Oray's Publications
Impact Factor: 6.67(SJIF) **Research Journal Of English (RJOE)**Vol-7, Issue-2, 2022
www.rjoe.org.in An International Peer-Reviewed English Journal ISSN: 2456-2696
Indexed in: International Citation Indexing (ICI), Cite factor, International Scientific Indexing (ISI), Directory of Research Journal Indexing (DRJI) Google Scholar, Cosmos and Internet Archives.

Teacher Development: Integrating Technology to Meet the Needs of 21st Century Learners

Prof. P.Rajendra Karmarkar[1] PhD., Principal, AU College of Arts and Commerce, Visakhapatnam
Kandi Dharma Kumar[2]**,** Research Scholar, Andhra University, Visakhapatnam

Article Received: 03/05/2022, Article Accepted: 010/06/2022, Published online: 14/06/2022
DOI:10.36993/RJOE.2022.7.2.50

Abstract

Today's students' learning styles have changed. Traditional teaching methods such as lectures, students reading textbooks, and teacher-dominated discussions no longer meet students' needs. According to a 2000 National Center for Educational Statistics study, "American children between the ages of 9 and 17 use technology more than any other age group" (Gillard & Bailey, 2007, p. 87). However, this Paper discusses "**Integrating Technology to Meet the Needs of 21st Century Learners**" by briefly discussing the Education and skills of the 21st Century. Later throws light on the Teacher's goals to help students become iKids and genuinely global citizens. It has also thrashed out the roles of "School," "Teacher," "Learner," and "Curriculum" for the 21st Century. Later the Paper explores how we should integrate technology to enable our class to be a global classroom. Finally, it ends with an excerpt from the book "**Teaching the Elephant to Dance"** by James A. Belasco, Ph.D.

Keywords: teaching, development, technology, classroom, curriculum.

Introduction

The 21st Century

The new millennium was ushered in by a dramatic technological revolution. We now live in an increasingly diverse, globalized, and complex media-saturated society. According to Dr. Douglas Kellner at UCLA, this technological revolution will impact society more than the transition from an oral to print culture. Even kindergarten children can make a difference by participating in real-life, real-world service learning projects. We are never too young or old to make our voice heard and create change that improves the world.

Today's kindergarteners will be retiring in the year 2067. We have no idea what the world will look like in five years, much less 60 years, yet we are charged with preparing our students for life in that world. Our students face many emerging issues such as global warming, famine, poverty, health issues, a global population explosion, and other environmental and social issues. These issues lead to students needing to communicate, function, and create change personally, socially, economically, and politically on local, national, and global levels.

Perceived Education in the 21st Century

We want to create strong connections with students, reach out to all learning styles, and produce an interactive and engaging classroom.

We want to make our life simpler, discover new teaching ideas, and aid our communication with others. We desire to know more about technology-based teaching resources to bring our classroom into the 21st Century.

Technology plays an ever-increasing role in society, and students are the first individuals to learn about and adapt to new products. Therefore, it only seems natural to integrate it into the classroom. Technology has numerous uses and benefits that can help enhance your classroom and thus, improve the learning experience.

Furthermore, most schools are now retrofitting their classrooms to fit the Internet into each one. This abundance of technology is unlocking a whole new world of possibilities for teaching and enhancing the learning experience. So if we want to learn practical methods for integrating technology into our classroom, this Paper will help us a lot!

Skills Needed Today

*Critical Thinking and Problem Solving
*Collaboration across Networks and Leading by Influence
*Agility and Adaptability
*Initiative and Entrepreneurialism
*Effective Oral and Written Communication
*Accessing and Analyzing information
*Curiosity and Imagination

One of our goals is to help students become iKids and genuinely global citizens.

In many countries, today's students are referred to as "digital natives" and today's educators as "digital immigrants." Teachers are working with students whose entire lives have been immersed in the 21st-century media culture. Today's students are digital learners – they take in the world via the filter of computing devices: the cellular phones, handheld gaming devices, PDAs, and laptops they take everywhere, plus the computers, TVs, and game consoles at home. A Henry J. Kaiser Family Foundation survey found that, on average, young people (ages 8-18) mainline electronic media for more than six hours a day. Many multitask – listening to music while surfing the Web or instant-messaging friends while playing a video game.

However, as Dr. Michael Wesch points out, although today's students understand how to access and utilize these tools, many are used for entertainment, and the students are not truly media literate. Read the section below on Web 2.0 and new social communities. Dr. Wesch shows us how to use the tools to enable our students to become genuinely media literate as they function in an online collaborative, research-based environment – researching, analyzing, synthesizing, critiquing, evaluating, and creating new knowledge!

