

# Chapter 1

## Use of Technology to Motivate Students

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### EXECUTIVE SUMMARY

*A middle school teacher proposed that since students these days are more at ease with technology due to the excessive use of technology gadgets in their lives, why not make the best use of technology by way of electronic whiteboards to engage students? This brought about some changes in this inner city school which had failed the state Annual Yearly Progress (AYP) report more than once. However, was the sudden surge in student motivation the result of the novelty effect or the Hawthorn effect? And might that surge in student motivation soon fade away?*

### BACKGROUND INFORMATION

In urban neighborhoods where education is generally not viewed as life-transforming training, but instead as free daycare, teaching can be a daunting task. And if there is a huge pressure place on teachers by administrators to either perform or perish, the challenge becomes even more pronounced.

One such inner city school, which has failed the state Annual Yearly Progress (AYP) report for the last 3 years, is Elm Middle School. Some of the main reasons for failing AYP standards have been low math and reading results combined with other non-evaluative contributing factors such as; lack of parental support, poor student attendance, and low student motivation in classrooms. Although several

DOI: 10.4018/978-1-61350-492-5.ch001

useful teaching strategies have since improved the student results last year, the school has miles to go before it can be counted as a success by the community and school district leaders.

The teachers of Elm Middle School work very hard. They stay late in the afternoons to teach after-school tutorials. They attend on Saturdays to help struggling students. Miss Villarreal, a math teacher, asked the following question in a faculty meeting: “Even though it is true that we all work hard, do we work smart enough?” Miss Villarreal proposed that since students these days are more at ease with technology due to the excessive use of cell phones, IPODs, video games, Internet, and many other electronic devices, why not make the best use of this untapped resource.

It just so happened that teachers at Elm Middle School were lucky to have the school district recently purchase 10 electronic whiteboards for the school along with LCD projectors and laptops. The proposal of Miss Villarreal seemed a perfect solution for the problem.

The main focus for this case study was to observe the change in students’ attitudes towards learning as Miss Villarreal implemented activities via electronic whiteboards.

## **THE CASE**

Miss Villarreal had been teaching for five years total, all of it at Elm Middle School. When she joined the school, the average passing rate of math students was just 40%. As a result, a lot of solutions were tried. The teachers were asked to tutor struggling students after school, use peer tutoring in classes, and make classroom lessons more engaging. Although learning results significantly improved, the AYP expectations also increased, and the school is still considered barely “acceptable” by state standards. There was nothing left that teachers had not tried in their attempt to increase the students’ engagement in their studies. Of course, despite the teachers’ efforts, school administrators acknowledged the students’ responsibility to learn and be focused in the classroom.

Teachers in Elm Middle School made up the term “student visitors” to refer to the unmotivated student groups who just came to visit the classroom—rather than to learn any subject or skills—to chat with their friends without bringing their needed classroom supplies. A high percentage of students on campus comprised the unmotivated “student visitor” group.

Miss Villarreal took the initiative of introducing the electronic whiteboard in her math classroom. She understood that it was imperative to involve students in the use of the technology. When these students come to class loaded with electronic gadgets filled with music, videos, games—and no parental control—it becomes difficult for them to listen to a teacher standing in front of a blackboard giving a lecture

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