

Improving Achievement With Digital Age Best Practices

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Preface

We live in a results-now world. Seldom do we hear about a football coach, school administrator or a business CEO maintaining their job tenure without demonstrating both immediate and measureable results impacting the bottom line. Imagine well-known figures, such as IBM's CEO Louis Gerstner, who posted an average net profit of \$5.8 billion from 1994 to 2002, losing his job after his first year as CEO for generating a modest end-of-year profit of \$3 billion in 1994.

School systems are notorious for following a similar modus operandi. The craze to bolster test scores often forces schools to expend the majority of available funding as well as their collective focus to this single purpose at the detriment of other competing initiatives (e.g. 21st Century Skills, differentiated instruction, student-directed learning environments). Employing a one-size-fits-all mentality to increase student achievement may achieve limited short-term success, but its long-term ramifications often result in school systems, especially those within an urban setting, repeating a vicious cycle of continuous remediation.

Technology Use Practices

The heavy investment that schools spend on digital tools and resources (e.g. laptops, interactive whiteboards, mobile devices) in the United States alone exceeds five billion dollars annually, yet seldom are technology solutions factored into any viable equation for improving student academic achievement. In fact, the pervasive use of digital tools in P-12 classrooms has not changed dramatically during the past two decades.

As it stands, the instructional focus emphasises content understanding and supports mastery learning and direct instruction. Student learning focuses on lower levels of cognitive processing (e.g. Bloom levels – remembering, understanding, applying; Webb’s levels – recall and reproduction, working with skills and concepts). Digital and/or environmental resources are used by students for extension activities, enrichment exercises or information gathering assignments that reinforce lower cognitive skill development relating to the content under investigation.

Digital Age Best Practices

How can school systems leverage their available digital tools and resources, curriculum initiatives and limited local, state and federal funding to achieve academic success in their schools? There is no single variable responsible for any school system’s turnaround. Achieving success on all fronts of the curriculum and instruction spectrum requires a synergistic effort to maintain a high degree of fidelity to a common set of principles over the course of a lengthy period of time. These common principles are what I refer to as Digital Age Best Practices. These best practices include:

- **bolstering purposeful inquiry through student questions,**
- **promoting shared expertise with networked collaboration,**
- **personalising and globalising content by making authentic connections,**
- **accelerating individual growth through vertical and horizontal differentiation,**
- **anchoring student learning with digital age tools and resources,**
- **clarifying student understanding with formative assessments, and**
- **implementing student-centred learning environments.**

The term *digital age* is used judiciously to signify a set of classroom best practices that (a) can be seamlessly expanded when used in conjunction with digital tools and resources (e.g. mobile devices, interactive whiteboards, digital responders) and/or (b) apply the principles of 21st Century Skills (e.g. critical thinking and problem solving, communication and collaboration).

The use of the Digital Age Best Practices provides a solid foundation for instructional decision making while supporting other school initiatives, such as new teacher evaluation systems, classroom walk-through protocols, academic benchmarking, differentiated instruction, technology integration and “conventional” best practices in the classroom.

Can school systems designated as low achieving according to state and federal guidelines achieve academic excellence? Exemplars do exist that document the efficacy of Digital Age Best Practices, strategic team building, flexible professional development and shared accountability to bring forth such dramatic improvement.

A Different Approach

This book chronicles how one urban school district, Atlantic City Public Schools, overcame institutional inertia, poverty and gang violence to elevate student and teacher performance with dwindling federal and state financial resources through a common set of best practices known as Digital Age Best Practices. These best practices, however, are not limited to an urban setting but flourish equally well within any P–12 school system. Collectively, they can help transform static, didactic bastions of information processing into vibrant learning communities without the need for additional spending. The Digital Age Best Practices can provide value-added benefits to schools that have already invested heavily in well-conceived initiatives ranging from *one-to-x* mobile device acquisitions to a new maths adoption.

The organisation of this manuscript uses the common thread of the Atlantic City Public Schools as the backdrop to highlight both success stories as well as the obvious challenges embedded with implementing the change cycle. To this end, the book is divided into four progressive stages. Section I discusses each of the seven Digital Age Best Practices, including implementation challenges and their corresponding solutions, while Section II offers a broader perspective of Digital Age Best Practices using Atlantic City as a case study. Section III provides a specific road map that school systems can follow to retrofit the Digital Age Best Practices into their own unique teaching and learning paradigm. Section IV highlights specific characteristics required of instructional leaders in the 21st century to optimise the benefits of Digital Age Best Practices, resulting in increased student academic progress and improved classroom pedagogy.

A Word of Caution

The reader, however, should not be confused by the book's sequential organisation. The book is far from being a "how-to" instructional manual; rather, it is a guide to both tantalise and inform the reader with suggestions, illustrations, examples and strategies aimed at elevating the teaching and learning experience. The use of well-intentioned theories is kept to a minimum; instead, the book relies on pragmatic examples that have helped many classroom teachers engage seemingly disgruntled, disenfranchised learners. The enclosed collection of sample lesson plans, frameworks, implementation strategies and truisms is best utilised by readers who:

- desire suggestions based on actual experiences rather than on theoretical constructs,
- recognise that change can be a slow yet satisfying process, and
- are willing to do the work.

Yet, a word of caution is offered as you peruse the ensuing sections. *Don't be concerned about making too many changes too fast!* To paraphrase Dr Robert Marzano, even incremental change in teacher effectiveness can have a statistically significant impact on student achievement.