Web 2.0 and new Social Communities

Dr. Michael Wesch, a member of the Advisory Board for 21st Century Schools, made a global impact on August 2, 2008, when his presentation at the American Library of Congress (on June 28), *An Anthropological Introduction to YouTube,* was featured on YouTube. In this presentation, Dr. Wesch opens our eyes to the phenomenon of new social communities and to the classroom use of many recently developed Web 2.0 tools such as Jott, Twitter, YouTube (there is also TeacherTube, SchoolTube, and StudentTube), Diigo, Google Earth, and many more.

Dr. Wesch demonstrates how media production and Web 2.0 applications are essential tools in education. These tools are necessary for the study of new social communities as well as learning authentic, 21st-century media literacy. He takes the tools of Web 2.0 beyond the everyday use of entertainment to essential understandings of the world. It is the 21st-century way to learn and apply critical 21st-century skills.

"**School", "Teacher", "Learner" and "Curriculum" for the 21st Century**

How should education be structured to meet the needs of students in this 21st-century world? How do we now define "School," "Teacher," "Learner," and "Curriculum"?

Schools in the 21st Century will be laced with a project-based curriculum for life aimed at engaging students in addressing real-world problems, issues important to humanity, and questions that matter. This is a dramatic departure from the factory-model education of the past. Finally, it is abandoning textbook-driven, teacher-centered, paper and pencil schooling. It means a new way of understanding the concept of "knowledge," a new definition of the "educated person." A new way of designing and delivering the curriculum is required.

Let us have a glance over the new definitions for "School," "Teacher," and "Learner" appropriate for the 21st Century:

Schools: will go from 'buildings' to 'nerve centers,' with walls that are porous and transparent, connecting teachers, students, and the community to the wealth of knowledge that exists in the world."

Teacher: From primary role as a dispenser of information to the orchestrator of learning and helping students turn information into knowledge and wisdom.

The 21st Century will require knowledge generation, not just information delivery, and schools will need to create a "culture of inquiry."

Learner: In the past, a learner was a young person who went to school, spent a specified amount of time in specific courses, received passing grades, and graduated. Today we must see learners in a new context:

So, imagine a school where the students are so excited about school that they can hardly wait to get there. Imagine having little or no "discipline problems" because the students are so engaged in their studies that those problems disappear.

Imagine having parents calling, sending notes, or coming up to the school to tell you about the dramatic changes they are witnessing in their children: newly found enthusiasm and excitement for school, a desire to work on projects, research, and write after school and on weekends. Imagine your students making nearly exponential growth in their basic skills of reading, writing, speaking, listening, researching, scientific explorations, math, multimedia skills, and more! It is possible. It has happened and is happening in schools across the country. Moreover, there is growing evidence of schools everywhere having the same results when implementing a 21st-century curriculum.

What is the 21st-century curriculum?

The twenty-first-century curriculum has specific critical attributes. It is interdisciplinary, project-based, and research-driven. It is connected to the local, state, national, and global communities. Sometimes students collaborate with people around the world on various projects. The curriculum incorporates higher order thinking skills, multiple intelligences, technology and multimedia, the multiple literacies of the 21st Century, and authentic assessments. Service learning is an essential component. The classroom is expanded to include the greater community. Students are self-directed and work both independently and interdependently. The curriculum and instruction challenge all students and provide for differentiation.

The curriculum is not textbook-driven or fragmented but is thematic, project-based, and integrated. Skills and content are not taught as an end in themselves, but students learn them through their research and application in their projects. Textbooks, if they have them, are just one of many resources. Knowledge is not memorizing facts and figures but is constructed through research and application connected to previous knowledge, personal experience, interests, talents, and passions. The skills and content become relevant as students require this information to complete their projects. The content and basic skills are applied within the curriculum and are not ends in themselves.

Assessment moves from regurgitating memorized facts and disconnected processes to demonstrating understanding through application in various contexts. As is self-assessment, real-world audiences are an essential part of the assessment process.

Integrating technology resources

First, technologies are not an end in themselves; they are tools students use to create knowledge and create personal and social change. There should be full access to technology. If students do not have computers or internet access at home, we will find a way to provide them. If we can, we will obtain laptops for every student and Teacher. Buildings will need to be wired in such a way that students can access their files, as well as the Internet, from anywhere in the school. Various labs and learning centers should be set up around the campus.

As an example, a small school district in western Arkansas had a technology lab that would be the envy of many universities and corporations. It had half a million dollars worth of equipment and software, absolutely state-of-the-art, and the school did not have to invest any money. They were only required to create a space to set up the lab and provide one full-time Teacher. Students use this lab to do everything from architectural design to filmmaking to creating virtual reality programs on various topics. For example, a group had made a field trip to NASA in Houston. They filmed what they saw, and when they returned, they created a virtual reality program for the other students in the district to use to "visit NASA"!

