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Article Submissions

Long Island Education Review is a peer reviewed publication that is published twice each year. To be considered for publication, all submissions should be double spaced, in 12 point characters and accompanied by a <u>disk</u> in Word, or they should be sent by <u>email</u> as a Word document. Authors should follow the APA guidelines. No article will be accepted if it is more than 10 pages (double spaced) long. Suggested changes are the responsibility of the author. For the Spring issue, all submissions must arrive by March 15, 2014.

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SCOPE Education Services is a not-for-profit, private, voluntary organization permanently chartered by the New York State Board of Regents to provide services to school districts. Founded in 1964 by school superintendents, it is a cooperative venture for sharing resources to deal with common concerns. It is governed by a Board of Directors of school superintendents and college representatives and serves as a regional School Study Council and School Board Institute.

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Future Themes for The Long Island Education Review:

• Focus on the "Doctoral Research" of the New Generation

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- What is "Special" about Special Education
- Technology and 21st Century Schools
- Reducing Bullying in Schools
- The Next Generation of Superintendents: Assistant Superintendents Speak Up

Editor's Perspective

Readers in the general public have been bombarded with buzzwords like Common Core, state testing, and highly effective teachers versus developing or ineffective teachers. The Fall 2013



journal contains a number of articles relating to these topics and more from a perspective that is often neglected - research and evidence. Education has been the fodder for the local newspapers in the last year without so much as mentioning research or findings from studies that clarify the foundations of good instruction. Why are research and evidence-based practices so neglected in today's education system?

I am reminded of an experience I had while teaching a course in research application; one of my students was very upset about her district changing the curriculum for her kindergarten children. I suggested she research the curriculum, looking at the data and methodologies behind the change. After a month of searching, she couldn't find any figures or studies supporting the new curriculum. Finally contacting the curriculum company research department she was told that the decision for the kindergarten curriculum was based upon the findings of previous elementary programs, but not specifically on kindergarten. Her defiant response in the report, "Now if it fails, I'll tell them to go look at the research." Without proper research support for the new Common Core Standards and the various educational tools that stem from it, how can we develop best practices? The articles here delve into the current research around education. However, I challenge our readers, as we challenge our students, to objectively, deeply examine the beliefs and the methods we use in education.

Let's look at the information we have related to research and address these concerns. In any good research, the first task at hand is a clear and concise definition of terms. Can we decide on a "common" definition for Common Core? Can we come to a consensus and define examples and uses? Due to the misunderstanding of the term, "Common Core," the educational community and general public cannot fully address the issues related to it until an accepted definition is established. Research relies upon a clear and concise definition of the issue. The researcher's responsibility to the reader rests on a sound and complete research of literature to support the terms and definitions used their

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research. This is the first step in any form of good research, a mutual understanding of terms and definitions.

Now that we have identified our terms, let's go to our second step, defining the research question. How and where did this issue begin and what is the question at hand for this research? In this edition, articles ask if the changes in evaluations, Core and APPR, have a significant impact upon teacher performance and student learning. Do we have ample research to support change? I think the Common Core, APPR and other assessments and evaluations are very valid and worthy topics for research in education.

If we follow the good research we can trust the results and review the findings with a better and a clearer understanding. However, some research in our field is limited and anecdotal. We must ask if the methodologies used to measure change are clearly identified and easily replicated. Too often, I find what I call "voodoo" methodology. This means the methodology is so guarded and complicated that only the researcher can interpret his or her findings. Another aspect of "voodoo" methodology is the statistical analysis. What forms of analysis are used to discuss the results of the findings? At this time, most of the forms of analysis have been qualitative and correlational in design. Although this is an acceptable form of analysis, the time has come to use some form of experimental design for sounder findings. This can be done by comparison between states not accepting the Common Core and those who have.

We have the opportunity to redefine the education system through sound research. We can reveal the significant differences these changes have made and thereby resolving issues that have long stymied educators. We can answer those questions that are left open by the research gaps. The Fall edition of the Long Island Education Review begins by addressing the topics surrounding the CCSS and APPR. However, we leave important questions untouched for today's leaders and educators to answer.

Richard L. Swanby Editor-in-Chief

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Opinion Center

The Current Status of Educator Evaluations: Teacher Effectiveness Tied To Student Learning

By Michael J. O'Brien, M.S., P.D.

The landscape is quickly and dramatically changing when it comes to rethinking and rebuilding teacher evaluations in school systems throughout the United States. In fact, teacher evaluations were the main topic of discussion at the March, 2013 International Summit on the Teaching Profession (ISTP) held in Amsterdam. At this summit, bringing together the ministers/secretaries of education and union presidents from 20 countries, it was noted by Andreas Schleicher of the Organization for Economic Cooperation and Development (OECD) in her report - "Teachers for the 21st Century: Using Evaluations to Improve Teaching" - that teacher evaluation systems are essentially "a work in progress." It was agreed upon by the participants of this summit that teacher evaluation systems must include high quality professional development, good working conditions, support from administrators, and a prominent role for teachers in developing new policies. It was clear that the United States was in a different place than most other nations. While we in the U.S. focus primarily on building accountability systems with multiple measures rooted in student achievement data, the world speaks about building a profession with teachers who can assess and inform each other's instructional practices and learning in schools. Many in the U.S. hope it's possible to have both a delicate balance of accountability and instructional improvement driven by multiple sources of data.

