Summer 2014 • Volume 80-4

The Delta Kappa Gamma Bulletin

International Journal for Professional Educators

Impact of Educational Reforms

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The *Bulletin* invites materials appropriate to the Society's Purposes: position papers, applied and/or data-based research, reviews of literature, program descriptions, and other articles on announced themes or other topics of interest to educators; letters to the editor; book and technology reviews; poetry; and graphic arts.

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(deadline is September 1, 2014)

National Board Certification • Mentoring and Coaching • Content-based/Instructional Leadership

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From the Editor

Reform is an interesting word. As a noun, it suggests "the improvement of something by removing or correcting faults, problems, etc." (Merriam-Webster). But as a verb, "to reform" leaves open to question whether the desired improvement is *externally* imposed or *internally* developed. Do outside forces, such as politicians and business people, reform education… or do educators (those who "do" education) reform–i.e., "become changed for the better"? This duality is captured in the articles in this issue focused on educational reform as authors explore changes in structures (externally imposed policies and challenges) and strategies (approaches developed within the profession) to enhance student achievement.

Wallender sets the stage as she examines past initiatives leading to one of the most recent and comprehensive educational reforms in the United States: the Common Core State Standards (CCCS). Considering the practical implications of such a reform, Giouroukakis and Cohan examine the importance of questioning as an instructional strategy across the disciplines and provide a grid that details common language supported by the Standards. Murphy and Torff consider other practical implications, arguing that simultaneous implementation of the CCCS reform and teacher-accountability reforms creates difficult and unfair circumstances for educators, both in terms of ability to impact students and in terms of job- performance evaluation.

> *"… [A]ttention to structures and strategies is important, but affirmation of the spirit of education is at the heart of true reform…"*

Responding in detail to interview questions posed by Editorial Board member Irby, Madsen and Schroeder provide insights to the implications of educational reform for leadership. One of their key ideas—that leaders must focus on building professional and social capital—is explored in more depth by Nappi, who argues for the importance of the teacher leader in the task of improving schools. In *Education Under Siege*, reviewed here by Hannesdóttir, Mortimore echoes the need for quality educators and details wide-ranging reform possibilities based on a study of international achievement.

Two articles related to technology—a powerful force for change in education—complete the focus on reform. Broussard, Hebert, Welch, and VanMetre present a case study assessing the impact of a 1:1 computer program implemented in a high school, concluding that this program inspired a transformation of the learning environment and curriculum that resulted in an exceptional organizational change. Interestingly, in her article about Net neutrality, Cook provides an alert for educators who have become comfortable with the kind of readily available Internet resources employed in the 1:1 program and other tech-based reforms. In this case, a legal reform may threaten the affordable accessibility undergirding educational reform through technology.

Finally, even as educators look to reform, familiar topics reappear. Adcock revisits multiple intelligence theory and argues its ongoing relevance and importance for educators. Smith and Herzog detail a qualitative study of the impact of retention on students—in this case, on successful high school students anticipating postsecondary education.

As ever, I believe that the articles in this issue will stimulate thought for the professional

educators who are its readers. However, I do not believe that the dual notions of structures and strategies explored herein provide the full picture of educational reform, particularly for DKG members. I would argue that we do not need to *reform* education as much as we need to *reaffirm* education. To reaffirm is "to show a strong belief in or dedication to something, such as an important idea"—and the failure to demonstrate such strong belief is what holds back educational efforts today. For those outside of the profession, participating in a culture and climate that de-values educators—by bashing teachers and administrators, by defeating reasonable school budgets, by mocking educators in the media while worshipping entertainment and sports figures—does not affirm education and undermines efforts to improve. For those within the profession, failure to affirm education occurs when we accept the view that one is "just" a teacher, shrug off political and policy involvement as too difficult, and ultimately are too timid to assert what we know are the right things to do for students. In sum, attention to structures and strategies is important, but affirmation of the spirit of education is at the heart of true reform—and at the heart of the genuine spiritual fellowship that defines DKG.

Judith R. Merz, EdD
Editor

The Common Core State Standards in American Public Education: Historical Underpinnings and Justifications

By Jennifer Wallender

The majority of the United States have adopted the Common Core State Standards (CCSS) in English Language Arts and Mathematics. Although standards are not new to the states, the CCSS initiative entails numerous changes in philosophy, curriculum, instruction, assessment, and many other areas. Understanding the justifications of the CCSS, including initiatives and legislative foundations and catalysts, is important for all educational stakeholders—and especially DKG members. In this article, the author reviews literature to synthesize four major early initiative and CCSS justifications: creating common educational standards, preparing students for college, stressing quality education for all students, and increasing rigor in schools. She analyzes past initiatives and legislation, as well as the current CCSS initiative, to show how these four justifications, alone and in various combinations, have impacted public education. She concludes that the CCSS initiative is the culmination of all four justifications.

The Common Core State Standards (CCSS) initiative will require numerous changes in philosophy, curriculum, instruction, and assessment. Educators who are informed about the justifications and past initiatives that led to the CCSS initiative will be knowledgeable and able to generate more balanced responses to this U.S. curricular reform. In particular, the key women educators in Delta Kappa Gamma can be instrumental in familiarizing the public with the CCSS initiative.

The title *Common Core State Standards* has become an atomically-charged expression that evinces high emotions from many stakeholders. It also has gained much popularity among the public. One can hardly read the newspaper or watch television without hearing some mention of the Common Core State Standards—both positive and negative.

Beginning in 2010, I was privileged to be a member of the North Dakota Common Core English/Language Arts (ELA) Adoption Committee. Our team relentlessly analyzed the current state standards against the CCSS. We also asked for input from North Dakota (and possibly other state) constituents. After weighing pros and cons, we adopted the ELA and Mathematics CCSS. At the time, I did not realize what a historic and significant change the CCSS initiative would bring. Even though I have that episodic memory, I have come to realize that I, like many educators, look forward to learning more about the CCSS.

In this literature review, I discuss the historical underpinnings and justifications surrounding the CCSS initiative. Literature was found from original government documents when possible, government Web sites, books, and peer-reviewed journals. After reading widely on historical initiatives and legislation, I synthesized four salient justifications of the foundations and catalysts of the CCSS initiative. The purpose of this literature review is to illuminate the underpinnings of the CCSS initiative and consider justifications for the creation of this new initiative. Using a historical lens to analyze the CCSS will help educators to understand how the document came to fruition and why it encompasses what it does.

Initiative Overload

Public education has not experienced a shortage of initiatives focused on improving schooling in the United States. These early initiatives had similar justifications to the current CCSS implementation. Overall, four major justifications for both early initiatives and the CCSS initiative were found in a review of literature: creating common educational standards, preparing students for college, stressing quality education for all students, and increasing rigor in schools. These four justifications impacted initiatives and legislation alone or in various combinations, but the CCSS initiative combined the four justifications to increase student academic achievement in the United States.

Three of the four aforementioned justifications formed the foundation for one of the earliest U.S. public education initiatives. In 1892, the Committee of Ten attempted to conform high school educational standards to increase rigor and prepare certain students for college (United States Bureau of Education, 1892). Not only did the Committee recommend common standards, but they also sought high school and college alignment. They urged colleges to retain high admission standards, which successively entailed increasing rigor in high schools. This early initiative, then, was similar to the CCSS with the exception of emphasizing an equal quality education for all students. That particular justification remained unmentioned until much later with the strengthening of civil rights (Independence Hall Association, 2014).

Preparing students for college and increasing rigor in schools continued as major justifications for further legislation. In 1958, President Dwight D. Eisenhower signed the National Defense Education Act (NDEA; New York State Education Department, 2009). NDEA was introduced partially in response to the Soviet Union's Sputnik launch, which caused public fear that U.S. schools were inferior to schools in the Soviet Union and, plausibly, other countries. More importantly to the future of the CCSS initiative, though, NDEA was signed in response to an earlier national goal of the President's Commission of Higher Education—to increase the number of U.S. college graduates (Russell, 1949). Thus, this legislation fused increasing rigor in American schools with preparing students for college to increase global competiveness.

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In the next historical time period relevant to the CCSS initiative, however, educational leaders diverged from rigor and college preparedness to the justification of providing quality education for all students. In conjunction with the 1965 War on Poverty and increased focus on civil rights, the federal government identified public education learning gaps of marginalized groups (Independence Hall Association, 2014; New York State Education Department [NYSED], 2009). Given the imbalanced educational system at the time, the need to provide quality education for all students advanced and impacted legislation. Through the Elementary and Secondary Education Act (ESEA) of 1965, legislators labored to make quality education available and fair to all students (United States Department of Education, 2012). Several legislative amendments of ESEA occurred, but the 1980s brought about a publication simultaneously reiterating the lack of rigor in American schools and advocating quality education for all students (NYSED, 2009).

In 1983, the National Commission on Excellence in Education published *A Nation at Risk*. This report warned that America's schools were inadequate and not globally competitive (National Commission on Excellence in Education, 1983). *A Nation at Risk* criticized "*equity* over excellence" (NYSED, 2009, p. 49) by implicitly disapproving of the nation's increased efforts toward providing a quality education for all students at the expense of lowered academic standards and achievement. One of the Commission's recommendations was to strengthen the curriculum with stronger (i.e., more rigorous) standards. This standards-based education, however, would not yet be synonymous with creating common educational standards.

The goal of increasing rigor in schools with standards and assessment dominated the administrations of George H. W. Bush, Clinton, and George W. Bush. In 1989, the first educational summit since the Great Depression met to brainstorm national performance goals (NYSED, 2009). This summit laid groundwork for G. H. W. Bush to propose America 2000, which emphasized national standards. America 2000 was never enacted, but it did carve a path for Clinton's Goals 2000 proposal, which supported states' development of standards (NYSED, 2009). Clinton also reauthorized ESEA as *Improving America's Schools Act*, which deepened the attention on standards by creating frameworks for aligning curriculum, assessment, performance objectives, and teacher training.

In 2001, President George W. Bush proposed the No Child Left Behind Act (NCLB). To show school progress, NCLB required individual states to design standards, assessments, and proficiency levels for students' academic achievement (Office of Elementary and Secondary Education, 2011). Every state, however, created a "different accountability system" (Office of Elementary and Secondary Education, 2011, p. 29) for determining proficiency levels. Allowing individual states to create standards with varying levels of proficiency left wide gaps in expectations for rigor and student achievement. For example, students relocating from one state to another experienced large gaps in educational expectations, causing frustration for administrators, teachers, parents, and students (Newman & Roskos, 2013). To remediate this issue, policymakers saw the need for creating common educational standards across the nation.

At this point, the idea of increasing rigor in schools was revisited on a global level in terms of employment opportunities. The perception that America's students were losing an academic edge to other countries also led to the international benchmarking of standards (National Governor's Association, the Council of Chief State School Officers, & Achieve, 2008). Policymakers concluded that creating common educational standards and increasing rigor in schools to prepare all students for college or career readiness in

the 21st century were vital if the United States was to strive for and surpass educational excellence. Thus came the bundling of all four justifications into a new initiative.

CCSS Origins

Addressing the diversity and range of standards enacted unequally across the United States, the Council of Chief State School Officers and the National Governors Association joined forces to design standards that were common across states (Common Core State Standards Initiative [CCSSI], 2014; McLaughlin & Overturf, 2012). Teachers, administrators, and other professionals collaborated, evaluated feedback from the public, and drafted the ELA and Mathematics CCSS (CCSSI, 2014). These disciplines were chosen for common standards because ELA and mathematics include skills necessary for all other content areas.

The ELA and Mathematics Standards express the knowledge and skills that students need in order to meet the end goal of college and career readiness for all (CCSSI, 2014). They do not, however, direct how educators should teach to meet these goals (CCSSI, 2014). All four of the justifications for prior reform initiatives—creating common educational standards, preparing students for college (or careers), stressing quality education for all students, and increasing rigor in schools—were conjoined with the creation of the CCSS. Whereas previous initiatives were enacted based on one or a combination of the justifications, the CCSS were deliberately created to encompass all four.

Of the four synthesized justifications for the CCSS initiative, rigor has gained the most attention (Fisher, Frey, & Alfraro, 2013). The standards were intended to be more rigorous by mirroring the standards of top-performing countries (CCSSI, 2014; Porter, McMaken, Hwang, & Yang, 2011). The standards were also internationally benchmarked, with an appendix providing evidence and data used in the process (CCSSI, 2014).

Voluntary Adoption

It is unconstitutional for the federal government to mandate CCSS adoption; therefore, individual states voluntarily adopted either the ELA, Mathematics, or both sets of standards (CCSSI, 2014). As an incentive, federal funding was available to states that chose to adopt the CCSS (Lavenia, 2010). Monetary incentives may have had a positive impact on the CCSS adoption in a given state, but adoption of the standards by neighboring states likely contributed to such adoption as well (Lavenia, 2010). Also, networking through various consortia could have been a factor in a particular state's efforts to adopt the standards. Lastly, a nontangible and more intrinsically-motivated benefit to adopting the CCSS may have been combining powers with the federal government to improve education.

Many reasons existed for states to voluntarily adopt the CCSS, and in fact, many states did just that. At the time of this writing, 44 states (88%) had voluntarily adopted the CCSS (CCSSI, 2014). The District of Columbia, Department of Defense Education Activity, and four territories had also adopted the Common Core (CCSSI, 2014).

Conclusion

The CCSS initiative marked a landmark curricular reform for Grades K-12 (Calkins, Ehrenworth, & Lehman, 2012). Beginning as early as 1892, many United States' initiatives and considerable legislation have been foundations and catalysts for the creation of the CCSS. Although there were many reasons for these initiatives and legislation, four salient justifications were evident in the literature: creating common educational standards,

preparing students for college, stressing quality education for all students, and increasing rigor in schools. Throughout U.S. public education history, various combinations of justifications impacted past initiatives and legislations, but the CCSS melded all four of the synthesized justifications.

The CCSS will bring philosophical, curricular, instructional, and assessment changes to public education. These standards will also bring critique and analysis. Informed educators, particularly DKG members, can generate more thoughtful and balanced discussion among stakeholders by becoming aware of and knowledgeable about the historical underpinnings leading to this momentous initiative.

References

Calkins, L., Ehrenworth, M., & Lehman, C. (2012). *Pathways to the Common Core: Accelerating achievement*. Portsmouth, NH: Heinemann.

Common Core State Standards Initiative. (2014).*Common Core State Standards Initiative: Preparing America's students for college and career*. Retrieved from http://www.corestandards.org/

Fisher, D., Frey, N., & Alfraro, C. (2013). *The path to get there: A Common Core road map for higher student achievement across the disciplines*. New York, NY: Teachers College Press.

Independence Hall Association. (2014). *U.S. History.org: History for the mind and heart*. Retrieved from www.ushistory.org

Lavenia, M. (2010). *The Common Core State Standards initiative: An event history analysis of state adoption of common K-12 academic standards* (Master's thesis). Retrieved from ProQuest. (UMI 1504007)

McLaughlin, M., & Overturf, B. J. (2012). The Common Core: Insights into the K-5 standards. *The Reading Teacher, 66*(2), 153-164. doi:10.1002/TRTR.01115

National Commission on Excellence in Education. (1983). A *nation at risk: The imperative for educational reform* (Report). Washington, DC: U.S. Department of Education.

National Governors Association, the Council of Chief State School Officers, & Achieve. (2008). *Benchmarking for success: Ensuring U.S. students receive a world-class education*. Washington, DC: National Governors Association.

Newman, S. B., & Roskos, K. (2013). Why Common Core matters: What parents need to know. *The Reading Teacher, 67*(1), 9-11. doi:10.1002/TRTR.1186

New York State Education Department. (2009). *Federal education policy and the states, 1945-2009: A brief synopsis*. Retrieved from http://www.archives.nysed.gov/edpolicy/research/res_essay_contents.shtml

Office of Elementary and Secondary Education. (2011). *Report to Congress on the Elementary and Secondary Education Act: State-reported data for school years 2003-04 to 2007-08*. Washington, DC: U. S. Department of Education.

Porter, A., McMaken, J., Hwang, J., & Yang, R. (2011). Common Core Standards: The new U.S. intended curriculum. *Educational Researcher, 40*(3), 103-116. doi: 10.3102/0013189X11405038

Russell, J. D. (1949). Basic conclusions and recommendations of the President's Commission on Higher Education. *Journal of Educational Sociology, 22*(8), 493-508.

United States Bureau of Education. (1892). *Report of the committee on secondary school studies*. Washington, DC: Government Printing Office. Retrieved from https://archive.org/details/cu31924030593580

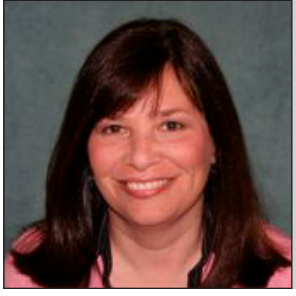
United States Department of Education. (2012). *Overview: The Federal role in education*. Retrieved from http://www2.ed.gov/about/overview/fed/role.html

Common Core, Common Language: Reforming Instructional Questioning

By Vicky Giouroukakis and Audrey Cohan

The Common Core State Standards (CCSS) for English Language Arts and Literacy in History/Social Studies, Science, and Technical Subjects have necessitated reforms that include a shift in instructional strategies, including those related to questioning. Teachers must utilize questioning in the classroom that focuses on common language for curricular development and instructional purposes. Yet, the types of questions that teachers have learned in their respective teacher-preparation programs may not necessarily align with the CCSS, with different academic terms used in each content area. As a result, teachers may be confused by the various terms used to define questioning types and the overlaps that exist. In this article, the authors present an instructional grid for questioning that is streamlined to include common language supported by the CCSS for ELA/Literacy and can facilitate teachers' development of questions across the curriculum.

A teacher is introducing a science lesson about dinosaurs and encouraging the students to consider theories as to why the creatures became extinct. What types of questions does this teacher ask? *Now imagine that the same teacher is asking the children to make predictions about dinosaurs during a reading activity on the same day.* How can this teacher generate questions and make connections across content areas—i.e., in both science and language arts—in an effort to address the new common core standards?



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Common Core State Standards: What Do They Demand?

According to the Common Core State Standards (CCSS) for English Language Arts (ELA) and Literacy in History/Social Studies, Science, and Technical Subjects (http://www.corestandards.org/ELA-Literacy/), all teachers are expected to teach reading, writing, speaking, listening, and language in their respective disciplines. This interdisciplinary approach is needed so that students

acquire the necessary "literacy skills and understandings required for college and career readiness in multiple disciplines" (National Governors' Association Center for Best Practices & Council of Chief State School Officers [NGA/CCSSO], 2010, p. 3). The CCSS provide the structure for teachers to integrate explicit, meaningful, and thoughtful questioning across the content areas.

Based on our research and experiences working with preservice and inservice teachers, we have found that questioning is one of the strategies underlying instruction that challenges most teachers. Faced with the difficult task of planning curriculum that aligns with the CCSS for ELA/Literacy, teachers are challenged to deliver instruction that includes effective questioning to advance students' knowledge of subject matter. Yet, the types of questioning that they have learned in their respective teacher-preparation programs may not necessarily align with the CCSS because different academic terms are employed in each content area (e.g., *convergent* in science and *literal* in ELA and social studies). As a result, teachers may be confused by the various terms used to define types of questioning and the overlaps that exist. The question we address in this article is *how can we align all these different terms so that teachers implementing the CCSS can understand if their questioning in a given content area aligns with the CCSS?*

Connecting Questions to the Common Core State Standards

As teachers refocus their attention to their skills in questioning, they are simultaneously trying to understand and incorporate the CCSS for ELA/Literacy into lesson planning. Preservice and often inservice teachers are asked to intensify their questioning skills to improve student understanding, incorporate common core standards, and help students make interdisciplinary connections. They need to learn how to generate questions as well as how to ensure that their questions reflect the core knowledge needed by the student learners. Quality instruction does not mean simply asking the question; it means asking the *right* type of question.

