In the digital age, students have the ways, means, and speed to gather any information they want. But they need your guidance more than ever. Discover how digital technology is actually changing students' brains. Learn why this creates new obstacles for teachers, but also opens up potential new pathways for learning. You will understand the new realities of teaching in a world filled with ipods, smartphones, and the Internet. Computers are everywhere, and they are transforming the human world. The technology of computers and the Internet is radically changing the ways that people learn and communicate. In the midst of this technology-driven revolution people need to examine the changes to analyze how they are altering interaction and human culture. The changes have already permeated societies around the world, altering learning, teaching, communication, politics, and most aspects of human interaction.

Keywords: Brain-based Teaching, Digital classroom and 21st Century

Introduction

It is critical that teacher’s prepare today's students with the executive function skill sets they will need for success in the globalized, information explosive, and ever-expanding technologically progressive 21st century. Just as certain is the continued accountability by educators to teach the over-packed curriculum in the existing standards. Our education era has put forward new theories and approaches to eliminate the limitation of the traditional way of learning and to improve the quality of instruction. Constructivism, multiple intelligence, active learning, inquiry-based learning, problem-based learning, project based learning etc. are some of the new approaches.

The biggest challenge our country facing today in the field of education is not only education expansion and universalisation of education but to improve the quality of education. To overcome this major challenge, teachers play a vital role. Teachers should plan for a new innovative step where they can promote the quality of 21st century learning. Students’ active participation in the teaching learning process is another factor for the improvement of the quality of education. For this, we should apply those techniques in our
teaching learning process which create interest among the pupil. In other words, the process should be pupil centered rather than teacher centered.

**Brain Based Teaching Approach**

Brain-Based Teaching Approach is one such learner centered and teacher facilitated approach that utilizes learner’s cognitive endowments. It is based on the brain-based learning principles. This approach is believed to boost learning due to its holistic approach towards the learners. It is an approach of learning which favors the brain’s best natural operational principles, with the goal of attaining maximum attention, understanding, meaning, and memory. It is defined as any teaching technique or strategy that utilizes information about the human brain to organize how lessons are constructed and facilitated with emphasis placed on how the brain learns naturally. The Brain Based Teaching approach is a strategy implemented based on the Brain Based Learning Principles developed by Caine & Caine (1991, 2003) via three instructional techniques, relaxed alertness, orchestrated immersion, and active processing associated with these principles. Caine and Caine (1991) have pointed out that brain research establishes and confirms that multiple complex and concrete experiences and essential for meaningful learning and teaching.

**Engaging the brain in a digital classroom**

In the digital age, our students have the ways, means, and speed to gather any information they want. But they need our guidance more than ever. Studies indicate there are benefits to using personalized digital devices in the classroom, whether or not these benefits raise grades or test scores or even engage students in higher levels of thinking and learning. Therefore, building an emotional climate within the classroom is a key component of brain-based learning strategies. Facebook, Instagram alone provide students opportunities to digitally connect outside of the classroom. Students need opportunities to build both face to face and digital relationships within the context of the classroom as well. The first step is establishing a virtual presence for our classroom.

**Classroom Website**

In its simplest form, this could mean setting up a classroom website that students can access both inside and outside of school. On the website, you can post information relevant to students and parents, such as homework assignments, or a calendar with important school dates and deadlines. Your website can also be more sophisticated, with pages for each unit of
study where you can post assignments, study guides, or links to digital resources for your students.

**Classroom Blog**

A more interactive option for creating a digital presence for your class is to establish a classroom blog. This can be done using a number of free online resources. Using this strategy, one can actually have a digital dialogue with our students about classroom content and assignments. Students can have conversations online about everything from specific course content to a team project they may be working on. One can even link the blog to our classroom website for our students.

**Text and Email**

Depending on the age of your students, and the resources they have available, texting or emailing is another option for creating a digital classroom presence to develop relationships with your students. Typically your school will provide you with an email address, but you can also create a Gmail address or use services such as Google Voice to be able to send and receive texts from your students.

**Cloud Computing**

Today's class work means starting a report at school and finishing it at home. It requires switching seamlessly between the Chrome book in the classroom and the student's personal PC. It means sharing a report with team members without worrying that you don't have email addresses or they can't read the format you published in. Cloud computing makes all that happen. It's accessible from anywhere with Internet or WiFi, on any device, by whoever you give access. Students need to understand how cloud computing works and which 'clouds' are used by their school.

**Virtual Collaboration**

Student study groups used to be hindered by finding a time that worked for all participants, agreeing on a meeting place, and then actually getting there. Virtual collaboration has none of those problems. Documents can be shared with all stakeholders and accessed at will. Many digital tools like Google Apps allow students to collaborate on a document from separate personal devices.

**Conclusion**

Unlike traditional methods of schooling, which is often said to inhibit learning by ignoring the brain’s natural learning processes, the Brain Based Teaching Approach is
believed to boost learning due to its holistic approach towards the learners. The role of teachers is to provide the appropriate classroom climate, which emphasizes on instructions that accommodate how the brain learns, that will enhance brain functionality in processing and constructing data properly, according to the individual learner’s level. This approach provides a positive environment for the students to learn effectively which will result in boosting their academic achievement. Brain based teaching approach enhanced learning by enriching an emotional climate in the classroom. It is purely learner centered and teacher facilitator approach. This approach helps to maintain good working relationship with teachers and students and making learning meaningful and a joyful experience.

References