Throughout the United States educator evaluation is the focus of intense national discussion and debate. This interest is due, in part, to a growing recognition that the single most important school-based factor in strengthening students' educational achievement is the quality and effectiveness of the educators who teach in and lead the schools (Darling-Hammond & Bransford 2005; Barber & Mourshed 2007). This sharpened focus stems from a series of reports and studies critical of the current status of educator evaluation systems across the nation (Donaldson 2009; The National Council on Teacher Quality 2010). Among the most prominent concerns these studies raise are that the current educator evaluation policies and practices:

- Do not provide educators with adequate feedback for improvement
- Lack sufficient connection to goals of student learning and growth
- Fail to differentiate levels of educator effectiveness
- Fail to identify variability in educator effectiveness within schools and across districts

These failures make it difficult for schools to capitalize on the knowledge and skills of highly effective educators, promote professional growth and continuous learning, and value and reward excellence. They also inhibit the removal of the small percentage of persistently poor performing educators who fail to make progress, despite being provided reasonable time and support for improvement. Poor evaluation practices are a missed opportunity for promoting better leadership, better teaching, better learning, and better schools.

Across the states, there is unprecedented momentum towards developing and implementing teacher evaluation systems that factor student achievement into teacher ratings. This is an important shift in thinking about teacher quality. The change is significant because policymaking around improving teacher quality to date has focused almost exclusively on teachers' qualifications rather than their effectiveness in the classroom and the results they get with students. In 2009, only 14 states required annual evaluations of all teachers, with some states permitting teachers to go five years or more between evaluations. By 2012, 23 states required annual evaluations for all teachers and 43 states required annual evaluations for all new teachers. In 2009, 35 of the 50 states did not, even by the kindest of definitions, require teacher evaluations to include any sort of measure of student learning. Today, at least 30 states now require that teacher evaluations include objective evidence of student learning. In 2012, 20 states required student achievement to be significant or the most significant factor in judging teacher performance.

With a focus on the National Council on Teacher Quality list of 9 states that have embraced the use of student growth data (value-added) as the *preponderant criterion in teacher evaluations and tenure decisions*, the body of this article singles out 4 of those states: Delaware, Rhode Island, Oklahoma and Tennessee. New York, though not one of the states in this category, is included under the category of 20 states where teacher evaluations are "significantly" informed by student achievement/growth (National Council on Teacher Quality: State of the States 2012: Teacher Effectiveness Policies) and added for comparison purposes.

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The 2011 NCTQ evaluation on **how well the states identify effective teachers**, places the 5 states cited for analysis in this article with the following grades:

- · Rhode Island ~ A-
- · Tennessee ~ B
- · Delaware ~ B
- · Oklahoma ~ B-
- New York ~ C+

It needs to be mentioned that in order for states to be able to measure teacher effectiveness, state data systems must have three key components: 1) a unique statewide student identifier number that connects student data across key databases across years; 2) a unique teacher identifier system that can match individual teacher records with individual student numbers; and 3) an assessment system that can match individual student test records from year to year in order to measure academic growth. While NCTQ finds that most states are able to match individual test records, there are some important mismatches between capacity and policy. Three states require that teacher evaluations include student achievement but appear to currently lack capacity to link data: Colorado, Connecticut, and South Dakota. At the same time, 12 states have the capacity to link data, but have no present requirement that student achievement be reviewed as part of teacher performance appraisals: Alabama, Iowa, Kansas, Kentucky, Mississippi, Missouri, Nebraska, New Hampshire, New Mexico, North Dakota, South Carolina, and Wisconsin.

Performance evaluation policies throughout many of the states are including the introduction of objective measures, taking student achievement and growth seriously as a means of assessing teachers and principals. Appraising performance is ultimately an activity that involves personal judgment and performance-based teacher evaluations need to be approached in measured, realistic and transparent ways. States such as Delaware make sure teachers meet student growth expectations each year. Teachers in this state with two consecutive years of ineffective ratings or who earn a combination of ineffective and unsatisfactory ratings for three consecutive years are considered to have a pattern of ineffective teaching and are eligible for dismissal. In Oklahoma, teachers rated as ineffective for two consecutive years; needs improvement for three years; or do not average at least an effective rating over a five year period are dismissed. Rhode Island makes teacher ineffectiveness grounds for dismissal by requiring districts to dismiss all educators who are rated ineffective for two consecutive years. Tennessee explicitly makes teacher ineffectiveness grounds for dismissal. Tenured teachers who receive two consecutive years of below expectations or significantly below expectations performance ratings are returned to probationary status, making them eligible for dismissal. In New York, tenured teachers with a pattern of ineffective teaching or performance, defined as two consecutive annual ineffective ratings, may be charged with incompetence and considered for termination through an expedited hearing process.

