

## IS A SMART CLASSROOM A 'REAL SCHOOL'? INSTITUTIONAL IMPEDIMENTS TO PROGRESS

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### ***Abstract***

*This article attempts to interpret the historical background for the creation of the 'real school' as a basis for explaining why educational reform fails. It frames the discussion around the practice of using technology in the classroom, and discusses the possible reasoning behind the impediments that may preclude the inclusion of technology in the classroom to assist reading instruction. Finally, this article presents the author's interpretations of the impact of institutionalization in regard to smart classrooms.*

***Keywords:*** educational politics, legislative action, educational change, institutionalism

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The use of technology in the classroom is nothing new. As a matter of fact, the use of technology in the classroom can be traced back to the 1920s when radio was first introduced as a teaching tool. It was often referred to as "textbooks of the air" (Cuban, 1986: 19). Three decades went by before television replaced radio in the early 1950s (Cuban, 1986). Interestingly enough three more decades came and went before the arrival of the personal computer in the mid-1980s; which led televisions to be mainly used at home, while desktop computers were mostly found in school computer labs (Cuban, 2001; Tyack & Cuban, 1995).

Everett (2010), who traced the history of computer development and the use of computers in the classroom, believes that the early 1990s was the beginning of a rapid era of technology and computer development, as well as one that led to a wider use of computers in the classroom. This phenomenon was marked by the period of fast expansion and adoption of the Internet from 1997 through 2007 (Everett, 2010).

It may sound antiquated to consider the use of radios, televisions, or even some desktop computers in a twenty-first century classroom. In this century of rapid development, students, teachers and parents are constantly bombarded with the need to use laptop computers, smart phones, and most recently electronic readers or electronic tablets as tools that enhance both instruction and learning. This apparent sudden wave of electronics being used in the classroom has caused many schools in the nation to displace desktop computers to storage rooms, prompting many

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experts in education to reopen the discussion as to whether technology has ever assisted learning (Cuban, 2001). It is in part this movement from stationary machines (such as radios, televisions, and desktop computers) to portable devices that suggests that the constant transition from one technology to another is a clear example that technology has yet to fully reform education.

Although technology has not reformed education, education has experienced a shift in the way technology is incorporated in the classroom. This shift however has opened the discussion that perhaps the proper and adequate implementation of technology for instruction may not be fulfilling its initial high expectations (Savage, Erten, Abrami, Hipps, Comaskey & Lierop, 2010). Savage et.al (2010) have proposed that even after decades of using computers in the classroom, for example, that there is little evidence of their effectiveness as instructional tools, or how they might serve a pedagogical purpose. Technology development is constant, as it is its daily use. Implementation of technology in the classroom is no longer an idea of a far future. Now more than ever, starting as early as kindergarten, children are engulfed in technology, and on a regular basis bring their smart cell phones, laptops, or tablets to the classroom. An example of the rapid growth of technology and its adaptation in schools is in Portland, Main where by this Fall, more than 300 kindergarten students will be using the Apple iPad to learn their A,B,Cs, numbers and even music (Canfield, 2011). This is the same city that in 2002 provided Apple laptop computers to all of its seventh and eighth graders, and that by the end of 2010 had already expanded the use of laptops to almost half of its high school students (Canfield, 2011) .

Technology has an appeal to many involved in education. Even the simplest uses of technology in and out of the classroom, have dramatically changed how information is gathered, processed, and transmitted; changing in its path the concept and idea of what a school really is. Therefore, this paper will attempt to analyze the historical precedents that have shaped the concept of 'school' with the introduction of instructional technology, as well as present some theories of institutionalism that could explain some of the difficulties of implementing technology in the classroom.

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### ***Introducing the concept of a 'Real School'***

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Tyack and Cuban (1995) assert that through the evolution of education, schools have remained similar in how they have operated. The authors add that this constant preservation of how things are done has through time become the features that most of the public, some educators and most students consider to be what constitutes the "real school." Tyack and Cuban (1995), state that teachers have come to recognize that routines and established institutional forms are easier to follow than experimental methodologies of instructing and learning. Teachers and students expect certain fixed customs that define school. When a student spends

every day in the classroom for several years, it becomes more difficult to accept changes in instruction. It is also difficult for teachers to accept change in the way they instruct after spending countless numbers of hours preparing for classes. As Tyack and Cuban (1995) believe, this repetition of institutionalized procedures becomes cemented in the construct and identity of a 'real school'.

Many could come to consider the 'real school' as a collective agreement for the predisposed establishment of schooling. However, Tyack and Cuban (1995) argue that instead, the 'real school' has been held in place because of "unexamined institutional habits and widespread cultural beliefs" (88) of those who believe in what constitutes the 'real school.' The traditional acceptance of what is a 'real school' has also played a crucial role in educational reform, as the measuring stick for success. The authors propose that the shift between the nongraded one-room country school to the graded school is an example of how a simple institutional reform became engraved in the fabric of education, and in the minds of teachers, students and parents. Once schools were divided into different grades, people began to consider "distinct grades as emblematic of a 'real school'" (Tyack & Cuban, 1995: 91).