The language in the CCSS reflects desired types of questioning. These desired types of questions are referenced by varied terms in different subject areas in teacher preparation. Specifically, in ELA and social studies, three levels of questions are commonly used: *literal, interpretive,* and *evaluative*. Science questioning terms include *convergent, divergent,* and *evaluative*. In math, *mechanical, conceptual,* and *application* questions are employed. Furthermore, general theory about questions has provided educators with yet other levels of terminology—for example, Bloom's Taxonomy of Cognition (e.g., *recall, analysis*; 1956) and Lewin's (2010) categories of type I (e.g., *summarize*), type II (e.g., *analyze*), and type III (e.g., *evaluate*). In this article, we present an instructional grid for questioning that is streamlined to include common language supported by the CCSS for ELA/Literacy and that can facilitate teachers' development of questions across the curriculum.

Questioning Matters

Questioning is the basic feature underlying teaching (Mills, Rice, Berliner, & Rosseau, 1980) and one of the most effective strategies for teaching content that influences children's learning. According to Martin, Sexton, Franklin, and Gerlovich (2005), "Elementary teachers use questions more than any other teaching tool" (p. 224). As teacher candidates learn about the importance of questioning in their instruction, they often learn to construct *different types of questions* for *different content areas*. The candidates may not recognize overlaps in questioning skills. This unintended outcome may be due to the fact that

teacher-preparation programs often separate methodology classes by content area and, therefore, employ different terminology for each subject. For instance, a *literal* question may be introduced during a reading lesson while a *convergent* question is introduced during a science lesson. In fact, although named differently, these questions produce the same answer. The CCSS for ELA/Literacy not only promote students' literacy skills but also provide a common language for questioning.

Preservice teachers *do* know that questioning is foremost in developing student understanding, yet it is seldom a skill in which they are successful. As teacher educators, we first became aware of the weakness in questioning strategies when we looked at our own institutional data. Based on aggregated teaching-performance data from the education programs at our college, teacher candidates showed weakness in the questioning dimension across the content areas (social studies, math, science, and English). Teacher candidates, for instance, demonstrated minimally effective use of varied questions and techniques; their questions were a combination of knowledge level and higher order thinking types, and only some invited thoughtful response. When we examined course work for methodology classes and textbook directives on *how to* ask questions in our education programs, we found that different content-area professors approached the art of questioning in varied ways. Similarly, when doing professional development workshops for inservice teachers in the field, we noticed that subject-area teachers ask different types of questions. It appears there is little research to inform teacher-preparation programs regarding the connectedness of questioning within content areas (Frykholm & Glasson, 2005) in alignment with the CCSS.

Types of Questions

Preservice teachers are supported in developing strong and appropriate questions in teacher-preparation programs through their coursework and field experiences (Harvey & Goudvis, 2007; Marzano, Pickering, & Pollock, 2003). Within content-area classes and in general-education courses, teacher candidates become familiar with a wide variety of terminology related to questioning. However, the CCSS for ELA/Literacy provide common terminology in instructional questioning across the content areas that ensures higher level thinking.

This CCSS terminology aligns with Bloom's (1956) Taxonomy, which represents different levels of cognition and consists of the following stages of thinking: knowledge, comprehension, application, analysis, synthesis, and evaluation. According to Martin et al. (2005) and Ralph (1999), teachers must use both low or closed and high or open-ended cognitive questions. Researchers (Redfield & Rousseau, 1981; Taylor, Pearson, Peterson, & Rodriguez, 2003) have shown that gains in achievement can be expected in classrooms where teachers make use of high-level questioning (i.e., questioning at the critical and analytical levels).

Guskey (2007) offered new views on the work of Bloom as he noted, "Bloom always considered thoughtful and reflective teachers vital to the successful implementation of mastery learning and continually stressed flexibility in its application" (p. 112). By knowing the varied levels of questioning and noting the similarities across the content areas, teachers can engage students and ask the best questions at the correct level of challenge.

Questions that Could Be Used in English Language Arts and Social Studies

In ELA, teachers have often been taught that there are three types of questions that should be evident within every lesson. These are *literal* questions, *interpretive* questions, and *evaluative* questions. A literal question refers to one in which an answer is *right there* in the written work and can be easily found by children. Answering literal questions is generally considered a low-level reading skill and one that most children can accomplish quite simply.

Along the questioning continuum in ELA is the interpretive question, which requires children to *read between the lines*. Interpretive questions denote higher-order thinking skills and are often aligned with Bloom's levels of comprehension, application, analysis, and synthesis.

> *"The CCSS for ELA/Literacy provide common terminology in instructional questioning across the content areas that ensures higher level thinking."*

Last and highest on the thinking continuum is the evaluative type question that is considered a staple of published literature-based reading series. Usually found at the end of a story, this type of question requires student learners to offer their own opinions or evaluations. In addition, this style of question is often referred to as an *on your own* venture. Some examples of evaluative questions for teaching literature include *How are you similar to the character? What is your opinion of the character or events in the story? Why do you think the author wrote the story?* Teachers are quick to note that there is no right or wrong answer here and encourage children to be reflective or to connect the reading to their own personal knowledge or experiences. Bos and Vaughn (2002) similarly noted categories that help student learners distinguish between literal and interpretive questions—skills that they titled *textually explicit, textually implicit,* and *scriptually implicit*.

Questions that Could Be Used in Science

Concerned about the quality and types of questions, we looked in textbooks for those questions that support science learning**.** Orlich et al. (1994) studied the six cognitive levels proposed four decades earlier by Bloom (1956) in his noteworthy Taxonomy, and proposed three categories for questioning, thereby creating simplified stages that are helpful for teachers. The three-category system begins with a *convergent* question that helps children to focus on basic knowledge. The second stage of questioning invites *divergent* thinking, which implies that there are a number of responses or answers. Lastly, the *evaluative* question asks the student learner to offer a judgment or opinion.

Questions that Could Be Used in Math

In his math classes, Schoenfeld (1992) discussed three questions that gave students the opportunity to solve the assigned problem:

1. What (exactly) are you doing? (Can you describe it precisely?)
2. Why are you doing it? (How does it fit into the solution?)
3. How does it help you? (What will you do with the outcome when you obtain it?) (p. 63)

The first question could be labeled *mechanical* or *procedural*; the second, *conceptual*; and the third, *application*. Mechanical or procedural questions are factual questions that require simple problem-solving knowledge and the *doing* of math. Conceptual questions engage students' abstract cognition and *thinking* about mathematical concepts and processes. Application questions require students to apply their knowledge of math to the real world.

Lewin's Typology of Questioning that Could Be Used in the Content Areas

To help his students get to the higher-level thinking stage in any content area, Lewin ("From Curious to Suspicious Readers," 2010, para. 1) defined three levels of questioning connected to Bloom's Taxonomy (1956):

- Type I questions seek to understand information from the reading.
- Type II questions cause the reader to analyze, critically examine, and appraise the information presented by recognizing what is missing or only implied.
- Type III questions judge the author's position or formulate an alternative—or even contrary—hypothesis.

Lewin (2010) argued that more complex questioning (Type III questions or *thick* questions, as he called them) will help students move beyond comprehension of a text and toward inference, hypothesis, analysis, and more complex learning.

Bloom's Taxonomy of Questioning

According to Bloom (1956), there are six levels of thinking that range from lower level to higher level cognitive processes: (a) knowledge; (b) comprehension; (c) application; (d) analysis; (e) synthesis; and (f) evaluation. Students' thinking needs to be stimulated and to move from basic recall to the higher level of evaluation ("Bloom's Taxonomy," 2010). These six levels of the cognitive domain have served as a useful guide for advancing students' thinking and, with the advent of the new CCSS, can now provide a common language for effective teacher questioning across the content areas (see Table).

Table

Types of Cognitive Questions Teachers Typically Ask

Sample Verbs Used in Common Core State Standards	Types of Cognitive Questions in ELA/Social Studies	Types of Cognitive Questions in Science	Types of Cognitive Questions in Math	Types of Cognitive Questions in Lewin (2010)	Types of Cognitive Questions in Bloom's Taxonomy
Summarize	Literal	Convergent	Mechanical	Type I	Knowledge
Explain Apply Analyze Integrate	Interpretive	Divergent	Conceptual	Type II	Comprehension Application Analysis Synthesis
Assess/ Evaluate	Evaluative	Evaluative	Application	Type III	Evaluation

In summary, depending upon the content area, teachers may be constructing questions with different key terms and varied academic language. The CCSS consist of key words that reflect verbs in Bloom's Taxonomy (1956) that teachers can use as common language across the disciplines to ask a variety of appropriate questions. These questions range from low-level recall questions to higher-level thinking questions. For example, the Career Readiness Anchor Standards for Reading K-5 expect students to *read* closely, *determine* central ideas, *analyze* their development, *interpret* words and phrases, *analyze* the structure of texts, *assess* point of view, *evaluate* the argument, and *comprehend* complex literary and informational texts (NGA/CCSSO, 2010, p. 10). The Math K-6 standards expect students to *apply* arithmetic to algebraic expressions, *analyze* quantitative relationships between dependent and independent variables, *and summarize* distributions (see http://www.corestandards.org/the-standards/mathematics/grade-6/introduction/). The standards provide a common set of expectations for all subject areas that assist teachers in planning for successful instruction.

Conclusion

Preservice and often inservice teachers need help in identifying effective questioning strategies, especially across content areas. The table presented in this article is intended to equip educators with a classification system for improved questioning and to help them better understand the overlap between types of questions typically found in content areas. Our goal is to provide teachers with a clear hierarchy for understanding common academic language—reinforced by the CCSS—and thus support them as they foster successful student learning.

References

Bloom, B. S. (1956). *Taxonomy of educational objectives: The classification of educational goals*. Chicago, IL: Susan Fauer.

Bloom's Taxonomy: An overview. (2010). *TeacherVision.* Retrieved from http://www.teachervision.fen.com/teachingmethods/curriculum-planning/2171.html

Bos, C. S., & Vaughn, S. (2002). *Strategies for teaching students with learning and behavior problems* (5th ed.). Boston, MA: Allyn & Bacon.

Frykholm, J., & Glasson, G. (2005). Connecting science and mathematics instruction: Pedagogical context knowledge for teachers. *School Science & Mathematics*, *105*(3), 127-141. doi: 10.1111/j.1949-8594.2005.tb18047.x

Guskey, T. R. (2007). All our children learning: New views on the work of Benjamin S. Bloom. In A. M. Blankenstein, R. W. Cole, and P. D. Houston (Eds.), *Engaging every learner* (pp. 101-117). Thousand Oaks, CA: Corwin Press. doi: 10.4135/9781483329383.n6

Harvey, S., & Goudvis, A. (2007). *Strategies that work: Teaching comprehension to enhance understanding*. Portland, ME: Stenhouse.

Lewin, L. (2010). Teaching critical reading with questioning strategies. *Educational Leadership online*, 67. Retrieved from http://ascd.org/publications/educational-leadership/mar10/vol67/num06/Teaching-Critical-Reading-with-Questioning-Strategies.aspx

Martin, R., Sexton, C., Franklin, T., & Gerlovich, J. (2005). *Teaching science for all children: An inquiry approach*. Boston, MA: Pearson.

Marzano, R. J., Marzano, J. S., & Pickering, D. J. (2003). *Classroom management that works*. Alexandria, VA: ASCD.

Mills, S. R., Rice, C. T., Berliner, D. C, & Rosseau, E. W. (1980). The correspondence between teacher questions and student answers in classroom discourse. *The Journal of Experimental Education*, *48*(3), 194-204.

National Governors' Association Center for Best Practices & Council of Chief State School Officers (NGA/CCSSO). (2010). *Common core standards for English language arts & literacy in history, social studies, science, and technical subjects*. Washington, DC: Authors. Retrieved from http://www.corestandards.org/the-standards/english-language-arts-standards

Orlich, D. C., Harder, R. J., Callahan, R. C., Trevisan, M. S., & Brown, A. H. (2010). *Teaching strategies: A guide to effective instruction* (9th ed.). Boston, MA: Wadsworth.

Ralph, E. G. (1999). Developing novice teachers' oral questioning skills. *McGill Journal of Education, 34*(1), 29-47.

Redfield, D. L., & Rousseau, E. W. (1981). A meta-analysis of experimental research on teacher questioning behavior. *Review of Educational Research, 51*(2), 237-245.

Schoenfeld, A. H. (1992). Learning to think mathematically: Problem solving, metacognition, and sense-making in mathematics. In D. Grouws (Ed.), *Handbook for research on mathematics teaching and learning* (pp. 334-370). New York, NY: MacMillan.

Taylor, B. M., Pearson, P. D., Peterson, D. S., & Rodriguez, M. C. (2003). Reading growth in high-poverty classrooms: The influence of teacher practices that encourage cognitive engagement in literacy learning. *The Elementary School Journal*, 3-28.

Standards and Accountability in Conflict

By Audrey Figueroa Murphy and Bruce A. Torff

The authors consider two reform initiatives—the implementation of Common Core Curriculum Standards and policies holding educators accountable for student performance—and highlight research indicating that new initiatives often suppress performance in the short term as practitioners learn new procedures. Accordingly, they argue that simultaneous implementation of these reforms creates difficult and unfair circumstances for educators and that educational reform would be more equitable and effective if implemented more deliberately.

What happens when one educational reform initiative suppresses the outcomes of another, producing unfair circumstances for educators? An answer to this question is evident in the simultaneous implementation of two reform initiatives visible on the educational scene in the United States: the Common Core State Standards and policies holding educators accountable for student performance.

The Common Core State Standards

The first reform initiative involves *standards*, instantiated recently in the Common Core State Standards (CCSS; Common Core State Standards Initiative, 2010) and previously in the *No Child Left Behind Act* (No Child Left Behind Act, 2002). Standards describe what students should know and be able to do in specific grades and subjects, typically accompanied by examinations that determine the extent to which students have met these benchmarks. The CCSS are now fully or partially implemented in 45 states, the District of Columbia, and four U.S. Territories (National Governors Association Center for Best Practices, Council of Chief State School Officers, 2010).

By all accounts, implementation of the CCSS is labor-intensive and academically challenging for teachers (Eilers & D'Amico, 2012). For example, the CCSS standards in English language arts emphasize argumentative writing in which students draw on nonfiction sources to generate persuasive essays. The consequent reduction of the role of expressive writing and fiction in schools is just one of the 12 *shifts* that the CCSS implementation involves in English language arts and mathematics (Common Core State Standards Initiative, 2010). These shifts have caused many teachers to struggle to familiarize themselves with the CCSS and design new vehicles for curriculum, instruction, and assessment.

Accountability Policies

The second reform, *accountability*, is the focus of the U.S. Department of Education's *Race to the Top* program (U.S. Department of Education, 2013), which offers substantial

funding to states in exchange for implementation of policies in which teachers and administrators are held accountable for students' test results. Because educators would be evaluated on the basis of student performance, accountability policies have meaningful implications for high-stakes decisions regarding job retention and tenure. Many educators argue that accountability policies encourage teachers to teach for the test—i.e., devote instructional time to the knowledge and skills on the test, to the exclusion of virtually all else (Cizek, 2001; Ehren & Hatch, 2013; Kim & Abernathy, 2012). Such policies raise the question of how the implementation of new standards affects the evaluations used to assess the job performance of teachers and administrators.

Impact of Standards and Accountability Implemented Simultaneously

It would not be surprising if a reform initiative as far-reaching as the CCSS lowered educator and student performance in the short term. Ample evidence exists that educational interventions frequently have deleterious effects at first, as individuals strive to learn new procedures, followed by a rise in performance as fluency with the new procedures accrues (Carlucci & Case, 2013). This U-shaped learning curve has been documented in many domains, including language learning, understanding of temperature, and facial recognition (Bowerman, 1982; Carey, 1982; Marcus et al., 1992; McClelland & Patterson, 2002; Pinker & Ullman, 2002).

Implementation of the CCSS is no exception according to recent research (Murphy & Torff, in review). Because nationally normed tests linked to the CCSS have yet to be administered, it cannot be known at this time how the CCSS affect student performance; nor can it be known how the CCSS affect educator performance, because no studies have been published with objective, systematic observations of teachers' classroom behavior since the advent of the CCSS. However, available research does document teachers' perceptions of their capacity to teach effectively, drawing on a large body of research demonstrating how closely such perceptions track with actual classroom behavior (Fang, 1996). This research shows that individuals who believe they are performing well may or not be, but individuals who believe that they are ineffective almost always are. Thus, a reduction in perceived effectiveness is a reliable indicator of diminished performance.

In the wake of the implementation of the CCSS, we recently assessed teachers' perceptions of their capacity to teach effectively using a survey completed by 370 teachers in the northeastern United States (Torff & Murphy, in review). The results showed that teachers are experiencing a considerable slide toward the bottom of the U-shaped curve for teaching three different student populations. The implementation of the CCSS was associated with statistically significant declines in perceived ability to teach general-education students (t = 13.29, p < .0001), special-education

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students (t = 7.88, p < .0001), and English language learners (t = 7.43, p < .0001). For all three populations, teachers with the most experience evinced the largest reductions. The decrease in perceived classroom effectiveness was significantly greater for teaching general-education students relative to teaching both special-education students (t = -8.43, p < .0001) and English language learners (t = -8.18, p < .0001).

This pattern of decline in perceived capacity to teach effectively is to be expected, given U-shaped learning curves documented in other fields. At the same time, the results provide a troubling example of what happens when reforms are instituted with insufficient regard for how they interact. In this case, zeal to implement new standards simultaneously with full accountability may have put educators in an untenable position. While educators work toward implementing the CCSS, efforts to strengthen accountability have proceeded apace as states receiving Race to the Top funds implement the accountability mandates attached to this funding.

For example, during a single school year, New York State implemented both the CCSS and accountability policies, with unfortunate results (New York State Education Department, 2013a, 2013b). State education officials opted not to phase in the new standards gradually; rather, they required all teachers in all subjects and grades to teach according to the CCSS at the outset of the school year, with virtually no time to learn the new approach. During the same school year, state officials administered tough new tests linked to the standards. Predictably, the test results were abysmal, such that even honor-roll students received failing scores, uniting parents and educators in bitter criticism of the state's actions (Campbell, 2013; Fleisher & Banchero, 2013; Lestch, Chapman, & Fermino, 2013). Unfortunately, the officials also simultaneously implemented strict accountability policies that use student test scores and other data to rank teachers on four levels, two of which lead to possible dismissal, tenure notwithstanding (Chen et al., 2013). The state leaders moved ahead with the CCSS and new tests linked to it with regrettable haste, holding teachers accountable for student performance in a manner that jeopardizes their jobs.

Clearly this situation in New York and similar situations elsewhere lack fairness. Accountability policies might well have been delayed to allow teachers a reasonable period to learn to implement the CCSS and prepare for the tests. Reformers, well intended as they may be, have left teachers in a difficult position.

Educational Reform, Unaccountable

Perhaps the conflict highlighted in this article offers the citizenry an occasion to reflect on the two vehicles of educational reform. Will standards and accountability produce big gains, as widely assumed? The answer may never be known. Ironically, the standards-and-accountability model of educational reform is unaccountable; student outcomes are typically attributed to educator performance, not to the efficacy of the model. When test results are good, it is because educators functioned effectively; when results lag, it is because educators underperformed. As such, the current model of educational reform cannot fail—it can only be failed.

