century skills and proficiencies will create a disconnection between the innovative jobs being created and the skills of the workforce.

Teachers those who come from immigrants of low technology areas could change their methodology and content to fit with the digital frame so that they fit with the digital era. The digital immigrants have to change their mindsets (mindsets in terms of fixed

mental attitude disposition that predetermines a person's responses to and interpretations of situations). It could be concluded that not all educators are resistant to change. It is also important to note that the lack of software or digital tools does not prevent teachers from changing their practices. In developing countries, digital tools are not as sophisticated as the ones used in developed

countries. However, teachers could adapt their teaching in spite of the little available tools. Teachers might be resistant to change because of the gap related to the availability of digital tools, and the gap related to teachers who feel like immigrants in the digital world.

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