The 'real school' however has had its share of opposition. Several reforms have come along that have challenged the core of what the 'real school' has come to signify. Such reforms include the Dalton Plan, the Eight Year study, the School of Tomorrow, the Open Classroom (Tyack & Cuban, 1995), and most currently the Smart Classroom reform. Nevertheless, history has demonstrated that these reforms have come and gone, and that as soon as they are deemed a failure, the collective consciousness of the public goes back to pointing out their failing in terms of their lack to follow the principles of the 'real school.' In a way, the failure of educational reforms needs to be extrapolated not directly from their dissimilarities with the concept of a 'real school,' as much as from the reasoning behind the persistence of the grammar of schooling.

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### *How the Grammar of Schooling Persists*

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Teachers, students and the public do what they already know how to do best. This means that performing daily routines in a structured manner reinforces the ideas that schools are run the way they have always been run. This practice may be perpetuated in any school, at any time, in any state in the country. Thus, the common practice of schooling becomes a tradition that is performed by many. To better understand this, consider the practice of reading instruction during the early years of elementary schooling.

In a recent article dealing with reviving reading, Scherer states that "after a decade or more of concentrating on the best ways to help students learn to read, we have come to see the necessity of refocusing on helping students read to learn" (2010:

5). This assessment is confirmed in a study performed by The Annie E. Casey Foundation titled *Early Warnings: Why Reading by the End of Third Grade Matters* (2010), which states that “up until the end of third grade, most children are learning to read; beginning in fourth grade, however, they are reading to learn” (9). According to the report, the issue of not reading at grade level by the time children reach fourth grade becomes even more troubling, since research has demonstrated that: 1) half the printed material in fourth grade is virtually “incomprehensible” to poor readers; and 2) that those children who struggle to read during third grade, will continue to struggle throughout high school (The Annie E. Casey Foundation, 2010).

A possible issue that contributes to students’ difficulties with reading during third grade is the “emphasizing [of] phonics instruction without embedding it in the context of real reading” (Shagoury, 2010: 64). This instructional practice of phonics in the early school years has been reinforced for years, and despite research that suggests that it is not correctly implemented, it continues to occur.

Shagoury also adds that reading comprehension is reduced when so much emphasis is placed on teaching decoding in the early years, making students “parrots” of text (2010: 64). Yet, documents such as the California English Language Arts content standards for public schools continues to emphasize that decoding be done independently from context in the early years. Thus even if teachers wanted to modify instruction to fit their struggling reading students’ needs, they would be in direct contradiction to the established institutionalized rules about what needs to be taught in the classroom.

On the other hand, even students who read at grade level during third grade experience transitional difficulties when moving to the fourth grade. As Gutshall (2009) observes, there is a major shift that occurs between third and fourth grade that is not necessarily related to reading issues, but more directly connected to the fact that students in third grade go from a classroom environment that is nurturing to the students’ needs, to a classroom that focuses more on teaching content.

Miller reinforces the argument by stating that when students are identified as “struggling readers early in their education, they continue to receive reading intervention and tutoring throughout their school lives” (2010: 31), and in many cases, are not able to catch up to their peers. The further the students get in their schooling, the more the label is etched in their consciousness. This however, is not necessarily their fault. As Tovani points out: “we [instructors] have inadvertently given many struggling readers the message that no one believes they can or will read in school” (2010: 26). Struggling readers (or poor readers) struggle to read mainly because they lack the confidence to attempt to read in the first place. Tovani (2010) continues the argument by proposing that perhaps having reasonable expectations and “providing scaffolding with strategic instruction” (26) can help

students develop the level of confidence necessary to make progress. It is this need to progress that brings the impediments of institutionalism to the surface, as many schools are attempting to implement technologies that can assist struggling readers reach reading proficiency. Although technology alone is not the solution to the issue of reading, it is pertinent that it be considered as an alternative to help students develop the confidence they require to help themselves progress in reading. Students who use technology, in or out of the classroom, already display mastery of the technology through its use. If this is true for the use of technology, could that same principle be applied to the enhancement of their reading skills?

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***Institutionalism as the Road Block to a Smart Classroom***

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Reading instruction in the primary grades has changed over the years in hopes to effectively help children reach reading proficiency. This idea of reading proficiency, also known as reading at grade level, has been influenced greatly by the introduction of multiple techniques and strategies aimed at isolating individual components of reading. However due to institutionalized rules about instruction and outcome assessments, schools have yet to find the appropriate technology that satisfies their instructional needs. This could be attributed to the fact that most technologies are not created with the purpose of their applicability to educational settings. Also, the contracting of third party businesses that provide products that promise a solution to educational deficiencies, places technology use in the classroom in a self-fulfilling prophesy path of failure; a path that has already been legitimized by internal labor of division among teacher that use and teacher that do not use technology in their classroom.