References

Bowerman, M. (1982). Starting to talk worse: Clues to language development from children's late speech errors. In S. Strauss & R. Stavy (Eds.), *U-shaped behavioral growth, Developmental Psychology Series* (pp. 101-145). New York, NY: Academic Press. doi:10.1016/B978-0-12-673020-3.50012-4

Carey, S. (1982). Face perception: Anomalies of development. In S. Strauss & R. Stavy (Eds.), *U-shaped behavioral growth, Developmental Psychology Series* (pp. 169-190). New York, NY: Academic Press. doi:10.1016/B978-0-12- 673020-3.50014-8

Carlucci, L., & Case, J. (2013). On the necessity of U-shaped learning. *Topics in Cognitive Science*, 5, 56-88. doi: 10.1111/tops.12002.

Campbell, J. (2013). *Teachers, parents criticize Common Core at state forum*. Retrieved from http://www.lohud.com/article/20131024/NEWS/310240085/Teachers-parents-criticize-Common-Core-state-forum

Chen, M., Danis, K., Fleisher, L., Juan, J., Kumanan, P., Keegan, J., …Wilberding, K. (2013). Grading the teachers. *The Wall Street Journal*. Retrieved from http://projects.wsj.com/nyc-teachers/

Cizek, G. J. (2001). More unintended consequences of high-stakes testing. *Educational Measurement: Issues and Practices*, *20*(4), 19-27. doi:10.1111/j.1745-3992.2001.tb00072.x

Common Core State Standards Initiative. (2010). *The Standards*. Washington, DC: National Governors' Association Center for Best Practices, Council of Chief State School Officers. Retrieved from www.corestandardsorg/

Ehren, M. C., & Hatch, T. (2013). Responses of schools to accountability systems using multiple measures: The case of New York City elementary schools. *Educational Assessment, Evaluation and Accountability*, *25*(4), 341-373. doi:10.1007/s11092-013-9175-9

Eilers, L. H., & D'Amico, M. (2012). Essential leadership elements in implementing Common Core State Standards. *Delta Kappa Gamma Bulletin, 78*, 46-50.

Fang, Z. (1996). A review of research on teacher beliefs and practices. *Educational Research, 38*, 47-65. doi: 10.1080/0013188960380104

Fleisher, L., & Banchero, S. (2013, August 6). National test-score declines are likely. *The Wall Street Journal*. Retrieved from http://online.wsj.com/news/articles/SB10001424127887323420604578652450468865758

Kim, J. H., & Abernathy, D. (2012). Understanding curriculum as a polyphonic text: Curriculum theorizing in the midst of standardization. *JCT (Online), 28*(1), 38-46.

Lestch, C., Chapman, B., & Fermino, J. (2013, August 7). City students' scores take dramatic plunge on new standardized tests. *N.Y. Daily News*. Retrieved from http://www.nydailynews.com/new-york/education/city-students-scores-dramatic-plunge-new-standardized-tests-article-1.1419973

Marcus, G., Pinker, S., Ullman, M., Hollander, M., Rosen, T. J., & Xu, F. (1992). Overregularization in language acquisition. *Monographs of the Society for Research in Child Development, 57*, 1-182. doi:10.2307/1166115

McClelland, J. L., & Patterson, K. (2002). Rules or connections in past tense inflections: What does the evidence rule out? *Trends in Cognitive Science, 6*, 465-472. doi:10.1016/S1364-6613(02)01993-9

Murphy, A. F., & Torff, B. (in review). *When goals conflict: Common core standards and accountability policies.* Manuscript submitted for publication.

National Governors Association Center for Best Practices, Council of Chief State School Officers (2010). *Common Core State Standards*. Washington, DC: Author.

New York State Education Department. (2013a). *Annual professional performance review.* Retrieved from www.engageny.org/tags/annual-professional-performance-review_

New York State Education Department. (2013b). *NYS P-12 Common Core Learning Standards*. Retrieved from www.p12.nysed.gov/ciai/common_core_standards

No Child Left Behind Act of 2001, Pub. L. No. 107-110, § 115, Stat. 1425 (2002). *The No Child Left Behind Act of 2001*. U.S. Department of Education. Retrieved from http://www2.ed.gov/policy/elsec/leg/esea02/index.html

Pinker, S., & Ullman, M. T. (2002). The past and future of the past tense. *Trends in Cognitive Science, 6*, 456-463. doi:10.1016/S1364-6613(02)01990-3

U.S. Department of Education. (2013). *Race to the Top Fund.* Retrieved from http://www2.ed.gov/programs/racetothetop/index.html

Interview

Educational Reform and Leadership

By Jean Madsen, Pat Schroeder, and Beverly J. Irby

This article continues a series initiated by members of the Bulletin's *Editorial Board. The goal of the series is to interview Delta Kappa Gamma members or other educational leaders on a topic related to the theme of the issue. Here, board member Irby presents responses to questions posed to Dr. Jean Madsen, Professor, and Dr. Pat Schroeder, Member of the Educational Leadership Research Center, Department of Educational Administration and Human Development, College of Education and Human Development, Texas A&M University, College Station, Texas.*

Introduction

Both Drs. Madsen and Schroeder are involved with two research interests. They believe that these two intersect with leadership and educational reforms. One area of research is the importance of professional development for principals and its implications for building school capacity. Dr. Madsen's other research area examines how school administrators address their schools' changing demographics: *Due to the changing demographics, how will schools implement educational reforms to enhance student outcomes?* They provide their thoughts on educational reform and its implications for leadership.

Irby: How do you define educational reform as it relates to leadership?

Educational reform can be defined as the outcome of the social and political forces calling for school improvement to increase learning for all students regardless of race, ethnicity, or economic status. Increased expectations and accompanying accountability challenges have implications for principals. Scholars have concurred that school leadership behavior has a significant, even if small and indirect, impact on student achievement (Hallinger, 2003; Leithwood, Louis, Anderson, & Wahlstrom, 2004; Robinson, Lloyd, & Rowe, 2008). In fact, scholars have alleged that the success of educational reforms rests on the principal's ability to implement accountability policies (Bryk, Sebring, Allensworth, Luppescu, & Easton, 2010; Leithwood & Louis, 2012). Additionally, it has been asserted that the principal's leadership should focus on building the capacity of teachers to support school improvement and increased student achievement (Heck & Hallinger, 2009; Louis & Wahlstrom, 2012; Newmann, King, & Youngs, 2000).

Given the research on the importance of instructional leadership, questions have been raised about how best to prepare principals to lead school improvement efforts. In addition, scholars agree on the need for ongoing professional development throughout a principal's career, knowing that the context of leadership is changing (Davis, Darling-Hammond, LaPointe, and Meyerson, 2005; Leithwood et al., 2004). Additionally,

planning for principals' ongoing professional development involves how principals apply their professional development (PD) experiences to their practice (Firestone & Riehl, 2005). The success of educational reforms should be aimed at how leaders improve student achievement. Therefore, the educational reform movement must include new ways of designing and delivering PD to enhance student achievement.

Based on our research, we examined how principals acquire, process, and apply learning from PD to their practice (Schroeder & Madsen, 2011; Schroeder, 2013). Findings from that work were three-fold. First, findings indicated learning in a group gave principals opportunities for interactions that facilitated learning the new material. Principals exchanged ideas, engaged in problem solving in a group, and formed supportive networks extending beyond the sessions. During the PD sessions, principals were connecting new knowledge to prior knowledge through constructivist and transformative learning processes (Daley, 2000). Principals' thinking about new research-based knowledge was also influenced by *phronesis*, or practical wisdom, gained from their experiences in their context (Halverson, 2004). Second, the research indicated that principals reflected on their PD experiences once they were back in their context of practice and contextualized new knowledge by considering their organizational structures, politics, and concern for human relations with their constituents. Third, it was suggested principals' application of new learning ranged from deeper understanding of current practices to thinking differently about some practices to small, incremental changes in practice. Thus we propose that educational reform must also include ongoing PD for leaders. Additionally, reform policies should be implemented with the understanding how educators process new learning and its connection to practice.

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Irby: What do you propose leaders can do regarding educational reform on their campuses or in their districts?

Several scholars have noted the importance of building a school's capacity for improvement. Most agree that capacity for instructional improvement is an interactive process aimed at improving teachers' professional capabilities (Bryk, Sebring, Allensworth, Luppescu, & Easton, 2010; Spillane & Thompson, 1997; Spillane & Louis, 2002). A school's capacity for improvement is multidimensional, including (a) teachers' knowledge, skills, and attitudes; (b) program coherence; (c) technical resources; (d) a professional community; and (e) principal leadership (Newman, King, & Youngs, 2000). In addition to these necessary resources, Malen and Rice (2004) suggested that there is a productivity dimension to school capacity and noted the importance of resource alignment and the hindrance of organizational fragmentation. In their study of Chicago schools, Bryk et al. (2010) found professional capacity to be one of five essential supports necessary for improving student achievement. They also found that leadership, as the number one essential support, serves as a catalytic agent for school improvement. Other scholars have referred to professional capacity as developing people and identified it as one of four core leadership practices (Hallinger, 2003; Leithwood, 2012).

We conducted a study to understand how principals carried out reform directives and then shared this knowledge with teachers (Schroeder & Madsen, 2013). It was discovered that principals were involved in developing human and social capital, building program coherence, and aligning resources. However, there were challenges of managing the educational reform chaos caused by organizational fragmentation and freneticism. Principals stated their frustrations about implementing mandates that were in opposition to instructional practices. It was suggested that principals continually relied on their perceived strengths to build school capacity. These findings suggest that principals' PD should be designed to help principals further develop leadership practices associated with building capacity for sustained school improvement

Irby: How does cultural change relate to educational reform?

Traditionally, schools in the past were more homogenous, but, with changing demographics, schools are increasingly becoming more ethnically diverse and multilingual. Districts with increasing rates of demographic growth are probably experiencing a form of organizational change. Changes brought on by diversity are unique because they have prompted schools to confront topics of race and gender (Thomas, 2008). Teachers are anxious about changing their instructional practices and have concerns about making connections to their students. Conflicts occur when teachers make judgments about students because of their stereotypical beliefs about certain racial groups. Hence, some teachers are unable to adapt their practices due to these changing demographics. When teachers' views and behaviors deviate or are perceived as being at odds, the results are little socialization and fewer professional exchanges among groups of teachers (Achinstein, 2002).

These racial differences between teacher groups play a role in establishing the emotional climate of the school. Researchers have documented the types of challenges that prevent the establishment of a professional community. Bell (2003) unearthed the many disagreements between teachers of color and majority teachers. These arguments focused on differences over instructional practices, discipline, and the degree of multicultural emphasis. Achinstein (2002) examined how demographically diverse groups of teachers

clashed over professional ideology, which resulted in teachers not trusting each other. Findings revealed that, if teachers did not hold similar beliefs about teaching students of color, they were taunted by others to change their practices (Achinstein, 2002).

Principals who lead demographically diverse schools play an important role in changing the dynamics that often occur in these contexts (Thomas, 2008). It is also acknowledged that school leaders are experiencing organizational resistance as the numbers of demographically diverse students increase. Often, in response to changing student demographics in a school, principals may take action toward teachers' perceptions about students of color. Consequently, it also becomes important to establish high expectations and reshape teachers' belief systems, so teachers can work collectively addressing students' needs. Principals who lead demographically diverse schools often face resistance by teachers who are unwilling to change their practices due to fears of letting go of familiar ways of teaching (Thomas, 2008). If principals are unable to prevent teachers' resistance to diversity-related changes, there will be continued problems of low student expectations, unfair discipline practices, and less equity in student outcomes (Bell, 2002).

Therefore, in dealing with cultural change, the focus of the leader is to create an inclusive school (Booysen, 2014; Madsen & Mabokela, 2003; Madsen & Mabokela, 2014). Mainstream or traditional theories do not take into account the understanding of the sources of conflict that occur in schools due to issues of diversity (Nkomo & Cox, 1996). Nor have these theories stressed the significance of understanding the importance of one's cultural identity and how that influences workplace relationships in completing tasks. Leading demographically diverse groups implies the management of a heterogeneous workforce in ways that guarantee the same productivity, commitment, and outcomes achieved from a homogenous workforce (Ferdman & Deane, 2014).

Leaders of demographically diverse groups require a functional integration where the leader induces followers to apply their energies and resources to a collective objective. Thus, how the leader is perceived and whether the organization has an image of being responsive to its diverse constituency are critical to the leader's effectiveness. The leader's ability to develop relationships among groups that are perceived as fair and his or her accuracy in assessing followers' needs to establish an inclusive group are critical. Once followers believe there is a sense of collectivity, then the leader must use the group's talents to accomplish goals.

Inclusive leadership is critical to addressing cultural implications occurring in schools. It drives the focus of the leader's capacity to (a) understand his or her own cultural identity and its influence on interactions with others who are racially and ethnically different; (b) create an organizational direction that responds to how the school is perceived by its diverse constituency; (c) implement a relational identity orientation to promote interpersonal cooperation and create dense and integrated networks among and between school participants; and (d) establish an organizational structure that adapts to the changing needs of diverse students and teacher participants (Madsen & Mabokela, 2005; 2014). These skills are important in any attempt to build inclusive environments because they require the leader to change his or her own behavior and to enact the processes to make cultural changes at the organizational level.

Irby: In what ways does educational reform lead to organizational change?

Changing demographics and educational reforms provide the context for organizational change in education. The focus of the high-stakes accountability movement

in this decade has been to increase learning for all students by addressing the quality and equality of educational opportunities for students. Scholars have identified organizational development as a way to approach organizational change. Organizational development focuses on managing changes by building organizational capacity (Cummings & Worley, 2009). The organizational capacity of a school is increased by developing human, social, and cultural capital (Malen & Rice, 2004). Thus, in response to increasing social and political expectations of schools, educational reforms have led to a focus on the organizational development needed to bring about organizational changes. Yet, these reforms have only minimally addressed schools' changing student population.

In response to increasing and evolving demands placed on schools, a focus on the development of principals' leadership skills needed to support excellence and equity for all students has emerged (Lumby, Crow, & Pashiardis, 2008; Young, Crow, Murphy, & Ogawa, 2009). However, a review of the PD opportunities available for experienced principals concludes there is considerable descriptive literature on programs but little evidence about the relationship of these programs to practice (Smylie, Bennett, Konkol, & Fendt, 2005).

> *"Changing demographics and educational reforms provide the context for organizational change in education."*

At the same time, the schools are undergoing cultural change where they are facing demographic changes of their student population. It seems that school reforms are not in alignment with a culturally responsive curriculum and instructional strategies needed for students of color. With changing demographics, how do leaders also establish a culture of inclusion where boundaries and rules for acceptable behavior are established? How do leaders build school capacity that involves curriculum and instructional and assessment practices? Educational reforms have necessitated the development of teachers' content and pedagogical knowledge and skills, the development of cultural understandings, and the development of school and district professional communities. A challenge to organizational change in schools, as suggested by Malen and Rice (2004), is to insure that policies mandating educational reforms do not weaken rather than strengthen a school's potential to develop capacity. Resource misalignment and organizational fragmentation and freneticism can diminish a school or district's capacity to change and improve.

References

Achinstein, B. (2002). *Community, diversity, and conflict among schoolteachers: The ties that blind.* New York, NY: Teachers College Press.

Bell, S. (2002). Teachers' perceptions of intergroup conflict in urban schools. *Peabody Journal of Education, 77*, 59-81.

Booysen, L. (2014). The development of inclusive leadership: Practice and processes. In B. M. Ferdman & B. R. Deanne (Eds.), *Diversity at work: The practice of inclusion* (pp. 296-330). San Francisco, CA: Jossey-Bass.

Bryk, A. S., Sebring, P. B., Allensworth, E., Luppescu, S., & Easton, J. Q. (2010). *Organizing schools for improvement: Lessons from Chicago.* Chicago, IL: University of Chicago Press.

Cummings, T. G., & Worley, C. G. (2009). *Organizational development and change.* Mason, OH: South-Western Cengage Learning.

Daley, B. J. (2000). Learning in professional practice. *New Directions for Adult and Continuing Education, 86*, 33-42.

Davis, S., Darling-Hammond, L., LaPointe, M., & Meyerson, D. (2005). *School leadership study: Developing successful principals.* Stanford, CA: Stanford Educational Leadership Institute.

Ferdman, B. M., & Deanne, B. R. (2014). *Diversity at work: The practice of inclusion*. San Francisco, CA: Jossey-Bass.

Firestone, W. A., & Riehl, C. (Eds.). (2005). *A new agenda for research in educational leadership*. New York, NY: Teachers College Press.

Hallinger, P. (2003). Leading educational change: Reflections on the practice of instructional and transformational leadership. *Cambridge Journal of Education, 33*(3), 329-351. doi: 10.1080/0305764032000122005

Halverson, R. (2004). Accessing, documenting, and communicating practical wisdom: The phronesis of school leadership practice. *American Journal of Education, 111*, 90-120.

Heck, R., & Hallinger, P. (2005). The study of educational leadership and management: Where does the field stand today? *Educational Management Administration & Leadership, 33*(2), 229.

Leithwood, K. (2012). Core practices: The four essential components of the leader's repertoire. In K. Leithwood & K. S. Louis (Eds.), *Linking leadership to student learning* (pp. 57-67). San Francisco, CA: Jossey-Bass.

Leithwood, K., & Louis, K. S. (Eds.). (2012). *Linking leadership to student learning*. San Francisco, CA: Jossey-Bass.

Leithwood, K., Louis, K., Anderson, S., & Wahlstrom, K. L. (2004). *How leadership influences student learning*. New York, NY: The Wallace Foundation.

Louis, K. S., & Wahlstrom, K. (2012). Shared and instructional leadership: When principals and teachers successfully lead together. In K. Leithwood, & K. S. Louis (Eds.), *Linking leadership to student learning* (pp. 25-41). San Francisco, CA: Jossey-Bass.

Madsen, J., & Mabokela, R. (March, 2014). Leadership challenges in addressing changing demographics in schools. *NASSP Bulletin, 98* (1), 75-96.

Madsen, J., & Mabokela, R. (2005). *Culturally relevant schools: Creating positive workplace relationships and preventing intergroup differences*. New York, NY: Routledge Press.

Malen, B., & Rice, J. K. (2004). A framework for assessing the impact of education reforms on school capacity: Insights for studies of high stakes accountability initiatives. *Educational Policy, 18*(5), 631-660. doi:10.1177/0895904804268901

Newmann, F. M., King, M. B., & Youngs, P. (2000). Professional development that addresses school capacity: Lessons from urban elementary schools. *American Journal of Education, 108*(4), 259-299. Retrieved from http://www.jstor.org/stable/1085442

Robinson, V. M., Lloyd, C. A., & Rowe, K. (2008). The impact of leadership on student outcomes: An analysis of the differential effects of leadership types. *Educational Administration Quarterly, 44*(5), 635-674. doi: 10.1177/0013161X08321509

Schroeder, P. A. (2013). *Connecting principals' professional development to practice: The mediating roles of context and phronesis* (Unpublished doctoral dissertation). Texas A&M University, College Station, Texas.

Schroeder, P., & Madsen, J. (2013, November). P*rincipals' responses to building school capacity: Viewed through a lens of distributed cognition*. Paper presented at the University Council for Educational Administration, Indianapolis, Indiana.

Schroeder, P., & Madsen, J. (2011). *Principals' understanding and application of professional development knowledge*. Paper presented at the Annual Meeting of the American Educational Research Association, New Orleans, Louisiana.

Spillane, J. P., & Louis, K. S. (2002). School improvement processes and practices: Professional learning for building instructional capacity. *Yearbook of the National Society for the Study of Education, 101*, 83-104. doi:10.1111/j.1744-7984.2002.tb00005.x

Spillane, J. P., & Thompson, C. L. (1997). Restructuring conceptions of local capacity: The local education agency's capacity for ambitious instructional reform. *Educational Evaluation and Policy Analysis, 19*(2), 185-203.