Here we expected the Teacher to be an expert in these areas but found that she did not know how to use most of the equipment and software. The students had taught themselves using nothing more than some manuals and some online technical assistance. It seemed that the students were naturally inclined to understand, understand and work with these technologies, ad thee were highly motivated to learn them. Moreover, these were students in a tiny, low-income, rural district! So we believe there are resources available that will eventually allow us to create these opportunities for all schools and children.

So, Let our Class be The Global Classroom

Every day students from countries all over the world collaborate on essential projects. The website, ePals, is a site where teachers and students can join or start a collaborative project with anyone worldwide. According to ePals, Inc... Award-winning School Blog™ and School Mail™ products are widely used and trusted by schools worldwide." As we can have from our own experiences, media, university research, and as was demonstrated in the Did You Know? Video, technologies, especially the Internet, have resulted in a globalized society. The world is now "flat." Our world has been transformed and will continue to change at ever-increasing rates.

To be prepared to navigate this 21st-century world, our students must become literate in 21st-century literacies, including multicultural, media, information, emotional, ecological, financial, and cyber literacies. Collaborating with students worldwide in meaningful, real-life projects is necessary for developing these literacies. Students can learn that through collaboration, not competition, they can work together to make the world a better place. Students will use technologies, including the Internet and global collaboration, to solve critical issues.

To meet the above said after school also Matters.

A new study by Catalyst and the Women's Studies Research Center at Brandeis University shows that the workplace productivity of U.S. parents suffers when they are worried about what their kids are doing after school. 2We need more after-school programs. We need after-school programs that meet the needs of

21st-century students. What are those needs? What possibilities exist for designing such programs? How can we create programs that are fun, motivational, and educational?

"No one believes that children stop learning when the bell rings at the end of the school day. Curiosity bubbles inside children's minds from when they wake in the morning to when they go to bed at night." 3 Our challenge is to encourage, connect, and foster learning throughout a child's day. How do we help children make sense of all the information and experiences in their lives? How do we ensure that all children have opportunities to reach their full potential in a competitive world where thinking skills are the most critical asset of society?

How can we extend the learning throughout the day for all children? Part of our task is collaborating with the steering committee, parents, students, and community members to work toward designing programs that will meet these needs. There are many possibilities: internships, various clubs such as photography, gardening, writing, bicycle building, computer repairs, the arts, sports, culinary arts, creating student-run businesses (entrepreneurship), and many more.

Conclusion

We believe that when many parents and educators are introduced to the paradigm of education in the 21st Century, it is so foreign to them that they automatically reject it - and angrily! We are attempting to create a massive change in our society. This effort brings to mind the title of the book "**Teaching the Elephant to Dance**" by James A. Belasco, Ph.D. It is a book about creating change in organizations (business and industry) to cope with the changing world of the 1990s. When we think of the enormous task before us -the image of a "slow, ponderous pachyderm" comes to mind.5

Dr. Belasco explains that elephants are trained to stay in one place, through conditioning, with nothing more than a bracelet around one ankle - attached to nothing. However, if the tent catches fire, and the elephant smells the smoke and sees the flames, the conditioned response is overcome, and the elephant moves. He recommends that we find a way to get people to smell the smoke and see the flames - without actually burning down the tent. Teaching this elephant to dance will be a significant endeavor. It will have to encompass everything from teacher education and executive education programs at universities to in-service and continuing professional development for educators to educating everyone else.

References

Kellner, Douglas; *New Media and New Literacies: Reconstructing Education for the New Millennium*

Grant, Jodi, Director of the After School Alliance; *Fourteen Million Kids, Unsupervised*

McLeod, Scott, Dangerously Irrelevant

Time, Learning and Afterschool Task Force, *A New Day for Learning*

Belasco, James A., *Teaching the Elephant to Dance*, 1991

Wesch, Michael, Ph. D. See his works at Digital Ethnography. (separate footnotes to be added for each web page and video cited)

Baird, J. R. & Mitchell, I. J. (1986). Improving the quality of learning and teaching: An Australian case study - The PEEL Project. Melbourne: Monash University Printery.

Baker, J. H., 2003 "The Learning Log," Journal of Information Systems Education

Bartle, R.A., 2004, Designing Virtual Worlds, New Riders Publishing, Indianapolis, IN.

Dickey, M.D., 2003, Teaching in 3D: Pedagogical Affordances and Constraints of 3D Virtual Worlds for Synchronous Distance Education, Distance Education, 24(1)

Lombardo. T., 2007, The Pursuit of Wisdom and the Future of Education [Electronic Version], retrieved, 28, May 2007 from http://www.mcli.dist.maricopa.edu/dd/wisdom05/pursuit_of_wisdom.pdf.

How to cite this article?

Prof. P.Rajendra Karmarkar & Kandi Dharma Kumar, "Teacher Development: Integrating Technology to Meet the Needs of 21st Century Learners ", Research Journal Of English(RJOE)7 (2), PP: 372-378,2022, DOI: http://doi.org/10.36993/RJOE.2022.7.2.50