Meyer and Rowan (1991) state, a prevailing theory of institutionalism deals with the increased complexity of internal relations and labor division due to technology use. Within this complex internal relationship of labor division, Meyer and Rowan (1991) propose that creation and implementation of rules also plays an important role in legitimizing institutionalism. This dependence on rules has solidified the perception that a good organization runs well when more rules are implemented. A formal institution then, according to the authors, is one that is defined by well-structured rules and that is driven by desire to increase outcomes based on the execution and following of those implemented rules.

How this formal institutionalized rule system applies to education is documented in the California English and Language Arts content standards, as they are drafted in terms of “must-do” and “must-follow” requirements to guarantee proper and adequate education. However, when it comes to reading instruction, it is this strict institutionalization of instructional rules that has made it virtually impossible to allow fluid and self-supported instructional reading technology to thrive in the classroom. The use of reading technology in the classroom allows students to work independently or in small groups, while allowing the teacher to roam around and

pay more attention to struggling readers. Unfortunately, most schools see this free-flowing semi-independent practice as directly opposed to the requirements set forth by state boards and school boards of how much time students can spend working independently, and how much time teachers are allowed for working with students lagging behind. In a way, using technology in the classroom could be seen as a practice that would have thrived during the Dalton Plan years of education.

Meyer and Rowan (1991) provide a helpful insight into the success of formal organizations when these organizations implement, coordinate and control activities that are critical for its success. In other words, the institutionalization of schools as formal organizations with structures, rules and measurable expectations becomes the feeding cycle in favor of what the public has come to accept as the 'real school'. Perhaps the fact that a 'real school' is structured and predictable, plays a crucial role in providing another possible explanation of why smart classrooms have yet to become part of the institution.

Furthermore, Meyer and Rowan (1991) propose that the function of institutionalizing technologies in the organization for example has become a myth, as technologies turn to be technical procedures rather than efficient practices. It is perhaps this reliance on a legitimizing effect rather than the needs of the child that also plays an important role in preventing instructional technologies to enter the classroom. Technologies in school are often seen as a fad, or a niche among the most technically inclined teachers. School administrators often create a division between those who are able, and those who are not able to implement technology in their instruction. This differentiation between those who use and those who do not use technology in their classroom is often propagated by the propaganda that those who teach with technology somehow are better at teaching than those who do not. Thus this dichotomous organizational structure reinforces teacher, student and public perceptions that technology hinders education, rather than enhances it.

Several events can occur simultaneously within the organization that further hamper technology adoption in the classroom. One event is the possibility for teachers and administrators to be decoupled when outcomes reveal that the use of the classroom technology did not work. Another possible event is blaming organizations, in this case schools, for their attempts to be isomorphic to alleged successful schools. Such is the case of pretending to run a traditional 'real school' as an online alternative. As Scott (1987) summarizes, institutions represent regulative, normative and cognitive environments that are guided by the desire to provide meaning to social behaviors. In other words, 'real schools' have been regarded as regulative institutions that require rules and school policies to function.

With time, more normative environments developed, which promoted schools accreditation and teacher certification; helping the 'real school' become morally governed. Under the new institutionalized perception, isomorphism has become the

go-to indicator for comparing schools that implement instructional technology with the traditional 'real school'; when in fact, comparisons should not be made between the two, as those technologically inclined schools have yet to become culturally supported and conceptually correct. This failure to recognize the difference between brick-and-mortar schools constitutes the public's negative perception about schools that use technology and the 'real school'.

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### *Conclusion*

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Since its inception, education has experienced a metamorphosis that has resulted in what it currently is. These changes have come through reforms that have come and gone; and although no-single reform has been able to truly modify the way education is delivered, each attempted reform has left remnants that have become part of the current fabric of education. It is perhaps this resiliency to change that has greatly contributed to the idealization of what a real school is. Unfortunately, the constant expectation of what the next new thing will be that would attempt to reform education is met with the resistance put in place by the current organizational structure of institutionalism.

Through the historical summary presented by Tyack and Cuban, it became clear that technology use in the classroom was always introduced as a break-the-mold approach rather than an alternative to enhancing instruction. This out of the box thinking was usually framed as the contender to traditional education and therefore was often received with hesitation, as it could threaten the basic foundation of education. It is perhaps in this constant struggle between a traditional school and a school of tomorrow that any implementation of technology as instructional tools is viewed as a futile attempt to bettering education. Coupled with a legitimizing widespread acceptance of what has come to constitute the 'real school', institutionalism theories can very well explain the public's disregard toward implementing technology in the classroom.

In other words, education was built on sturdy foundations that have come to be proven as the way education should always be. Technology on the other hand, was created on ever changing models of adaption and survival. Therefore, it seems that until education is truly considered to be struggling, and whose foundations are faltering, that technology will continue to encounter resistance as a possible solution for reinforcing those foundations. Implementing technology in the classroom should go from an opportunistic business ventures model, to a legitimized component of the institutionalized organization. Otherwise, the school of tomorrow will become the school of the past.

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