The Teacher Leader: Improving Schools by Building Social Capital through Shared Leadership

By Judith S. Nappi

Is a strong leader with exceptional skills the answer to the daunting task of transforming or improving schools? The author argues that, despite the documented value of skilled leadership, in today's educational and financial climate the school principal cannot go solo. School and student success are more likely to occur when distributed or shared leadership is practiced. The need to attract and retain quality teachers is another reason to extend the role of the teacher to domains outside of the classroom walls. The author focuses on distributed or shared leadership as a facet of social capital, a driving force in the success of teacher leadership.

For many years policymakers and educators alike have thought that a strong leader with exceptional skills was the answer to the daunting task of transforming or improving schools. Research has strongly indicated that the leadership of the school principal plays a critical role in the development of successful schools (Glanz, Shulman, & Sullivan, 2007; Purkey & Smith, 1983). Principals set the tone for the building, work to develop and carry out school goals, guide instruction, develop the budget, and lead the charge for student success. However, one need not look far to realize that this concept in its purest form has not come to fruition. School principals and other administrators are often expected to fix all the problems schools face, yet one might pose the question as to the feasibility of this notion; certainly Chief Executive Officers of successful corporations surround themselves with experts in a variety of fields. Skilled leadership is an important factor in school and student success; however, in today's educational and financial climate, no matter how skilled the school principal, he or she cannot go solo. School and student success are more likely to occur when distributed or shared leadership is practiced.

Distributed or shared leadership implies a more cooperative view of influence and authority and is a shift from the belief that leadership is a unique characteristic that an individual has developed. Gronn (2002) found that when people collaborate and share their efforts and base of knowledge, the outcome is greater than the aggregate of their efforts as individuals. In addition, distributed leadership increases the pool of leaders or potential leaders for an organization—in this case, a school.

Andrews and Lewis (2004) believed shared or distributed leadership to be a form of synchronous leadership where teacher leaders work with principal leaders, in different but compatible means, towards shared goals. The notion of teachers as leaders is not new,

however. In 1986, a report funded by the Carnegie Foundation for Advancement of Teaching suggested that districts denote individuals who could model teaching methodologies for other teachers. In addition, due to their daily work and interactions with students, teachers are in a prime position to make decisions regarding the teaching and learning process and apply change thoroughly and consistently (Howey, 1988; Livingston, 1992). The need to attract and retain quality teachers is another reason to extend the role of the teacher to domains outside of the classroom walls as "isolation is a primary reason that new teachers leave" (Heller, 2004, p. 6). This article focuses on distributed or shared leadership as a facet of social capital, a driving force in the success of teacher leadership.

Who Are Teacher Leaders and What Do They Do?

Teacher leaders are (usually) classroom teachers who share their expertise in myriad forms. Danielson (2006) wrote that teacher leadership is a "set of skills demonstrated by teachers who continue to teach students but also have an influence that extends beyond their own classrooms to others within their own school and elsewhere" (p. 12). Sometimes teacher leaders are formally designated as such and may have the title of *teacher leader* or another title that focuses on his or her expertise, such as *data coach*; in other instances, teacher leader is not an assigned position but a role taken on by the individual. The realm of educational leadership has been broadly researched. However, the role of teacher as leader remains largely undefined because teachers take part in varying activities and roles that involve leadership. For example, Sherrill (1999) suggested that teacher-leaders are "clinical faculty, clinical educators, teachers-in-residence, master teachers, lead teachers, and clinical supervisors" (p. 57), while Crowther, Kaagan, Ferguson, and Hann (2002) viewed teacher leaders as individuals who are "aspiring to lead school reform" (p. 5). Killion and Harrison (2006) defined ten roles of teacher leaders:

- Resource Provider
- Instructional Specialist
- Curriculum Specialist
- Classroom Supporter
- Learning Facilitator
- Mentor
- School Leader
- Data Coach
- Catalyst for Change
- Learner

All of the teacher-leader roles identified indicate that the function of teacher leader is far-reaching and varied. The identified roles also suggest that leadership responsibilities are distributed and do not rely on one individual. In addition, all of the acknowledged roles require that the teacher leader collaborate with others in order to share his or her expertise,

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thereby utilizing individual capital to develop and strengthen *social capital*. Social capital can be defined as combined assets that can be shared in a supportive environment where group members have common goals (Dika & Singh, 2002).

School districts often call in *experts* from outside the school or the school district to improve student performance. Yet, teachers have a pragmatic understanding of the needs of the school and the school community that outsiders frequently do not. In addition, outside consultants and teaching *experts* often do not have experience in education or public schools (Leana, 2013). Having an understanding of the needs of the school and school community allows the teacher(s) to implement practices that target the specific needs of the students and the school. In addition, encouraging professionals to participate in school leadership alters the perception of ownership in that the feeling of ownership increases when teachers become part of the decision-making process. According to Donaldson (2001), "In a school where every adult is both 'shaper and shaped,' each person owns a share of influence and responsibility, not just over her individual job but over school-wide concerns as well" (p. 41). Donaldson also cited a necessity for schools to allow teachers leadership experiences outside of the classroom in order to expand their knowledge base through interacting with others. These leadership opportunities increase a teacher's scope of effectiveness or social capital, which focuses on the relationships among teachers.

The Power of Teacher Leaders: Building on Intellectual Capital for the Common Good

Teachers possess a variety of experiences, attributes, and abilities. In their seminal work, Belasco and Stayer (1993) described the different abilities that members of any organization possess as *intellectual capital* and examined the paradigm shift in leadership from one individual leading to everyone having a role in the leadership process. Effective organizations build upon the innate intellectual capital as employees (teachers) are more familiar with the formal and informal power structure than the leader (principal; Donaldson, 2001). Because teachers possess different abilities, it is natural that teachers will collaborate and, generally, teachers collaborate with one another; they do not collaborate with the principal or outside experts (Leana, 2013). For example, if a teacher is having discipline problems in the classroom, he or she might ask a teacher with excellent classroom management skills for advice, or a teacher having difficulty with presenting a concept might ask a teacher who excels in methodology for assistance. This intellectual capital, when fostered through collaboration, can result in a productive social capital.

Allowing teachers to take on leadership roles not only has an impact on their classrooms and the school, but also supplies the school with professionals who may eventually take on formal roles in educational leadership. Effective organizations have a healthy culture that is sustained through leadership that is consistent in nature. Development of teacher leaders will assist in providing the school with human resources that will uphold the vision, mission, and goals of the school (Collins & Porras, 1994). Buchen (2000) argued that "the only leadership that will make a difference is that of teachers. They alone are positioned where all the fulcrums are for change. They alone know what the day-to-day problems are and what it takes to solve them" (p. 35). He further stated, "They, not the principals, should be the ones to hire new teachers. They know what is needed" (p. 35).

The competencies and knowledge required of teacher leaders are identified in *The Teacher Leader Model Standards* (Teacher Leadership Exploratory Consortium, 2011). For school and district leaders who are looking to put teacher leaders in place, the Standards give some thoughts for implementation, as well as strategies for supporting teacher leaders.

The diverse characteristics of teacher leadership are outlined in the seven domains of the Standards:

- Domain I: Fostering a collaborative culture to support educator development and student learning;
- Domain II: Accessing and using research to improve practice and student learning;
- Domain III: Promoting professional learning for continuous improvement;
- Domain IV: Facilitating improvements in instruction and student learning;
- Domain V: Promoting the use of assessments and data for school and district improvement;
- Domain VI: Improving outreach and collaboration with families and community;
- Domain VII: Advocating for student learning and the profession. (p. 9)

The Standards can also be used as a guide when creating professional development in order to provide programs designed to enhance the skills and knowledge of teacher leaders, once again building upon an individual's intellectual capital for the greater good.

In order for teacher leaders to be successful, school principals must take advantage of the strengths or intellectual capital of these leaders. Using the intellectual capital of an individual teacher is important, and Donaldson (2001) supported nurturing of leadership skills in teachers as well as increasing opportunities for collaboration. By increasing opportunities for collaboration, administrators increase their social capital, which is important to schools desiring an increase in student achievement. For example, a study conducted by Leana (2011) found a positive correlation between math scores and the number of teacher conversations with colleagues that centered on math conducted in an environment of trust:

> Teacher social capital was a significant predictor of student achievement gains above and beyond teacher experience or ability in the classroom. And the effects of teacher social capital on student performance were powerful. If a teacher's social capital was just one standard deviation higher than the average, her students' math scores increased by 5.7 percent. (p. 33)

Although traditional responsibilities such as ordering supplies, maintaining an inventory, and acting as a liaison between the administration and faculty are important, an administrator who limits teacher leaders to these responsibilities can be thwarting the success of the school. School leaders have to recognize the positive aspects of having teacher leaders and be willing to give up some perceived power and not be threatened by a teacher leader's influence or leadership qualities. In transformational schools, administrators rely on teacher leaders to maintain a positive school culture, assist other teachers in implementing best practices, and improve student achievement (Weller, 2001).

In order to be a successful teacher leader, an individual must have the ability to communicate with administrators, teachers, and other staff members. Communication is the key to translating intellectual capital into social capital through shared leadership. Making connections within the school community is an essential ingredient for success. Teacher leaders must also be able to navigate resistance that can, and most likely will, arise when teacher leaders are working with administrators in order to create a sense of collaboration and healthy school environment or culture.

The Benefits of Having Teacher Leaders in Schools

The most obvious benefit of having teacher leaders in schools is that they can lessen the burden on the school principal. This is not to be confused with reducing the work load

of the principal; the point is to shift the principal's focus from managerial leadership to instructional leadership. Teacher leaders can take responsibility for making decisions on day-to-day activities within the school, thereby freeing the principal to engage in activities that will improve instruction, such as teacher observations, walk-throughs, professional development, and so forth. The types of activities that teacher leaders engage in must be agreed upon with administrators. Teacher leaders can assume managerial aspects of leadership, such as selecting textbooks or budgeting for a department, as well as instructional aspects of leadership, such as providing professional development for teachers, leading professional learning communities, and assisting new teachers.

"School and student success are virtually impossible without the use of distributed or shared leadership."

Perhaps less obvious is the impact teacher leaders have on student achievement. Empirical research conducted by Walters et al. (2003) indicated that 33% of variation in school level achievement is related to the teacher. Louis et al. (2010) found that shared leadership has a greater impact on student achievement than individual leadership. The Wallace Foundation's 10-year study (2010) related to improving educational leadership found that student achievement was higher in schools that garnered input from key stakeholders, including teachers, and in schools where shared leadership was practiced. The researchers in the study also found that professional communities were encouraged in schools with shared leadership, and, when teachers were involved with professional communities, they were more likely to implement best practices associated with an increase in student achievement.

Shared leadership may also lessen the negative impact of principal turnover. Hargreaves and Fink (2006) found that principal turnover is most successful when the principal leaves a heritage of shared leadership as this will most likely guarantee that the initiatives designed and implemented to improve student achievement will be preserved. Therefore, it would be desirable to develop social capital within a school by fostering teacher leaders through shared leadership practices in order to sustain the school's mission as well as goals and purpose.

Summary

In today's educational and financial climate, the school principal clearly cannot go solo. School and student success are virtually impossible without the use of distributed or shared leadership. Distributed or shared leadership is a shift from the belief that leadership is a unique characteristic that an individual has developed to a belief that teachers have a pragmatic understanding of the needs of the school and the school community as well as individual sets of skills and knowledge—their intellectual capital. When principals share leadership responsibilities and allow teachers to take on leadership roles, the type of collaboration that follows results in productive social capital, which in turn increases the scope of effectiveness of the professional community.

References

Andrews, D., & Lewis, M. (2004). Building sustainable futures: Emerging understandings of the significant contribution of the professional learning community. *Improving Schools, 7*(2), 129-150. doi:10.1177/1365480204047345

Belasco, J. A., & Stayer, R. C. (1993). *Flight of the buffalo*. New York, NY: Warner Books.

Buchen, I. H. (2000). The myth of school leadership. *Education Week, 19*(38), 35-36.

Carnegie Forum on Education and the Economy. (1986). *A nation prepared: Teachers for the twenty-first century: The report of the Carnegie Forum on Education and The Economy's Task Force on Teaching as a Profession*. Washington, DC: Author.

Coleman, J. S. (1988). Social capital in the creation of human capital. *American Journal of Sociology, 94*, 95-120. doi:10.1086/228943

Collins, J., & Porras, J. (1994). *Built to last: Successful habits of visionary companies*. New York, NY: Harper Business.

Crowther, F., Kaagen, S. S., Ferguson, M., & Hann, L. (2002). *Developing teacher leaders: How teacher leadership enhances school success.* Thousand Oaks, CA: Corwin Press.

Danielson, C. (2006). *Teacher leadership that strengthens professional practice.* Alexandria VA: ASCD.

Dika, S. L., & Singh, K. (2002). Applications of social capital in educational literature: A critical synthesis. *Review of Educational Research, 72*(1), 31-60. doi:10.3102/00346543072001031

Donaldson, L. (1996). *For positivist organization theory: Proving the hard core*. London, UK: Sage. doi:10.4135/9781446280331

Donaldson, L. (2001). *The contingency theory of organizations*. Thousand Oaks, CA: Sage. doi:10.4135/9781452229249

Gabriel, J. G. (2005). *How to thrive as a teacher leader.* Alexandria, VA: ASCD.

Glanz, J., Shulman, V., & Sullivan, S. (2007, April). *Impact of instructional supervision on student achievement: Can we make a connection?* Paper presented at the Annual Conference of the American Educational Research Association, Chicago, IL.

Gronn, P. (2002). Distributed leadership. In K. Leithwood, P. Hallinger, K. Seashore-Louis, G. Furman-Brown, P. Gronn, W. Mulford, & K. Riley (Eds.), *Second International Handbook of Educational Leadership and Administration* (pp. 653-696). Dordrecht, NL: Kluwer. doi:10.1007/978-94-010-0375-9_23

Hargreaves, A., & Fink, D. (2006). *Sustainable leadership*. San Francisco, CA: Jossey-Bass.

Heller, D. A. (2004). *Teachers wanted: Attracting and retaining good teachers.* Alexandria. VA: ASCD.

Howey, K. R. (1988). Why teacher leadership? *Journal of Teacher Education, 39*(1), 28-31. doi:10.1177/002248718803900107

Killion, J., & Harrison, C. (2006). *Taking the lead: New roles for teachers and school-based coaches*. Oxford, OH: National Staff Development Council.

Leana, C. (2011). The missing link in school reform. *Stanford Social Innovation Review.* Retrieved from http://www.ssireview.org /articles/entry/the_missing_link_in_school_reform/

Livingston, C. (1992). Introduction: Teacher leadership for restructured schools. In C. Livingston (Ed.), *Teachers as leaders: Evolving roles* (pp. 9-17). NEA School Restructuring Series. Washington, DC: National Education Association.

Louis, K. S., Leithwood, K., Wahlstrom, K. L., & Anderson, S. E. (2010). *Investigating the links to improved student learning: Final report of research findings.* St. Paul, MN: University of Minnesota.

Purkey, S. C., & Smith, M. S. (1983). Effective schools: A review. *Elementary School Journal, 83*(4), 427-52. doi:10.1086/461325

Sherrill, J. (1999). Preparing teachers for leadership roles in the 21st century. *Theory into Practice, 38*(1), 56-61. doi:10.1080/00405849909543831

Spillane, J., Halverson, R., & Diamond, J. (2001). Investigating school leadership practice: A distributed perspective. *Educational Researcher, 30*(3), 23-28. doi:10.3102/0013189X030003023

Teacher Leadership Exploratory Consortium. (2011). *Teacher leader model standards*. Carrboro, NC: Author. Retrieved from www.teacherleaderstandards.org/downloads/TLS_Brochure.pdf

University of Minnesota. (2010, July 21). Educational leadership linked to student achievement in large U.S. study. *ScienceDaily*. Retrieved from http://www.sciencedaily.com/releases/2010/07/100721112232.htm

Waters, T., Marzano, R. J., & McNulty, B. (2003). *Balanced leadership: What 30 years of research tells us about the effect of leadership on pupil achievement*. Aurora, CO: Midcontinent Research for Education and Learning.

Weller, L. D., Jr. (2001). Department heads: The most underutilized leadership position. *NASSP Bulletin, 85*(625), 73-81. doi:10.1177/019263650108562508

Considering Alternatives: A Review of *Education under Siege*

By Sigrún Klara Hannesdóttir

Mortimore, P. (2013). *Education under Siege: Why there is a better alternative.* London, UK: Policy Press. 320 pages. ISBN-13: 978-0-1447311317.

This article continues a series of occasional book or Web site reviews contributed by members of the Bulletin's *2012-2014 Editorial Board. Hannesdóttir provides a review of a British author whose thoughts on educational reform can inspire readers from all nations.*

Author Peter Mortimore has been a teacher and researcher and is the former director of the Institute of Education, University of London. He is currently a professor at the University of Southern Denmark. For many years, he has served as an education columnist for the *Guardian*, a daily national newspaper in England.

In 14 chapters in *Education Under Seige*, Mortimore outlines how he would like to see a better education system operating for primary and secondary students in England. He identifies strengths and weaknesses of the current system and details the way he thinks the educational system should be going. He raises some politically hot topics in schooling, such as the role of homework, the necessity for school inspections and high-stakes assessment, as well as the role of a private education sector.

Mortimore proposes some radical changes that would be helpful in England, such as outlawing selection practices, integration of private schools into the state system, and establishing processes to ensure that each school has effective teachers. One of his main pleas is to ask all readers who share his concerns about the educational systems, not only in England but in other countries as well, to introduce new educational policy. He calls for action by politicians to alter the course.

Although his main emphasis is on education in Britain, Mortimore is well familiar with the Nordic educational systems. He uses many comparisons between England and the Nordic countries—Denmark, Norway, Sweden, and Finland—arguing that many good

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things from the Nordic experience could be transferred and used in different countries. What works well in one country should be looked at as a model for educational changes in another country. Mortimore uses rankings from the Programme for International Student Assessment (PISA) by the Organisation for Economic Co-operation and Development as a measurement for educational qualities. PISA is a "triennial international survey that aims to evaluate education systems worldwide by testing the skills and knowledge of 15-year-old students. To date, students representing more than 70 economies have participated in the assessment" (http://www.oecd.org /pisa/aboutpisa/), in which Finland has come out at the top.

> *"...[Mortimer's] arguments have relevance to all educators who are interested in alternatives in education."*

Mortimore claims that one of the reasons for the Finnish success is the status of teachers in Finland. In his view, teachers should have good qualifications, perform at an exceptional level, and be accorded high status in society. Strong teachers have a sense of autonomy and ownership, an appreciation of pedagogy and child development, and passionately expressed subject knowledge.

Mortimore outlines his concerns in a succinct and understandable language and his arguments have relevance to all educators who are interested in alternatives in education. This book can be recommended for everybody who is interested in education, educational policy, and the future of education, not only teachers and politicians from England and Europe.

Note: Go to https://www.youtube.com/watch?v=_lz0ymmANn4 to watch Peter Mortimore's lecture on the main points of his book.

Teaching Today for Tomorrow: A Case Study of One High School's 1:1 Computer Adoption

By Jan Broussard, Dustin Hebert, Brett Welch, and Sharon VanMetre

Change is commonplace in schools. Trends that garner international, national, and state attention seem to be tried and tested in P-12 schools on regular bases. One recent trend involves placing handheld computers in the hands of all students, whether they are in early elementary grades or college seniors. Decades of research show that technology is an instructional enhancement, and, with that in mind, educators at a high school in south Louisiana launched such a 1:1 program in which each teacher and student was issued a compact, convertible, Windows-based laptop computer (tablet PC). For that school, an organizational change unlike any other followed. The authors of this case study describe how teachers and leaders transformed the learning environment and curriculum from one that was quite textbook- and lecture-focused to one that now connects students with digital content and Web-based, interactive tools.

Background

As new technological innovations are released and as school personnel continue to work diligently to provide the best experiences for students, more and more learning environments will include the newest innovations as resources allow. Such is the case with one south Louisiana school where leaders invested in tablet PCs for all faculty and students.

Learning of successes with 1:1 initiatives in other institutions, the school leaders elected to investigate the feasibility of a similar adoption. Funding, implementation, and support were paramount in the decision-making process, and, in the end, when the decision to move forward was made, investing in the appropriate tablets, school networking infrastructure, software tailored to instructional needs, and professional development ensued.

The 2012-2013 academic year thus marked a new era at this school of approximately 650 students and 40 teachers with its implementation of a 1:1 tablet PC initiative in which each student in Grades 9-12 was issued a tablet PC for the duration of the school year. Each teacher, likewise, had been issued the same generation of PC during the preceding academic year, 2011-2012, in preparation for the campus-wide adoption.

University faculty researchers investigating technology's role in organizational change initiated a research study with the school involving classroom observations and interviews of students and teachers. The findings of this study were used by the school leaders to determine what advances in teaching and learning were experienced during the adoption year and to set goals for the second and subsequent years.

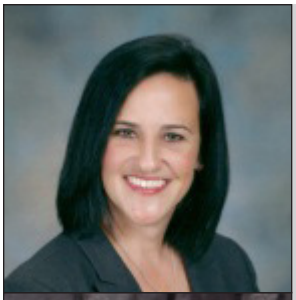
Technology in the Classroom

Technology is ubiquitous in today's world. It allows people to become more efficient workers, more independent consumers, and more connected in terms of networking with others. These reasons provide a natural rationale for the growing presence of technology in the classroom. In 2002, then Governor of Maine Angus King stated that technology's instructional goal was multidimensional. It should prepare students for a not-yet-existing world and provide them the tools to solve problems and construct knowledge (McLester, 2011). Some 14 years later, with *cutting edge* technological innovations that have come and gone, Governor King's position is still valid and applicable to today's classroom, regardless of the specific tools at hand.

Most recently, the Houston Independent School District instituted a 1:1 initiative within its high schools and distributed laptops to more than 18,000 students (Herold, 2014). An initiative of this nature is not a necessarily new idea, though. Other school personnel—at the elementary, middle, and postsecondary levels—have taken similar steps toward expanding technology's presence in student learning; some were successful, and some sent decision-makers *back to the drawing board* (Fox, 2009; Herold, 2014; "L.A. District," 2013; Larkin, 2011; Moran, Hawkes, & El Gayar, 2010; Shaw, 2005).

Teachers typically replicate the pedagogy with which they were taught. However, today they are expected to use tools and techniques that were mostly absent from their experiences as students and as teacher candidates. Donovan, Green, and Hansen (2011) conducted a study that sought to explain the assumption that "teachers teach the way they were taught" (p. 126). The results of the study showed that teachers who were trained in teaching within a 1:1 environment progressed in their beliefs about technology's impact on learning and their instructional uses of laptop computers. Conversely, teachers who were not issued laptops remained stagnant in their technological proficiency. Similarly, in an op-ed about tablet computing in higher education, Fox (2009) described that the use of laptops within the classroom environment led to an increase in students' overall test scores. Further research by Shapley, Sheehan, Maloney, and Caranikas-Walker (2010) showed that a strong predictor of student achievement was students' use of laptops outside school for learning games and homework.

Wide-scale technology initiatives are not void of concerned stakeholders who



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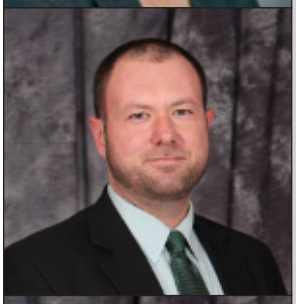

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feel technology is costly and who are concerned about its return on investment. Some of those individuals, such as parents and faculty, can be reticent to support a program in which every student is issued a tablet PC. Students, though, have been less likely to share the same concerns and apprehensions. According to a Pew Research Center study conducted in 2010, millennial students (born after 1980) believed that their unique identity is due to their affiliation with technology, such as social networking sites, wireless technology, video games, and self-created videos. They are comfortable with all types of technology, use that technology socially, and do not need distinctions between *social* and *instructional* technologies. Students who view technology as an effective learning tool may interpret technology literacy as a valuable skill that in turn increases confidence and leads to academic success (Wilson &Trainin, 2007).

A 1:1 initiative can also spark upward growth not only in standardized test scores but also in report card grades and graduation statistics. According to McLester (2011), national data support the theory that technology in the classroom positively affects student learners. Data have shown an increase in standardized test scores, report card grades, and graduation rates. In turn, these increases prove an increase in students' logical thinking, problem-solving skills, and comprehension. In a 1:1 initiative in North Carolina in which each student in Grades 4-12 was supplied a personal MacBook, students posted increased graduation rates of 9% in a 3-year period; the graduation rate increased from 77% in the 2006-2007 academic year to 86% in the 2009-2010 academic year. Moreover, more students elected to attend college after the MacBook implementation; in 2010, 86% of students elected to further their education in a higher education setting, while only 74% had elected to do the same in 2007 (McLester, 2011). The inclusion of technology affects students' ability to think logically, to view objectively, and to organize and recall.

The relationships among student achievement, engagement, technology, and pedagogy are present. Ultimately, as Larkin (2011) found, 1:1 technology yields a change in pedagogy, and changes in pedagogy affect student learning.

Methodology

The primary purpose of this qualitative study was to document what technologies were utilized and through what instructional strategies. Secondary to that was to ascertain in some way the level of engagement that faculty and students expressed regarding technology use.

Data Collection

Data were collected via classroom observations and independent focus-group interviews of students and teachers by four researchers between October 2012 and April 2013. These were the most substantive and appropriate methods to solicit teachers' and students' perceptions about and applications of the tablet PCs.

Classroom observations. To ensure a sample as representative as possible, classroom observations were scheduled based upon the variables of class period, department, and level of course. Each observation was 70-90 minutes in length, and the 82 observations in total were equally representative of the school's academic departments and two general classifications of (a) underclassmen (freshman and sophomore) classes; and (b) upperclassmen (junior and senior) classes. In total, classroom observations by the researchers included 5,740 instructional minutes, 37 teachers, and nearly the entire student population.

The researchers used a standard observation tool adopted from Donovan, Green, and Hansen (2011). The checklist tool was organized into three categories: *Teacher Technology Use*, *Student Technology Use*, and *Technology Tools*. Items within *Teacher Technology Use* addressed a range of pedagogical matters from presenting content to assessing student learning to facilitating student interaction. The *Student Technology Use* items were aligned to those, but the language was adjusted to reflect a student's role as compared to a teacher's role. Items relevant to *Technology Tools* included a list of general technology-related uses or applications such as word processors, Web browsers, podcasts, digital video, and multimedia presentations.

The researchers recorded observation data based on types of activities or tools observed being used in each lesson. The observation instrument was formatted as a checklist in which the observer identified, for each type of instructional use or technology application, whether teachers, students, or both were observed fulfilling that use or using that tool. Judgments of quality of activity and tool or extent of tool use were not within the scope of the study and, therefore, were not reflected on the observation instrument. The researchers and school leaders predetermined this approach, which aligned with the study's initial goal of simply documenting in what ways the tablet PCs and other technology tools were used without evaluating the uses of those tools.

Focus-group interviews. Focus-group interviews were conducted with students and teachers in exclusive groups. As in the observations, the classes selected for student focus-group interviews were as proportional as possible by level of course and by department. Teacher focus groups were scheduled once per class period to capture all class periods of the instructional day, thus providing an opportunity for each teacher to participate during one of his or her unencumbered periods.

During each interview, the researchers posed four questions to participants:

1. What do you believe are advantages of the 1:1 initiative?
2. What do you believe are challenges of the 1:1 initiative?
3. What are some examples of activities you have used the tablet PCs to complete (or assign)?
4. What other information about the 1:1 initiative would you like to provide?

The researchers conducted 16 student-focus-group interviews and eight teacher-focus-group interviews, ranging from 15-30 minutes each. Each group was asked to share examples of advantages and challenges of the tablet PC initiative as well as specific examples of how the tablet PCs were used. In total, 19 teachers and more than 300 students participated.

Data Analysis

Data were compiled from observation records and interview notes into an electronic spreadsheet. Frequencies were tabulated for both observation and interview data. Observation data frequencies reflected the number of times a specific technology use or tool was observed within a lesson. Tabulations of interview frequencies involved reviewing interview notes and tallying occurrences of specific words or phrases in the same contexts. Further, those data were analyzed via the constant comparison qualitative data analysis technique (Glaser & Strauss, 1967) in which all words and phrases are reviewed cyclically and in context and then consolidated until a manageable number of emergent themes result.

Discussion of Classroom Observations

Teacher technology use. The researchers analyzed observations related to teacher technology use to determine the top five technology-rich instructional techniques teachers embedded within their lessons. In ranked order, those techniques were

1. Organizing instructional materials: Preparing digital content in advance of a lesson and making that content available to students prior to or during the lesson, primarily, via Moodle (www.moodle.com; open-source learning platform) or DyKnow (www.dyknow.com; classroom management software).

2. Supporting learner-centered activities: Using tools including but not limited to Moodle, DyKnow, and other Internet applications to create learning activities in which students interact with content or each other and the teacher synchronously or asynchronously both during and outside classes.

3. Using Internet for extended learning: Taking advantage of the wealth of Internet content or interactive activities to provide or enhance face-to-face instruction, to engage students in learning beyond the lesson at hand (e.g., activities for early finishers), or to provide reinforcement or remediation for students who did not meet benchmark expectations.

4. Addressing content standards: Using technology as the primary or singular method of content delivery where very little to no teacher-driven instruction occurs; learning new concepts/skills independently through technology-mediated methods.

5. Supporting higher-order thinking: Creating opportunities where students demonstrate creativity and innovation in technology-dependent manners not otherwise possible.

Student technology use. The researchers analyzed observations related to student technology use to determine the top five technology-rich instructional applications in which students engaged, either by teacher requirement or voluntarily. In ranked order, those techniques were

1. Participating in class activities: Using technology to engage in in-class activities.

2. Using Internet to support learning: Accessing Internet tools either during class meetings to explore or reinforce concepts or skills presented.

3. Learning subject-specific skills or concepts: Using technology as the primary or singular method or as a supplement of content delivery where Internet content used is specific to the subject or topic at hand.

4. Being creative: Demonstrating creativity and innovation in technology-dependent manners not otherwise possible.

5. Demonstrating what was learned: Using technology to demonstrate learning in almost any form for assessment purposes.

Technology tools. The researchers analyzed observations related to technology tools used by students and teachers to determine the top five tools used only by students, only by teachers, or by both students and teachers. Those tools in ranked order were (a) Web browsers, (b) multimedia presentations, (c) word processors, (d) digital videos, and (e) spreadsheets.

Focus-Group Interviews

The researchers conducted focus-group interviews of students and teachers and posed aligned, broad questions to participants. In total, 16 student- and 8 teacher-focus-group interviews were conducted.

Findings from the focus-group interviews were organized by the primary theme of each interview question: advantages, challenges, examples, and additional information. As transcripts of interviews were reviewed, participant responses per theme were grouped by patterns that emerged among the responses. Then, responses per pattern were reviewed three times to ensure that the response groupings were accurate, and each group was assigned a label that described the pattern. Those patterns are designated herein as *significant findings*, and the themes and significant findings are presented in Tables 1 and 2.

Conclusion

This study, a mere snapshot of this school's first year of 1:1 adoption, is only the beginning. Classroom observations and focus-group data revealed that advances from the previous school year were made, and the idea of *flipped classrooms* (EDUCAUSE, 2012) was prevalent. Instruction began to shift from teacher-centered to student-centered, and teachers began to use more technology-rich approaches to presenting content and engaging students in class activities.

Students and teachers alike embraced the technology and recognized that challenges and areas for improvement still exist. Ultimately, though, the data showed a school-wide commitment to this initiative's success and that this particular school's general motto of preparing students for academic success was reflected in this effort.

The significant findings outlined in Tables 1 and 2 suggest advances that a similar 1:1 initiative could expect, and the tables also present challenges school decision-makers should consider. From innovative pedagogy to styli durability, all are matters that arise regularly during the implementation of projects with this type of scope. No matter the case, however, history demonstrates that, although specific tools evolve and in some cases become extinct, technology has infiltrated society's day-to-day functioning, and students will be well-suited in environments that not only acknowledge that world but also prepare them to function within it.

Table 1
Significant Findings: Student Focus Groups

Topic	Significant Findings
Advantages	Eco-friendliness. Greater organization and efficiency. Access to Internet tools, like Google and research databases. Greater communication with teachers and peers, especially in cases of absences or need for reinforcement/clarification. Meeting needs of visual and verbal/auditory learners. Reduced weight of backpacks and quantity of materials required per course. Enhanced college preparedness, especially because Moodle and Internet database use are nearly ubiquitous.

(table continues)

Topic	Significant Findings
Challenges	Computer malfunctions and quirks (e.g., slow connectivity to Internet, lost connection while using the Internet, updates run on computers at inopportune times, crashing without warning). Distractions during class (e.g., temptation to play games on computer, doodle with the stylus). Lack of diligence in charging batteries overnight. Less challenging courses than in traditional classroom without technology. Lost class time from one period to the next because student access restrictions not lifted from prior class. Academic dishonesty (e.g., students emailing answers to other students). Student reticence to technology and preference for traditional pen-and-paper approaches.
Examples	DyKnow test reviews Presentations and worksheets Graphs Emailing teachers and peers Online quizzes, tests Permission slips Studying via Quizlet (quizlet.com; learning tools creation) or Skype (www.skype.com; calling app) Group discussion boards School newspaper Paper composition
Additional Information	Traditionalists dislike emphasis on technology; others see the value. Consequences of damaging or losing the tablets are many (e.g., expensive, admonished by administration). Technology more appropriate for some subjects (English, social studies) than others (math). Indifference to DyKnow because of blocked Web sites but like Moodle and OneNote (www.onenote.com; note-taking app). Importance of backing-up data.

Table 2
Significant Findings: Teacher Focus Groups

Topic	Significant Findings
Advantages	Better efficiency in the classroom and for homework. Internet is great tool for learning. Better organization via OneNote and Moodle. Students learn responsible computer use. Students monitored and kept on track by programs like DyKnow and Respondus (www.respondus.com; exam creation tool). Students prepared for work and college through use of Microsoft PowerPoint and email. Students and teachers benefit from less paperwork.
Challenges	Durability of tablets and styli. Short battery life. Tablets updating or restarting with no real warning, interrupting class time and students' abilities to work. Internet connectivity often slow or interrupted. Students not self-disciplined enough to stay on track without monitoring. Reticence to learn technology. Lack of professional development and ongoing instructional support. Students not diligent about checking email or Moodle for updates and information. Lack of consequences for damaged property.
Examples	Great tool for visual and verbal/auditory learners. Disinterested teachers resign or retire. Good differentiated instruction tools. Helps make students more accountable and responsible for information. Makes transition to Common Core more manageable. Loss of instruction time to technological issues. Human interaction not reduced due to technology, although that was a fear. Increase in technology gap between more and less affluent schools.
Additional Information	Although reduced need for notebooks, textbooks still necessary. Concern about lack of human interaction when technology is implemented. Student testing anxiety due to PCs. Moodle and DyKnow are less user-friendly, less adaptable, and less dependable than other applications like Turnitin (turnitin.com; academic plagiarism checker).

References

Donovan, L., Green, T., & Hansen, L. (2011). 1:1 laptop teacher education: Does involvement affect candidate technology skills and dispositions? *Journal of Research on Technology in Education*, *44*(2), 121-139. doi: 10.1080/15391523.2011.10782582

EDUCAUSE Learning Initiative. (2012). *Seven things you should know about flipped classrooms*. Retrieved from http://net.educause.edu/ir/library/pdf/eli7081.pdf

Fox, M. (2009, November 16). The Devil's advocate: Should students be allowed to use laptops in the classroom, or are they too distracting? *Daily Titan*. Retrieved from http://www.dailytitan.com /2009/11/laptops-in-the-classroom/

Glaser, B. G., & Strauss, A. L. (1967). *The discovery of grounded theory: Strategies for qualitative research.* Chicago, IL: Aldine.

Herold, B. (2014). Unfazed, Houston embraces 1-to-1 student computing. *Education Week*, *33*(20), 1, 11.

L.A. District Begins Push Toward 1-on-1 Computing. (2013, July 1). *American School and University*. Retrieved from http://asumag.com/computerstablets/la-district-begins-push-toward-1-1 -computing

Larkin, K. (2011). You use! I use! We use! Questioning the orthodoxy of 1:1 computing in primary schools. *Journal of Research on Technology in Education*, *44*(2), 101-120. doi: 10.1080/15391523.2011.10782581

McLester, S. (2011). Lessons learned from 1:1. *District Administration*, *4*(6), 34-39.

Moran, M., Hawkes, M., & El Gayar, O. (2010). Tablet personal computer integration in higher education: Applying the unified theory of acceptance and use technology model to understand supporting factors. *Journal of Educational Computing Research, 42*(1), 79-101. doi: 10.2190/EC.42.1.d

Pew Research Center. (2010). *Millennials: A portrait of generation next*. Retrieved from http://www .pewresearch.org/millennials/

Shapley, K. S., Sheehan, D., Maloney, C., & Caranikas-Walker, F. (2010). Evaluating the implementation fidelity of technology immersion and its relationship with student achievement. *Journal of Technology, Learning, and Assessment*, *9*(4), 5-68.

Shaw, T. (2005, May/June). Getting parents and teachers to buy in to our tablet PC program. *Multimedia & Internet@Schools*, *12*(3), 37-38.

Wilson, K. M., & Trainin, G. (2007) First-grade students' motivation and achievement for reading, writing, and spelling. *Reading Psychology*, *28*(3), 257-282. doi: 10.1080/02702710601186464

Net Neutrality: What Is It and Why Should Educators Care?

By Vickie S. Cook

A recent ruling by the U.S. Court of Appeals for the District of Columbia has set the tone for elimination of Net neutrality. Net neutrality has created affordable accessibility for students, teachers, educators, librarians, and all users of the Internet in the United States. The author considers this historic ruling and the impact that it may have on school stakeholders at all educational levels.

What is Net Neutrality?

Net neutrality is a simple paradigm. This paradigm states that information available via the Internet global network of computers should be shared regardless of what information is being sent and from whom without individual subscribers paying additional content-delivery fees. Thus, the family downloading a video via a movie Web site should receive the same speed and quality as a student downloading class content on a course management system or a hobby genealogist looking for obituary records. Following this paradigm of Net neutrality, the purpose for the use of the Internet and the information shared should not affect the price for use, the speed, or the quality of the network. The same concept is sometimes referred to as the *Open Internet*.

One of the most significant components of the Open Internet concept is making the Internet available to the general public both for use and for innovation in creating content and doing business. Although some countries do block Web sites or filter content, in the United States the Internet is built through the use of free, publicly available standards that anyone with a network connection can access. The Open Internet ensures that a pathway for all Internet traffic is provided to flow in the same manner with the same quality and the same speed of delivery to the user. This design has made it possible for any individual to build applications, innovate technology use, communicate in new ways, and create business sites that allow users access to information through blogs, e-mail, video streaming, online shopping, and gaming.

The Federal Communication Commission (FCC) has historically been focused on ensuring that every American has access to open and robust high-speed Internet service or broadband. The FCC does not govern global initiatives related to the Internet network or its subsidiaries and providers. At the same time that the FCC has governed the concept of open access to the Internet, it has also guarded against government interference or regulation related to content development and delivery.

Until the January ruling, the three paradigms that governed the FCC and its application of oversight of the Internet included the following. First, Internet service providers (ISPs) must disclose information related to management of their network, its speed and quality, and the costs associated with the network. Second, ISPs may not block lawful content,

Web sites, or applications that are not harmful to the public, and mobile broadband providers cannot block any lawful Web sites or applications, even if they compete with a specific company's voice or telephone services; for example, a communication company that provides a videoconferencing service is not able to block other videoconferencing applications such as Skype© or Google Hangouts©. Finally, ISPs must not discriminate against lawful Internet users due to the content of the use on the provider's network. An Open Internet Guide available at http://www.fcc.gov/guides/open-internet explains more about these paradigms and clarifies the intent of Open Internet practices.

The Ruling

On January 14, 2014, the U.S. Court of Appeals for the District of Columbia set the tone for the elimination of Net neutrality within the United States as currently governed by the FCC, which was granted the role of enforcing Open Internet practices in 2010. Specifically, the court ruled that the FCC does not have authorization to oversee or provide rules regarding the open use of the Internet and called on the FCC to vacate its current Open Internet rules that had created the free-flowing exchange of ideas on a variety of provider networks. This ruling opened a door for ISPs to charge for a tiered level of service. This tiered level of service may be passed on to the general consumer, to specific groups such as schools and libraries, or to companies wishing to move their products to the public faster and at a higher quality. Companies are now negotiating for premium Internet access into the homes of individuals and users.

Part of the U.S. Court of Appeals' decision to revoke the FCC's authorization to write policy and enforce policy related to Net neutrality was based upon the perception that, although many individuals have choices among ISPs and may change services based on costs, the fact is that, in many communities, few or no choices of ISPs exist. In the latter case, lack of competition among available ISP companies will continue to plague individual Internet users.

Barbara Stripling, 2013-2014 president of the American Library Association, shared concerns that entertainment sites will be given priority to network access over education Web sites (Stripling, 2014). This could create serious problems for universities and libraries that rely heavily on the Internet to share resources to students across the country through online content. Additionally, the loss of Net neutrality could seriously impact students in rural areas of the country who rely heavily on online materials to supplement learning in both formal and informal ways (Stripling, 2014) and who have limited access to a variety of ISPs. Stripling anticipated that this ruling will more dramatically create a stronger digital divide between those who can *pay to play* and those who do not have the resources to purchase additional access or services.

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Impact

How does this change affect educators, and why should educators care about the loss of Net neutrality? It may affect those who teach and learn in very significant ways. This January 14, 2014 ruling by the U.S. District Court of Appeals could mean that there becomes a pay-per-view approach to home and school Internet functions. It could be mean that a *basic* package becomes available only to certain Web sites that are prechosen by selected ISPs rather than by the end user. It could mean that educational libraries have to pay additional fees not only for rights for patrons to utilize content but also for the use of broadband for specific sharing of data. Furthermore, the impact of this ruling could mean that any time educators want to show a YouTube video in their classrooms, they may have to provide credit card information and pay an additional fee for that use. These types of changes to the Internet could certainly change the access to online learning, information sharing, and student research.

Changes to the Open Internet policies may also have a dramatic negative effect on innovation in development and sharing of applications, especially related to start-up companies. Neal (2014) interviewed Fred Wilson, a partner in a company that represents a diversified portfolio among technology company startups. Wilson indicated that those companies that were already well established and able to afford to pay for premium service would have an unfair advantage over a start-up company that was unable to afford premium delivery services (Neal, 2014). This type of a damaging effect on innovation and potential development of applications could severely limit how the Internet is used by individuals, in education, in business, and internationally.

> *"Educators should add their voices to this issue and ensure that students in rural, suburban, and urban areas throughout the country can continue to access online courses, educational materials, and libraries without paying exorbitant access fees."*

Interestingly, the European Union drafted its own New Neutrality rules in April 2014 that will govern telecom companies if passed by the EU Leaders in October 2014 (Sterbling, 2014). This new ruling, if passed into law, will eliminate the digital divide that currently exists among individual users in Europe and may decrease cell-phone plan costs (Sterbling, 2014).

Many Internet practitioners in the United States are anticipating a wider digital divide among students whose families can afford ISP packaging for wider access online and those students whose cannot afford additional access pricing. This lack of Net neutrality may create significant learning rifts between the middle and lower economic strata of students and those in the upper-middle to upper level economic levels. Schools and libraries may be at increased pressure to provide the services through public or private means for student and family access. Although colleges and universities work to find ways to slow the tuition increases that have plagued the sector for the past several years, this development may add new fees for student access. Public schools struggling with

meeting budgets and creating positive learning environments may find that any additional access charges result in the reduction of other services. Private schools may struggle with affordability and connectivity for student access.

Issacson (2014) provided a visual explanation of the subtleties involved with Net neutrality through a Infographic available at http://www.huffingtonpost.com/2014/01/17/net-neutrality-gone_n_4611477.html. A quick Google search will reveal many other resources that fully explain this issue, and, by the time this article is published and read, additional information may have become available. Because this monumental ruling by the U.S. Court of Appeals for the District of Columbia continues to be played out, all concerned educators must continue to be cognizant of changes in the regulations that are imposed upon the FCC regarding Net neutrality. Educators should add their voices to this issue and ensure that students in rural, suburban, and urban areas throughout the country can continue to access online courses, educational materials, and libraries without paying exorbitant access fees.

Most recently, the FCC announced that it would entertain new Net neutrality rules at a meeting to be held in late spring (Gross, 2014). These rules will allow the FCC to judge each request for differential treatment of broadband on a case by case basis. This solution to establish Net neutrality that encourages individualized review may be one that will provide both individual users and companies to find a reasonable path forward.

The answer will not be simple. Finding a solution that will ensure equity among Internet users—i.e., that will ensure affordable access and availability for use and for innovative developments—will likely be complicated, and many industry and regulatory organizations will be weighing in. Educators at all levels must continue to participate in these discussions as advocates for educational access and for students to have affordable access that is not limited by their financial status or geographic location.

References

Gross, G. (2014). FCC defends new net neutrality proposal. *PCWorld*. Retrieved from http://www.pcworld.com/article/2147840/fcc-defends-new-net-neutrality-proposal.html

Issacson, B. (2014, January 17). One frightening chart shows what you might pay for Internet once net neutrality is gone. *Huffington Post*. Retrieved from http://www.huffingtonpost.com/2014/01/17/net-neutrality-gone_n_4611477.html

Neal, R. W. (2014, January 16). Net neutrality and venture capitalism: How ruling hurts tech startups, Internet innovation. *International Business Times*. Retrieved from http://www.ibtimes.com/net-neutrality-venture-capitalism-how-ruling-hurts-tech-startups-internet-innovation-1542914

Sterbling, T. (2014, April 3). European Parliament adopts net neutrality law. *ABC News*. Retrieved from http://abcnews.go.com/Technology/wireStory/european-parliament-adopts-net-neutrality-law-23172382

Stripling, B. (2014, January 16). Why net neutrality's demise hurts the poor most. *WIRED*. Retrieved from http://www.wired.com/opinion/2014/01/killing-net-neutrality-means-killing-economic-equality-access/

The Longevity of Multiple Intelligence Theory in Education

By Phyllis K. Adcock

The author argues for the ongoing relevance of using multiple intelligence (MI) theories to meet the varied needs of students in the classroom. She presents results from an informal survey of K-12 teachers enrolled in graduate education courses to find out their backgrounds in MI theory, how they applied what they learned about MI theory in their own K-12 classrooms, and the value of taking a course on teaching to MIs. The gathered data indicated teachers had a positive response to the use and value of MI theory in the classroom because it helped the teachers discover and address the different ways in which children learned best.

Introduction

The diversity of the learner is defined commonly by ethnicity, economic conditions, and gender; however, there are other issues of diversity—such as the visual or auditory abilities or the disposition of the learner—that can affect learning. An important aspect of considering the diversity of the learner is recognizing that each person has several ways in which he or she learns best. The learning theory that has brought light to the way in which each child learns differently is multiple intelligence (MI) theory.

Howard Gardner's theory that began with seven MIs in the 1980s has now evolved to eight (Gardner, 2006). Gardner suggested that the brain has many capacities for learning that he called *intelligences*. The eight MIs identified by Gardner are

- Linguistic: the heightened capacity for using words and language.
- Mathematical/Logical: the enhanced capacity for numerical or logical patterns.
- Naturalistic: the capacity of understanding of nature or biology well.
- Spatial: heightened abilities and manipulation of the visual-spatial.
- Bodily/Kinesthetic: the well-developed skill of physical movement.
- Musical: the enhanced capacity to discern rhythm and patterns.
- Interpersonal: the heightened ability to understand and respond to others.
- Intrapersonal: understanding of one's own emotional strengths.

These intelligences are found in all people; however, each person usually excels in only one or two. If teachers can determine the intelligences (enhanced abilities) in each child and then teach to those enhanced abilities, the child will learn better.

Since Gardener's theory was first introduced, other theories of MI have emerged. Daniel Goleman (1995), who began with the emotional intelligence (EI) theory, expanded this theory into a consideration of social and emotional intelligence (SEI; Goleman, 2006). Goleman theorized that a person's feelings and passions are the guiding force of his or her

behavior. EI is the enhanced capacity to recognize and control one's own emotions. SEI expands this concept as one shows a capacity to recognize and work well with the emotions of others. Unfortunately, the world of education has had little experience with SEI theory because Goleman spent more time in business and industry in the application of his theory.

At approximately the same time that Goleman was developing his ideas, Robert J. Sternberg developed the theory of successful intelligence (SI; Sternberg, 1996). Since then he has written many books related to his theory to further expand understanding of SI and how it affects learning (Sternberg, 2002; 2003). Sternberg's theory is a triarchic scheme of analytical, creative, and practical intelligences. *Analytical intelligence* involves basic cognition involving literacy and mathematical or logical thinking in problem solving. This intelligence is the most commonly applied in teaching and learning. *Creative intelligence* involves the capacity of the brain to find unique ways of problem solving beyond a linear approach. Finally, *practical intelligence* involves using everyday intelligence to think through daily problems to find an effective solution. Just as with Goleman's work, K-12 educators will find less information about Sternberg's theory of SI, because the research of his three-part theory focused on higher education and was not translated to the educational system as a whole.

Clearly, these varied theories of MI have similarities. For example, Sternberg's analytical intelligence is similar to Gardner' logical-mathematical, linguistic, and naturalistic intelligences. Sternberg's creative intelligences are similar to Gardner's spatial, bodily/kinesthetic, and musical intelligences. Similarly, Sternberg's practical intelligence is similar to Gardner's interpersonal and intrapersonal intelligences, which in turn is similar to Goleman's EI and SEI. (See Appendix A for a comparison of these major theories.)

Educators have seen the value of Gardner's MI theory and continue to use it to help students learn more effectively. Of course, theories of how children learn in multiple ways are not new phenomena. As early as the 1800s, the father of kindergarten, Frederick Fröbel (1782-1852), used the concept that children learn best when engaged in hands-on activities with multiple approaches (Fröbel, 2003). For example, he suggested many different ways in which children could have active learning in a garden to understand biology, the science of life. Fröbel saw a child's interest was piqued when learning was exciting, and he understood that learning through the five senses experientially was valuable—a very good example of the truly authentic learning that educational leaders value today (Kagan, 2000). Educators who strive to achieve successful learning using Fröbel's hands-on approach to learning recognize that people have different strengths and weaknesses. Ultimately, the message of MI is that teachers can profile their students to identify each child's strengths and weaknesses during the learning process (Moran et al., 2006) and then approach learning according to the child's particular strength or intelligence.

Application of MI Theory

Kagan (2000) completed a quantitative study that compared direct instruction (DI) and multiple intelligence (MI) approaches when learning. He found that the MI approach made the curriculum comprehensible to more students. The MI approach was more motivating for students, helped

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them to make a better personal connection to what they were learning, and encouraged teachers and students to enjoy a more active learning approach (Douglas et al., 2008). MI helped students and teachers alike to understand the diagnostic approach to problems in learning:

> …consider three beginning readers who have trouble comprehending a story. The first is struggling because of poor reading comprehension skills (a linguistic intelligence challenge). The second has poor social understanding of the dynamics among the story's characters (an interpersonal intelligence challenge). The third has such strong spatial intelligence that he has trouble beyond the physical pattern of the letter symbols (a challenge that Picasso, for example, faced in his early years). More reading practice, which is often the default intervention, may not help all of these students. (Moran, Kornhaber, & Gardner, 2006, p. 24)

Such research suggests that, when teachers develop learning activities, they need to keep in mind that each child will have a different experience because each learns differently. Most children may learn well with a DI approach, but more children learn better with a MI approach because it helps all children learn in the way they learn best (Moran, Kornhaber, & Gardner, 2006).

Assessing a TMI Course: Survey and Results

MI theory and its application were the basis for an informal survey given to graduate students enrolled in the *Teaching using Multiple Intelligence* (TMI) course at the University of Nebraska at Omaha. Participants (N = 75) were K-12 teachers in Omaha and surrounding metropolitan-area districts who were working on earning a master's degree from the College of Education. The TMI course focuses on the utilization of the various multiple intelligence theories by teachers to enhance children's understanding in the various disciplines. In the class, participants explore, evaluate, and develop various methodologies that foster understanding and use of MI in teaching. The graduate students completed the survey after they had completed the TMI course and had applied what they learned in their own classrooms. The survey (see Appendix B) was designed to determine the graduate students' background in MI theories, the value received from taking the TMI course, and application of MI theory in their teaching. Of the graduate students who were enrolled in the class, 75% completed the survey.

Background in MI theory. In responding to the section of the survey that examined the participants' background in understanding and using MI, 88% of the graduate students indicated that they had learned about MI theory in coursework or workshops. They knew and understood the different intelligences, and 44% had used MI to some extent in their teaching. However, less than 1% indicated they followed MI theory closely or used it consistently in their teaching. Virtually all indicated that their purpose in taking the course was to integrate MI theory more actively and purposefully into their instruction.

Value received from TMI course. Most graduate students (66%) said that preparing the class-lessons assignment was the most beneficial part of the TMI course. In this assignment, the teachers were expected to develop five different lessons using all eight MIs in each lesson. Once they had developed all five lessons, the lessons were uploaded into the electronic course system so that all the teachers could download and print copies of each lesson. In this way, each member of the class was able to assemble a file of MI-integrated lessons developed by other teachers and could then adapt the lessons for their own use.

Other teachers (16%) suggested that developing an understanding of how the brain

functions when learning was the most beneficial component of the TMI course, and 11% thought that reading journal articles about MI learning theories was valuable. Basically, the teachers shared that the assignments in which they had to use MI theory were the most beneficial. For example, the graduate class had a MI Fair in which the teachers were placed into groups to develop learning stations centered on one of the eight intelligences. At each station, the name of the intelligence was displayed along with the definition of that intelligence. Each station had to have three to five different activities and assessments that helped visitors to the station to understand more about that intelligence, how to use it in teaching, and how to assess that learning.

Application of learning. When the teachers were asked in the survey to explain how using MI theory would benefit them as teachers, approximately 75% indicated that MI theory helped them to meet the individual needs of their students. They believed that MI theory was imperative in meeting the diversity of the students and gave teachers a variety of instructional methods to use. Approximately 11% of the teachers mentioned the value of learning more about how their own personal MI strengths and weaknesses impacted their teaching approach. They were able to identify their own weaker intelligences—i.e., ones that they were thus less likely to use—and to understand how their students' strengths and weaknesses needed to be taken into account. The teachers believed that all students benefitted from using MI theory in class, not just those students who shared the same MI strengths as the teacher. The teachers said the TMI course helped them to think outside their comfort zones when developing learning activities and provided them with more tools for teaching.

> *"... [T]he need for teaching with the integration of MI is just as important today as it has been since the theory was first introduced."*

Participants in the survey also said their work in the TMI course helped them to learn how to increase student motivation and interest. For example, they noted that, if something needed to be retaught, they could use other MI approaches to present the concepts again without students becoming bored. In the same vein, the participants also suggested there would be fewer discipline problems with the use of MI because students who are engaged and challenged while learning do not cause behavior problems.

When asked how they thought that MI theory benefitted students in their classroom, 55% stated that the use of MI theory helped all students feel successful. They noted that, not only did the teacher know the students' strengths and teach accordingly, but students also understood when they excelled and what challenged them when learning. The teachers developed an insight to why the students behaved as they did during the teaching and learning process. Participants also stated that teaching using MI helped students develop more meaningful memory pathways that led to more effective learning.

The graduate students realized that learning in the classroom typically occurs using the linguistic, mathematical-logical, naturalistic, and spatial intelligences but could be expanded when using the other four intelligences. They noted that, when the teacher uses all eight MI approaches, all students learn better. Others stated that using all eight MIs also led to a variety of ways to assess students—another benefit for learners.

A Future Look at MI Theory and Education

Hoerr (2005) stated that DI compares to a banking process in which teachers are simply "depositing information into students from which the students will withdraw the information later for the test" (Hoerr, 2005, p. 1). This type of learning experience is not desired by today's teachers or students. The educational process needs to involve learning that is authentic and has real value for all of those involved. If educators take an approach of blending MI with DI, teaching will be more effective. MI allows teachers to focus not only on the product of learning but the process of learning as well. MI allows teachers to focus on the quality of the process of learning and a quality product when learning is done.

Teaching using MI theory is valuable to teachers and students alike because it addresses the diversity of learners. Understanding how the brain works and how MI theory can be used effectively is paramount to improving teaching and learning. In fact, a great deal of research on learning and the brain has become a leading focus in higher education. Pedagogy and teacher education continue to evolve, and teachers in K-12 must continue to seek new ways to teach using authentic and effective practices. Teacher educators in particular need to continue to emphasize the many different ways that each child learns and to encourage teachers to teach in the way in which the child learns best.

Conclusion

The research and survey data support the notion that the need for teaching with the integration of MI is just as important today as it has been since the theory was first introduced. The TMI students who participated in the survey valued their experience in the course and saw the need to integrate MI practices into their teaching, but their reflections indicated that the application and effectiveness of MI theory does not seem to be well understood or practiced in schools. Therefore, teacher educators must continue to teach about MI theory and the practical application of the theory in the K-12 classroom.

If more K-12 teachers saw the value of using MI theory effectively in their teaching, students would benefit in a number of ways. They would not only learn about their own MI strengths and how to use them effectively but also would enjoy learning in general because they are motivated to learn (Rettig, 2005). Teachers would also benefit by learning their own MI strengths and weaknesses and recognizing the need to make a conscious effort to use all eight MIs to reach all of their students, not just those who think as they do.

The longevity of MI theory, the evidence of effectiveness of MI theory in this study, and the literature indicate that using MI theory is effective in meeting the diversity of the learner. Accordingly, teachers need to broaden their instructional and assessment approaches to include strategies drawing on a wider variety of intelligences (Ozdemir, Guneyzu, & Tekkaya, 2006). Even more to the point, educators should focus on the value and the authenticity of any educational theory to produce real results in teaching and learning, and teacher educators should be guided by the same criteria as they determine what theories should continue to be integrated into teacher-preparation programs.

References

Douglas, O., Burton, K. S., & Reese-Durham, N. (2008). The effects of the multiple intelligence teaching strategy on the academic achievement of eighth grade math students. *Journal of Instructional Psychology*, *35*(2), 182-187.

Fröbel, F. (2003). *Pedagogics of the kindergarten: Ideas concerning the play and playthings of the child.* Honolulu, HI: University Press of the Pacific.

Gardner, H. (1983). *Frames of mind*. New York, NY: Basic Books/Perseus Books.

Gardner, H. (2006). *The development and education of the mind*. New York, NY: Routledge.

Goleman, D. (1994). *Emotional intelligence: Why it can matter more than IQ*. New York, NY: Bantam Books.

Goleman, D. (2006). *Social intelligence: The new science of human relationships*. New York, NY: Bantam Books.

Goleman, D. (2009). *Ecological intelligence*. New York, NY: Broadway Books/Crown Publishing.

Hoerr, T. (2002). Applying multiple intelligences in schools. *New Horizons for Learning.* Retrieved from http//www.newhorizons.org

Moran, S., Kornhaber, M., & Gardner, H. (2006). Orchestrating multiple intelligences. *Educational Leadership*, *64*(1), 22-27.

Ozdemir, P., Guneyzu, S., & Tekkaya, C. (2006). Enhancing learning through multiple intelligence. *Journal of Biological Education, 40*(2), 72-78.

Rettig, M. (2005). Using the multiple intelligences to enhance instruction for young children and young children with disabilities. *Early Childhood Educational Journal*, *32*(4), 255-259.

Sternberg, R. J. (1996). *Successful intelligence: How practical and creative intelligence determine success in life*. New York, NY: Plume/ Penguin Group.

Sternberg, R. J. (2003). *Wisdom, intelligence, and creativity synthesized*. New York, NY: Cambridge University Press.

Appendix A
Comparison of MI Theories: Sternberg, Gardner, and Goleman

Gardner's Multiple Intelligence Theory	Sternberg's Successful Intelligence Theory	Goleman's Emotional/Social Intelligence Theory
Mathematical/Logical Linguistic Naturalistic	Analytical	
Spatial Bodily/Kinesthetic Musical	Creative	
Intrapersonal Interpersonal	Practical	Emotional Social

Appendix B
Graduate Student Survey and Results

1. Why did you decide to take the EDUC 8070 Teaching with Multiple Intelligence course?

44% Required for program/degree
38% Sounded interesting/useful for teaching class
16% Background in MI and wanted to learn more
11% Heard good things about class and instructor
Other: Convenience of time offered; Important for all teachers to have; First year teacher and wanted more ideas to help me with teaching; Heard/talked about MI at inservice meetings

2. Which best describes your experience with MI theory? (Check all that apply.)

22% I had no experience with multiple intelligences before the course.
88% I heard of Gardner's theory of multiple intelligences.

44% I have used MI theory in some of my teaching.
.05% I use MI theory in a lot of my teaching.
0% I use a lot of MI theory in almost all of my teaching.

3. What was the most beneficial part of EDUC 8070 TMI class?

66% Preparing class lessons using all 8 MI and finding resources
16% How to incorporate MI in lessons
16% How the brain works/learns
11% Reading journal articles about MI
11% Learning about 8 MI and other theorists of MI
11% MI Fair and applying MI
Other: Really experienced MI and not just heard about it; Strategies were applicable to the classroom; Learned more about my own MI strengths and weaknesses; Real life applications to the K-12 classroom

4. Please explain how you think using MI theory benefitted you as a teacher?

61% Helped me meet individual needs of students and gave variety of instruction to all students and not just those of my same MI strengths
16% Kept students interested and re-taught without getting bored
16% Less discipline problems because students engaged and not bored
16% Helped students, especially those challenged in learning
11% Helped me to develop my own MI by developing those I am weak in
11% Helped my understanding of my students' strengths and weaknesses
11% Helped me think outside the box when teaching and more tools for teaching
Other: Developed a MI mindset and kept me thinking about how learning occurs and the many ways I can help learning; Built student motivation, interest and involvement; Helped me teach the whole child; Helped assessment of student's MI and base lessons on their MI strengths

5. Please explain how your students benefitted from MI theory being used as a teaching tool in your classroom?

55% MI helped students feel successful/intelligent and know their strengths
16% Met students' learning needs and insight to the way they are
16% Students didn't get bored and developed meaningful memory pathways
11% Better than just reading from a book, a hands-on approach to learning
11% Students learned better, understood better and applied what was learned better
11% Students felt more control in their learning
Other: Showed teachers how students learn differently; Gave variety to teaching and learning; Don't always have to teach in the typical intelligences such as linguistic, mathematical-logical, naturalistic, and spatial: there are four other ways as well.

6. Below, give an example of a teaching approach based on MI theory that you used in your classroom.

22% Incorporated at least 1 MI project every year, helped students to learn

their own strengths and weaknesses, then work with those strengths and weaknesses

22% Used more kinesthetic MI
16% Used more natural MI
16% Used more musical MI
11% Incorporated as many MI in their daily lessons as possible
11% Used lessons I developed with all 8 MI
11% Used a variety of other MI approaches and other than linguistic
11% Investigated the number of ways students can be assessed and then let them choose the assessment they wanted
Other: Construction of projects that use as many MI as possible; Use journaling to see how students thought they are learning; Students did spatial drawings of whatever they read to show comprehension; More group activities and more games for more interactivity; In math, used more manipulatives to help students see the problem, and use MI stations for students to use to learn more; In chemistry a) in modeling atoms, b) having debates of nuclear weapons, and used a deck of cards to better understand the development of the periodical table.

7. How receptive are the other teachers, administrators to MI theory at your school?

27% Very receptive and interested in what I shared with them
16% Some believed it is just a new name to the same old teaching approaches
16% Administrators are very supportive of anything that helps students learn better
11% Encouraged our school to use MI theory in staff development
Other: School encourages innovation in learning, buts wanted quiet learning; School is receptive but is concerned with AYP; School is receptive but doesn't practice MI frequently; School is receptive but focused on Reading First Curriculum; Not much is said about MI at school, but I try to spread the word.

Elementary School Grade Retention: High School Seniors Provide Perceptions of Being *Held Back*

By Christine M. Smith and Mary Jean Ronan Herzog

Researchers dating back to the 1920s have argued the effects of retention on the academic achievement, social adjustment, and emotional state of students. Studies regarding the phenomenon are substantially quantitative; comparatively few are qualitative. The phenomenological study described in this article fills a void in the qualitative research by examining the experiences of high school seniors who had been held back a grade in elementary school and who planned to participate in postsecondary education. Most feared they would lose their friends at the time they were retained. However, all exhibited resiliency, overcame challenges, and found success in school. Although several viewed retention merely as prolonging their schooling, many saw the benefits of retention on their academic achievement. Protective factors included mother's support, family support, early academic interventions, extracurricular activities in high school, and early-grade retention. The seniors in this study teach educators to consider each student's complete personal story and to envision each individual's future when deciding upon retention.

Educators, counselors, and psychologists have been involved in the debate regarding grade retention (i.e., being *held back* in school) and social promotion for decades. In both educational and psychological literature, researchers (Alexander, Entwisle, & Dauber, 2003; Allen, Chen, Willson, & Hughes, 2009; Beck & Muia, 1980; Dawson & Ott, 1991; Ferguson, Jimerson, & Dalton, 2001; Fournier, 2009; Grissom & Shepard, 1989; Hagborg, Masella, Palladino, & Shepardson, 1991; Hernandez-Tutop, 2012; Holmes, 1986; Jimerson, 2001; Jimerson, Anderson, & Whipple, 2002; Jimerson & Ferguson, 2007; Johnson, Merrell, & Stover, 1990; Katz, 2008; Kershaw, 2009; Mantzicopoulos, 1997; Meisels & Liaw, 1993; Peterson, DeGracie, & Ayabe, 1985; Pierson & Connell, 1992; Reynolds, 1992; Sandoval & Hughes, 1981; Schwerdt & West, 2012; Shepard & Smith, 1990; Tweed, 2001) have supported both proponents' and opponents' arguments about the emotional, social, and academic impact of being held back. One's head could swim after reading study after study. After decades of research, the only pervasive conclusion is that retention does not have a clear and consistent impact on student outcomes later in life.

Because quantitative studies on retention have yielded inconsistent results over time, qualitative studies might help educators gain a deeper understanding of the phenomenon. Studies of the lived experiences of those who were held back in elementary school may not provide consistent results, but they may give educators a visualization of the personal

impact of retention. Some students are retained but successfully complete high school and are prepared for college. For those students, perhaps retention is a good idea. At the very least, retention is not a corollary to their dropping out of school. For educators faced with retention decisions, information regarding the characteristics of students whose achievement was positively affected by retention would be beneficial. Such information is gained by examining the lived experiences of students who were held back.

The purpose of my study was to add to the qualitative literature in order to better understand the phenomenon of being held back from the perspective of high school seniors who had those experiences and who achieved success in school. I interviewed 22 high school seniors on track to graduate with a college-preparatory diploma. Prior to this study, I had interviewed five high school seniors with the same academic trajectory for a pilot study that helped clarify my methodology. Through the interview process, students reconstructed the academic, social, and home environments at the time they were retained. Transactions between the students and these environments that may have enabled them to rebound from any adverse effects from the retention event also emerged for investigation.

As an elementary school administrator, I have a vested interest in understanding the profile of a student who might benefit from being retained. Early sources of decision-making models (Lieberman, 1980; Light, 1998) provided limited insight into the predicted success of retention. Factors from those models included the child's physical size, maturity, academic potential, basic-skill competencies, and self-concept, as well as the parents' and school personnel's attitudes toward retention. Although these resources might be helpful, voices of students who were held back provided deeper insights into the effects of retention.

A Review of the Literature

Some researchers claimed that retention is a means by which academic standards are raised (Shepard & Smith, 1990). Indeed, statewide policies in Texas, North Carolina, and Florida mandate retention in elementary school for students who have not exhibited proficiency levels on state tests. In 2002, the implementation of the Florida Pupil Progression Plan resulted in the retention of almost 22,000 third graders (Powell, 2005). Earlier, the Texas Reading Initiative, enacted in 1997, called for the nonpromotion of third graders who did not pass the Texas Assessment of Knowledge and Skills (Rodriguez,

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2007). The Read to Achieve Act in North Carolina (North Carolina Board of Education, 2014) calls for the retention of third graders who are not reading on grade level by the end of the school year.

Some scholars contend that retention is a by-product of an increasingly demanding educational system. For example, according to Hernandez-Tutop (2012), educators face increased pressure to ensure their students meet rigorous standards as outlined in the Common Core State Standards (Common Core State Standards, 2013). When students do not demonstrate proficiency, the tendency is to retain them.

Historically, many researchers who conducted quantitative studies concluded that grade retention had a negative effect on later academic achievement (Alexander, 1996; Alexander, Entwisle, & Horsey, 1997; Dennebaum & Kuhlberg, 1994; Deschamps, 1992; Hagborg, Massella, Palladino, & Shepardson, 1991; Jimerson, 2001; Johnson, Merrell, & Stover, 1990; Meisels & Liaw, 1993). In similar seminal research, Holmes and Matthews (1983) found that academic achievement improved in the first year students were retained, but the gains disappeared after 2 or 3 years. Grissom and Shepard (1989) stated that a causal connection might have existed between retention and dropping out of school. More recently, Jimerson and Ferguson (2007) followed students from early elementary school through Grade 11 to determine the association between grade retention and academic achievement during adolescence. In their study, a random sample of promoted students outperformed retained students and students who were recommended for retention but promoted.

In an earlier study, Jimerson et al. (2002) reviewed 17 papers—including the work of Grissom and Shepard (1989)—and concluded that retention emerged as one of the more prominent factors contributing to students' dropping out of school. Specifically, Jimerson et al. noted, "…it was found that retention was the most significant predictor for high school dropout for these students" (p. 443). Most of the studies from their review claimed that being held back in school was a strong predictor of dropping out.

Other studies highlighted the positive effects of retention. A meta-analysis of studies that matched subjects between comparison groups tended to show that retained students fared as well as or better on achievement tests than matched students who were socially promoted (Allen et al., 2009). Pierson and Connell (1992) found that retained students' academic performance was significantly better than that of a matched group of socially promoted students. Their study examined students in Grades 3 through 6 one year after the retained students had been held back.

Ferguson, Jimerson, and Dalton (2001) followed 106 students from kindergarten through Grade 11; 58 of these students were retained, 15 promoted although recommended for retention, and a random sample of 33 were regularly promoted. They found that 25% of the retained students performed above the mean of promoted students in Grade 7 grade-point average and Grade 8 Stanford Achievement Test scores

Researchers in studies showing the positive effects of retention tended to focus more on why some retained students were successful rather than comparing groups of retained students to other groups. For example, a study from Ohio showed 138 of 966 students enrolled in one high school had been retained at some time in their educational careers (Kosiba, 2008). Ninety-eight percent of those retentions occurred before high school. Of the 138 students who were retained, 106 were academically successful.

Researchers focusing solely on the achievement of retained students over time in general found more benefits of retention than did those who compared retained students

with nonretained students. Schwerdt and West (2012) studied the effects of Grade 3 retention on student outcomes up to 6 years later. They found evidence of substantial short-term gains in math and reading achievement. Also, they found that Grade 3 retention "substantially reduces the probability of being retained in later grades…" (p. 26).

Similarly, Sandoval and Hughes (1981) found that some students benefited from retention. They monitored 146 Grade 1 candidates for retention to determine the effects of retention upon their social, emotional, and academic development after 1 year. Some of the students were promoted, and some were retained. The primary purpose of the study was to examine the characteristics of the children who benefited from retention. The authors found that retained students' academic success was dependent upon their self-concept and the confidence level of the initial Grade 1 teacher in the decision to retain.

Resilience as an issue in the literature. Studies that examined the characteristics of students who benefited from retention led to literature focused on child development, specifically resilience in children. The transactional model of development provided a theoretical framework for my study and provided insight for understanding what the participants said.

The transactional model of development as documented by Sameroff and MacKenzie (2003) suggests that a child's development is influenced by "…the continuous dynamic interactions of the child and the experience provided by his or her social settings" (p. 614). The developmental process in a student is a product of the relationship between the student and his environment over time. A student is changed as he or she interacts and adapts with the environment. Conversely, the environment reacts to the changes in the student. A variety of contexts exists in which children are influenced (Sameroff, 2009), one of the more powerful being the relationship between children and their parents. As a result of exploring this concept in the literature, I listened closely for references to parents during the interviews.

In addition to considering transactions between the student and parents, I also examined studies of transactions between school and student. Roeser, Eccles, and Sameroff (1998), for example, found that bidirectional interplay between middle school students' emotional well-being and academic motivation was connected to their success or failure in school. Their study suggested a transactional process between students' perceptions of their competence and the history of feedback from teachers. In turn, the students' self-perceptions affected their sense of well-being. These studies led me to anticipate much discussion regarding the participants' relationships with teachers.

Methodology

After approval from Western Carolina University's Institutional Review Board and the superintendents of the school districts from which I drew my sample, I contacted high school principals and their counselors to explain the study and consider ways they might find students who met the criteria for selection—i.e., retained at some point in their school careers and anticipating postsecondary work. Birthday lists from student databases helped identify the older students who were possible participants for the study. One school counselor created a survey that served as a starting point for locating participants.

To provide a personal touch beyond formal recruitment and consent, the school administrators and counselors asked identified students if they wanted to participate in a research study about being retained in elementary school and ultimately having a successful educational career. The school officials explained that an elementary school principal was

conducting the study to find out more about the effects of being held back in the early grades. The principals and counselors told the students that the researcher wanted to hear their stories and wanted their advice about what to consider when facing the retention decision. School personnel did not select the participants; all students who were eligible and interested participated.

Of the 22 participants, 9 were male: 3 White, 3 Black, 1 Biracial, and 2 Latino. All but two males received special education services in school. Of the 13 female participants, 11 were White and 2 were Black. Seven female participants received special education services in school, and one was in the academically and intellectually gifted program. Sixteen had been retained in the same school system from which they would graduate. Four were retained in a different North Carolina school system, and two were retained in a different state other than North Carolina. Of the 22 participants, 19 had been held back in the primary grades (Grades kindergarten through 3).

Using a topical approach (Marshall and Rossman, 2011), I interviewed each participant individually. I created the interview protocol (See Appendix) based on Seidman's (1998) three-interview approach. Most of the interviews occurred in offices in the student's school. However, some participants agreed to meet at my office. I interviewed one student at her grandmother's home. Each interview was digitally recorded using two devices and generally lasted 45-60 minutes.

I attempted to explore each individual's meaning of their lived experience with retention: how they perceived it, described it, felt about it, judged it, remembered it, made sense of it, and talked about it with others. I tried to deepen the discussions by asking each participant to tell me what it was like to be retained in elementary school. I asked probing questions such as *When did you first understand that you were being held back? How did you feel when you first learned that you were going to be held back? Why were you retained? What was your parents' view of retention? What was your teacher's view? Describe your first days of school as you entered the grade for the second time. How was the second time around different than the first? Now that you are about to graduate from high school, reflect upon how being retained affected your academic achievement. Knowing what you know now, would you have changed anything regarding your retention? If so, in what way?* By asking their advice for educators, I wanted to empower the participants and make them feel they were contributing to effective educational practices. This part of the interview gave the participants an opportunity to reflect on their meaning of being held back. They often couched their responses in terms of their own experiences. In several cases, they reversed their initial responses regarding the impact retention had on their education. In addition to recording the interviews, I took notes. During the interviews, I read over my notes to determine what responses needed to be clarified or probed.

I personally transcribed each interview and member-checked by sending the transcription to the participant for corrections, additions, and deletions. I received responses regarding the transcriptions from two participants. After completing each transcription, I thoroughly read through each and wrote memos in the margins to identify themes.

Research Questions

How do high school seniors on track to graduate with a college preparatory diploma feel about their having been held back in elementary school? Friends were integral in the lives of the participants. Every participant talked about friendships. Twelve said being held back enabled them to find a different and often better group of friends. Although they were

initially concerned about losing their friends, 17 said they made friends easily as they were held back. Some participants maintained friendships in both grade levels, but two participants felt *left behind* when their original set of friends graduated high school before them.

More than half of the participants put a positive spin on their retention. Five were glad they were held back because they viewed the retention as an opportunity to catch up academically or emotionally. Four others understood the reason for their retention, accepted it, and moved on. Participants' memories of their initial reactions upon learning of their retention spanned a wide continuum of emotions. Generally, the participants who were held back in kindergarten or Grade 1 reported having little recollection or exhibited less-negative emotions than those who were retained in later grades. Participants who were retained in later grades, such as Grade 4 or 5, expressed more anger than sadness at not moving up with their friends.

Participants' current reflections about their retention were varied. More than half of the participants claimed their retention experience put them on a more positive pathway than if they had not been held back. Slightly less than half of the participants claimed no benefits or consequences for being held back. Either they did not remember being retained or they felt being retained had no impact on them. Two participants expressed strong regret at being retained, saying it prolonged their time in school unnecessarily. Based on their experiences, most of the participants suggested that struggling students in any grade should receive extra help. A few participants advocated providing students with extra help as an alternative to retention. Nevertheless, the long-term impact of being held back in elementary school was unique for each participant.

> *"I attempted to explore each individual's meaning of their lived experience with retention: how they perceived it, described it, felt about it, judged it, remembered it, made sense of it, and talked about it with others."*

What were the parenting, social, and educational environments of these seniors before, during, and after they were retained in elementary school? Participants' parental environments varied; however, most common was strong maternal support. All but two participants described a mother who influenced, supported, and cared for them before, during, and after the retention event. In general, family support was evident in the lives of every participant. About half of the participants faced challenges at home such as divorce, death, mobility, and poverty. Although a high incidence of poverty existed among the participants, poverty did not appear to be a determining factor in the participants' graduation from high school. Some of the participants faced challenges common to many students, such as separated parents. Two participants faced enormous challenges, such as being removed from their homes and growing up in foster care. It is important to note that all of the participants faced their challenges and found ways to overcome them. None gave up.

School seemed to be a positive place for the participants. They enjoyed deep and long-lasting friendships with schoolmates. Also, they remembered positive social events in elementary school and shared many pleasant memories. Throughout high school, most of the participants were involved in sports or other extracurricular clubs. Participation in these activities seemed to bind the students to high school.

All of the participants could describe their academic struggles in detail. Reading problems plagued 12 participants. Of these participants, six blamed their reading problems for holding them back. Eleven participants mentioned math as their nemesis. Reading seemed to improve over time—more so than math. For most of those who were deficient in math, what started out as a barrier continued to be a weakness in later years as well.

School records indicated 14 of the participants in this study were identified as receiving special education services in reading, math, or both. One student was identified as academically gifted, and one student received accommodations through a 504 plan. It was interesting to note, however, that only 1 of the 14 participants mentioned being in special education.

What were the participants' perceptions of how transactions between environments over time shaped them into the people they are now? The most prominent transaction appeared to occur between family support and academic achievement. As mothers and other family members provided support, appropriate models for success were created for the participants when they were children. These models of success created environments of perseverance for the participants. In turn, the perseverance yielded more academic success. Having experienced some success, the participants' self-concepts improved, which made them more likely to set higher expectations for themselves. As they set higher academic expectations for themselves, they achieved more.

In addition, a transactional process appeared to exist between participants' perceptions of their competence and positive feedback from teachers. As participants responded favorably to the extra help they received from teachers and felt more confident in their work, the teachers were more likely to harbor favorable perceptions of their students' competencies. In turn, the students' self-perceptions affected their sense of well-being and made them more likely to receive positive attention from teachers. As teachers gave more positive attention, especially in the form of academic interventions, the participants experienced more success in school.

Because the participants experienced success in some aspect of school, they seemed to feel included in their school environment. Whether success came from a specific content area or an extracurricular organization, it seemed to have a positive effect on the participants' sense of belonging. In turn, their involvement in a team sport or club made a positive impact on their perspective of school.

The retention event created a cascade of transactional social environments. As the participants were held back, they found a new and different set of friends. Most often, the new set of friends changed the trajectory of their interests and shaped them into different people than they might have been otherwise. Twelve of the participants described their new set of friends as creating positive pathways for them.

What characteristics of resiliency, if any, did these seniors seem to possess that may have contributed to their success? Research suggested that one of the protective factors for resiliency is supportive parents (Janas, 2002; Steinhauer, 1996). All of the participants said they had supportive parents or at least one supportive adult during the time they were held back in elementary school. All but two participants indicated the supportive adults

were their mothers. However, all participants described how at least one adult helped them persevere.

Eighteen of the participants responded in ways that exhibited an internal locus of control, which has been shown to be a characteristic of resiliency (Shaver & Mikulincer, 2010). They made very few excuses for their problems, even to the point of minimizing the effect of some challenges they faced. They seemed to be proud of their accomplishments, and they all looked toward a positive future in pursuing their goals and aspirations. All of the participants clearly articulated their goals.

The participants appeared to have fostered trusting relationships with adults, which, according to Woklow and Ferguson (2001), is a characteristic of resilient children. The participants talked favorably about their teachers, indicating that they provided extra support, cared for them, and helped them beyond school. Seven participants detailed their personal relationships with teachers. The positive relationships between the participants and their teachers clearly contributed to the protective factors for resiliency.

Conclusion

Results from this study suggested that elementary school retention can have a positive effect on students, no effect, or a negative effect that does not necessarily result in dropping out of high school. For some students, retention helped them catch up or improve skills. Some students claimed that being held back neither helped them nor hurt them. A few claimed that retention caused them an extra year of unnecessary schooling. The educational outcome depended predominantly on the characteristics of the retainees and their transactions with their home, school, and social environments.

The most prominent protective factors for high school graduation for those who were held back a grade in elementary school were found to be (a) mother's support; (b) family support; (c) teacher support; (d) academic interventions provided; (e) emotional and behavioral well-being; (f) resilient character; (g) participation in high school extracurricular activities; and (h) early-grade retention (kindergarten through Grade 3). All of these elements were evident throughout the data. Not every participant possessed all of these factors; however, all of the participants possessed most of them.

Implications for Practice

Educators are faced with ever-increasing demands for a more rigorous curriculum. The Common Core State Standards (Common Core State Standards, 2013) used by most states require children to demonstrate skills that will prepare them for advanced studies after high school. It is the responsibility of all educators to preserve the integrity of the educational system and to ensure the success of every student. Therefore, myopic approaches regarding retention will likely have detrimental results. Widespread social promotion will dilute the value of the high school diploma. Retaining students based on proficiency criteria alone may result in limited benefits. Educators must wrestle with these potential outcomes.

When considering retention, educators ought to keep in mind that the goal for every child is high school graduation. Struggling students who possess protective factors for high school graduation as indicated earlier may benefit from retention. Using all available information, educators should weigh carefully the student's environmental variables as they may impact the educational pathway.

Participants in this study changed my thinking regarding retention. Instead of

considering retention as an intervention for *catching up a year*, I now consider retention as an intervention that will enable a student to make long-term gains. The question to ask is *Will retention facilitate this student's high school graduation?* As an educational leader, it is my responsibility to provide each child with an elementary education that will create opportunities for success in high school and beyond. The goal is not to be prepared for the next grade; the goal is to be prepared to graduate with a college-ready diploma.

In addition, retention candidates under my watch will need to possess most of the prominent protective factors for high school graduation listed above. Although these protective factors should not be used as a checklist, they can serve as a guide when considering retention. The participants in this study exemplified most of these characteristics. A struggling student in my elementary school who lacks many of these protective factors will not be considered for retention. For example, a struggling student who exhibits behavior problems would not be a good candidate for retention based on my findings. Most of the participants in this study exhibited no sociopathy. Instead, they trusted adults, made no excuses for their failures, responded well to structured environments, and made lasting relationships with friends.

"Challenge gave these participants purpose, and it is thus incumbent upon all educators to create challenging environments for students."

Lessons learned from these participants may serve to keep struggling learners from dropping out of school. The importance of challenge was evident in the findings. These students understood their challenges and possessed the qualities of resilience to meet them. Some of the participants, by accident or by interest, found themselves being *pushed* to improve. For example, several students said they became more confident as a result of their involvement in theater. For others, the challenge of competing in sports gave them a sense of competence that may have offset feelings of academic failure. Challenge gave these participants purpose, and it is thus incumbent upon all educators to create challenging environments for students.

Another lesson learned was the importance of having struggling students set high expectations for themselves. Every participant talked of reaching goals. Each articulated specific plans after graduating from high school. Failing a grade in school did not appear to define them as learners, nor did it brand them. Throughout school, they continued to seek opportunities to make themselves better. They seemed to know what they wanted and understood what they needed to do to attain their goals.

A final lesson learned was the importance of being *pushed* by someone. Every participant was motivated by someone who cared, and most were given encouragement by more than one influential adult in their lives. Their parents motivated them, and their teachers inspired them. Parents did not allow failure to hold their children back from ultimate success. They supported their children through educational setbacks and challenges. These participants did not make excuses, perhaps because they were not allowed to use their learning difficulties as excuses for not succeeding. Educators and parents should push children to succeed and provide the support necessary to overcome barriers.

The decision to retain students may or may not always be in the hands of educators

or parents. Mandatory retention policies for those students who do not meet proficiency criteria are becoming more popular among states. The decision to promote socially or hold students back may soon be removed from the hands of educators. Until then, educators must consider the unique characteristics and environmental factors of each student when deciding upon retention or social promotion. Even as failure occurs, lessons learned from these participants can propel students past setbacks and toward a productive, satisfying future.

Limitations

The study had definite limitations. Many pieces of information were collected in order to triangulate data and create a complete profile of each participant. However, I often found school records with missing data, and some participants did not know parts of their social histories. Time constraints prevented an exhaustive search to fill the voids. Similarly, reliability is a concern with the kind of retrospective data collected in this study (Henshaw, Foreman, & Cox, 2004), but retrospection can allow participants to reflect upon and assess their experiences with the new knowledge they gained over time. Researcher bias is another limitation, as in any qualitative study (Hill et al., 2005). In this study, bias was mitigated by refraining from selection of participants and by the member-checking process to confirm understanding of interview responses.

Overall, results of qualitative studies lack generalizability, and such is the case with this study. However, qualitative research allows the possibility to go beyond the narrow interpretations of data and extrapolate other applications of the findings (Patton, 2002). Therefore, findings from this study can be used as lessons learned and be applied to future decisions regarding retention.

References

Alexander, K. (1996). Rethinking retention. *American Teachers, 82*(1), 2.

Alexander, K. L., Entwisle, D. R., & Horsey, C. S. (1997). From first grade forward: Early foundations of high school dropout. *Sociology of Education, 70*(2), 87-107. doi:10.2307/2673158

Alexander, K. L., Entwisle, D. R., & Dauber, S. L. (2003). *On the success of failure: A reassessment of the effects of retention in the primary grades.* Cambridge, UK: Cambridge University Press.

Allen, C. S., Chen, Q., Willson, V. L., & Hughes, J. N. (2009). Quality of research design moderates effects of grade retention on achievement: A meta-analytic, multi-level analysis. *Educational Evaluation and Policy Analysis, 31*(4), 480-499. doi:10.3102/0162373709352239.

Beck, L., & Muia, J. A. (1980). A portrait of a tragedy: Research findings on the dropout. *The High School Journal, 64*(2), 65-72.

Common Core State Standards. (2013). *Common Core State Standards Initiative.* Retrieved from http://www.corestandards.org/in-the-states

Dennebaum, J. M., & Kuhlberg, J. M. (1994). Kindergarten retention and transition classrooms: Their relationship to achievement. *Psychology in the Schools, 31,* 5-12. doi:10.1002/1520-6807(199401)31:1<5::AID-PITS2310310102>3.0.CO;2-6

Dawson, M. M., & Ott, C. A. (1991). Keeping students back: What are the facts? *PTA Today, 17*(1), 16-17.

Deschamps, A. B. (1992). *An integrative review of research on characteristics of dropouts* (Unpublished doctoral dissertation). George Washington University, Washington, D.C.

Ferguson, P., Jimerson, S. R., & Dalton, M. J. (2001). Sorting out successful failures: Exploratory analyses of factors associated with academic and behavioral outcomes of retained students. *Psychology in the Schools, 38*(4), 327. doi:10.1002/pits.1022

Fournier, J. R. (2009). *A qualitative study of personal reactions and experiences of adolescent students who have been retained* (Doctoral dissertation). Retrieved from ProQuest. (UMI No. 3394738)

Grissom, J. B., & Shepard, L. A. (1989, March). *Structural equation modeling of retention and overage effects on dropping out of school.* Paper presented at the Annual Meeting of the American Educational Research Association, San Francisco, CA. Retrieved from ERIC database. (ED307684)

Hagborg, W. J., Masella, G., Palladino, P., & Shepardson, J. (1991). A follow-up study of high school students with a history of grade retention. *Psychology in the Schools, 28,* 310-317. doi:10.1002/1520-6807(199110)28:4<310::AID-PITS2310280405>3.0.CO;2-J

Henshaw, C., Foreman, D., & Cox, J. (2004). Postnatal blues: A risk factor for postnatal depression. *Journal of Psychosomatic and Obstetric Gynecology, 25,* 267-272. doi:10.1080/01674820400024414

Hernandez-Tutop, J. (2012). Social promotion or grade repetition: What's best for the 21st century student? Retrieved from ERIC database. (ED532287)

Hill, C. E., Knox, S., Thompson, B. J., Williams, E., Hess, S., & Ladany, N. (2005). Consensual qualitative research: An update. *Journal of Counseling Psychology, 52,* 196-205. doi:10.1037/0022-0167.52.2.196

Holmes, C. T. (1986). *A synthesis of recent research on non-promotion: A five year follow-up.* Paper presented at the annual meeting of the American Educational Research Association, San Francisco, CA.

Holmes, C. T., & Matthews, K. M. (1983). The effects of nonpromotion on elementary and junior high school pupils: A meta-analysis. *Review of Educational Research, 54*(2), 225-36. doi:10.3102/00346543054002225

Janas, M. (2002). Twenty ways to build resiliency. *Intervention in School and Clinic, 38*(2), 117-121. doi:10.1177/105345120203800 20801

Jimerson, S. R. (2001). Meta-analysis of grade retention research: Implications for practice in the 21st century. *School Psychology Review, 30*(3), 420-437.

Jimerson, S. R., Anderson, G. E., & Whipple, A. D. (2002). Winning the battle and losing the war: Examining the relation between grade retention and dropping out of high school. *Psychology in the Schools, 39*(4), 441-457. doi:10.1002/pits.10046

Jimerson, S. R., & Ferguson, P. (2007). A longitudinal study of grade retention: Academic and behavioral outcomes of retained students through adolescence. *School Psychology Quarterly, 22*(3), 314-339. doi:10.1037/1045-3830.22.3.314

Johnson, E. R., Merrell, K. W., & Stover, L., (1990). The effects of early grade retention on the academic achievement of fourth-grade students. *Psychology in the Schools, 27,* 333-338. doi:10.1002/1520-6807(199010)27:4<333::AID-PITS2310270409>3.0.CO;2-3

Katz, M. (2008). *An investigation into the use of retention as an intervention strategy for struggling students as measured by success on FCAT in Seminole County* (Unpublished doctoral dissertation). University of Central Florida, Orlando, FL.

Kershaw, A. A. B. (2009). *Listening to the voices of retained students: An analysis of the social structure of school* (Unpublished doctoral dissertation). University of Missouri-Kansas City, Kansas City, MO.

Kosiba, J. A. (2008). *When does retention have the greatest positive impact on a student's academic success?* (Unpublished master's thesis). Wittenburg University, Springfield, OH.

Lieberman, L. M. (1980). A decision-making model for in-grade retention (non-promotion). *Journal of Learning Disabilities, 13*(5), 40-44. doi:10.1177/002221948001300508

Light, H. W., (1998). *Light's Retention Scale.* Novato, CA: Academic Therapy Publications.

Mantzicopoulos, P. Y. (1997). Do certain groups of children profit from early retention? A follow-up study of kindergartners with attention problems. *Psychology in the Schools, 34*(2), 115-127. doi:10.1002/(SICI)1520-6807(199704)34:2<115::AID-PITS5>3.0.CO;2-P

Marshall, C., & Rossman, G. B. (2011). *Designing qualitative research.* Thousand Oaks, CA: Sage.

Meisels, S. J., & Liaw, F. R. (1993). Failure in grade. Do retained students catch up? *Journal of Educational Research, 87,* 69-77. doi:10.1080/00220671.1993.9941169

North Carolina Board of Education. (2014). *North Carolina Read to Achieve Act: A Guide to Implementing House Bill 950/S.L. 2012-142 Section 7A.* Raleigh, NC: Author. Retrieved from https://eboard.eboardsolutions.com/Meetings/Attachment.aspx?S=10399&AID=12267&MID=804,

Patton, M. Q. (2002). *Qualitative research and evaluation methods* (3rd ed.). Thousand Oaks, CA: Sage.

Peterson, S. E., DeGracie, J. S., & Ayabe, C. (1985). *A longitudinal study of the effects of retention/promotion on academic achievement.* Paper presented at the annual meeting of the American Educational Research Association, Chicago, IL. Retrieved from ERIC database. (ED263667)

Pierson, L. H., & Connell, J. P. (1992). Effect of grade retention on self-system processes, school engagement, and academic performance. *Journal of Educational Psychology, 84*(3), 300-307. doi:10.1037/0022-0663.84.3.300

Powell, H. A. (2005). *Third grade retention and the Florida Comprehensive Assessment Test: An exploratory study* (Unpublished specialist's thesis). University of South Florida, Tampa, FL.

Reynolds, A. J. (1992). Grade retention and school adjustment: An explanatory analysis. *Educational Evaluation and Policy Analysis, 14,* 101-121.

Rodriguez, A. J. (2007). *Social promotion and retention policies in Texas elementary schools* (Doctoral dissertation). Retrieved from *Dissertation Abstracts International Section A. Humanities and Social Sciences, 68*(10-A), 4208.

Roeser, R. W., Eccles, J. S., & Sameroff, A. J. (1998). Academic and emotional functioning in early adolescence: Longitudinal relations, patterns, and prediction by experience in middle school. *Development and Psychopathology, 10,* 321-352. doi:10.1017/S0954579498001631

Sameroff, A. (2009). *The transactional model of development: How children and contexts shape each other*. Washington, DC: American Psychological Association. doi:10.1037/11877-000

Sameroff, A. J., & MacKenzie, M. J. (2003). Research strategies for capturing transactional models of development: The limits of the possible. *Development and Psychopathology, 15*, 613-640. doi:10.1017/S0954579403000312

Sandoval, J., & Hughes, G. P. (1981). *Success in non-promoted first grade children.* Bethesda, MD: National Institute of Mental Health,. Retrieved from ERIC database. (ED212371)

Schwerdt, G., & West, M. R. (2012). *The effects of grade retention on student outcomes over time: Regression discontinuity evidence from Florida* (Research Report No. PEPG 12-09). Cambridge, MA: Harvard Kennedy School. Retrieved from www.hks .harvard.edu/pepg/

Seidman, I. (1998). *Interviewing as qualitative research: A guide for researchers in education and the social sciences*. New York, NY: Teachers College Press.

Shaver, P. R., & Mikulincer, M. (2010). New directions in attachment theory and research. *Journal of Social and Personal Relationships, 27*(2), 163-172. doi:10.1177/0265407509360899

Shepard, L. A., & Smith, M. L. (1990). Synthesis of research on grade retention. *Educational Leadership, 47*(8), 84-88.

Steinhauer, P. D. (1996). *Methods for developing resiliency in children from disadvantaged populations*. Retrieved from ERIC database. (ED426169)

Tweed, B. S. (2001). *How is a child's perception of self affected by retention?* (Unpublished doctoral dissertation). East Tennessee State University, Nashville, TN.

Woklow, K. E., & Ferguson, H. B. (2001). Community factors in the development of resiliency: Considerations and future directions. *Community Mental Health Journal, 37*(6), 489-498. doi:10.1023/A:1017574028567

Appendix
Interview Protocol

Past Experience

1. Tell me about elementary school. What do you remember most?
2. What were the best parts of elementary school?
3. Tell me about your elementary school teachers? What did you like about your favorite teachers in elementary school? Tell me about them.
4. What parts of elementary school were easy for you?
5. What parts were not so easy? Talk about those challenges.
6. In what grade were you retained?
7. What do you remember about being retained in elementary school?
8. Why were you retained? What do you remember about that event?
9. Did you know at the time that you were struggling? If so, how did you know?
10. How did you feel about the challenges you were facing at the time?
11. When did you first realize that you were going to be held back? How did you feel when you were first made aware that you would be repeating a grade?

12. If you were upset, then how did you overcome those feelings?
13. How did your family members react to your being retained?
14. What do you think was your teacher's perception of your retention?
15. Talk about your home life as you remember it before you were retained. How did it change throughout the years?
16. Talk about your education up until the time you were retained, e.g., did you stay in one school? Did you have friends? Did you like your teachers?
17. Talk about your second year in the grade in which you were retained. Were things different? If so, how?
18. Tell me about your teacher the year after you were retained?
19. Who has made a positive influence in your life?

Present Experience

20. How did being held back in elementary school affect your graduating from high school?
21. As a high school senior on track to graduate with a college prep diploma, you have had a successful educational career. Tell me about your successes in high school.
22. We all have challenges with our successes. Talk about the challenges you faced in high school.
23. How did you overcome those challenges?
24. What do you plan to do after you graduate from high school?
25. How do you feel about retention now?

Reflection on Meaning

26. You have reflected a lot about your experiences. Given those reflections, how has being retained affected you?
27. What is it like now talking about your past experience with being retained?
28. What advice would you give teachers and principals as they consider retention for a child?

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- References should refer only to materials cited within the text. Nonretrievable material, such as papers, reports of limited circulation, unpublished works, and personal communications, should be restricted to works absolutely essential to the manuscript.
- Abbreviations should be explained at their first appearance in the text. Educational jargon (e.g., preservice, K–10, etc.) should be defined as it occurs in the text.
- Place tables and figures on separate pages at the end of the manuscript. Use Arabic numerals and indicate approximate placement in the text.
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