What sets these emerging state policies apart from anything the field has seen before is that states are not only rethinking their standards for effective teaching, but they are defining the specific measures of effectiveness and the respective values of those measures within a comprehensive performance appraisal. Whether framed around the data captured by a mix of evaluation measurement tools (observations, surveys, growth scores, etc.) or framed around topical components (instruction, classroom management, student achievement), these formulas begin to describe the operating rules of the systems and to what extent student achievement and growth count towards overall assignment of effectiveness ratings to individual teachers and building principals.

The states highlighted in this article are quite prescriptive in identifying the role of student achievement/ growth in teacher evaluations in state statutes or regulations.

> **Tennessee** requires the following mix of measures:

A total of 50 percent of a teacher's annual evaluation must be based on student achievement data, of which 35 percent must rely on student growth data from the Tennessee Value-Added Assessment System (TVAAS). The remaining 15 percent must be based on other student achievement measures selected from a list of state approved options. Student growth *is* the preponderant criterion for teacher evaluation.

Delaware requires the following measures:

School-wide assessment measures count for 30 percent of the student improvement component and student cohort assessment measures account for 20 percent. Teacher specific assessment measures account for 50 percent of the student improvement component. Student growth *is* the preponderant criterion for teacher evaluation.

> Oklahoma requires the following measures:

50 percent of the ratings of teachers are based on quantitative components divided as follows: 35 percent based on student academic growth using multiple years of standardized test data, as available, and 15 percent based on other academic measurements. Student growth *is* the preponderant criterion for teacher evaluation.

> Rhode Island requires the following measures:

Student learning as measured through a matrix scoring system is the predominant component for teacher evaluation. Student learning is measured in two ways. Specific Learning Objectives (SLOs) for each grade and subject are set at the beginning of each school year. They can be adjusted at the mid-year point, based on available evidence, to ensure appropriateness. Teachers of reading and math in grades 3 through 7 will receive a score based on the Rhode Island Growth Model – a statistical model that measures how each teacher's students progressed in comparison to students throughout the state with the same score history. Student growth *is* the preponderant criterion for teacher evaluation.

New York requires the following measures:

A total of 40 percent of a teacher's evaluation is based on student achievement. Twenty percent (of the 40 percent) is based on student growth on state assessments or a comparable measure (increases to 25 percent upon implementation of a value-added growth model); 20 percent is based on locally selected measures of student achievement (decreases to 15 percent upon implementation of a value-added growth model). Student growth **is not** the preponderant criterion for teacher evaluation. However, teacher evaluations are "significantly" informed by student achievement/ growth.

The "Widget Effect," a widely read 2009 report from The New Teacher Project, surveyed the teacher evaluation systems in 14 large American school districts and concluded that status quo systems provide little information on how performance differs from teacher to teacher. The memorable statistic from that report: 98 percent of teachers were evaluated as "satisfactory."

The ubiquity of "satisfactory" ratings stands in contrast to a rapidly growing body of research that examines differences in teachers' effectiveness at raising student achievement. In recent years, school districts and states have compiled datasets that make it possible to track the achievement of individual students from one year to the next, and to compare the progress made by similar students assigned to different teachers. Careful statistical analysis of these new datasets confirms the long-held intuition of most teachers, students, and parents: teachers vary substantially in their ability to promote student achievement growth.

In a recent New Republic article (March 25, 2013), co-authored by Vicki Phillips (Director of the Bill and Melinda Gates Foundation) and Randi Weingarten (President of the American Federation of Teachers), both agreed that students have a right to effective instruction and that teachers want to do their very best. Both also stated their belief that evaluation systems must not be just a stamp of approval or disapproval but a means of improvement. The article goes on to describe "Six Steps to Effective Teacher Development and Evaluation." These steps highlight the importance of regular, timely, and constructive feedback on performance, the use of multiple measures of student growth, valid rubrics and training for observing practice, alignment with the shift from information coverage to deep learning, and the creation of a system of professional growth that reflects the sophistication and importance of their work.

A good evaluation system should not only measure a teacher's effectiveness but also help to improve the teacher's ability to be effective (Coggshall, 2012).

In their March, 2012 presentation "**Teacher Evaluation System Comparative Overview**", **(TNTP) - The New Teacher Project** compared 9 state and district evaluation systems on design components and measures of student learning. Four of the five states highlighted thus far in this article are included in this study, with Oklahoma as the exception. All of the 9 systems presented for comparison conduct annual appraisals and require at least two observations by an administrator or other trained designee. Almost all of the systems incorporate a measure(s) of student learning and a measure of instructional practice and include at least 4 ratings of teacher performance.

Several states have partnered with independent national models that promise to provide powerful reports to inform them about teacher effectiveness using the valueadded metric to identify strengths and opportunities for improvement. One such provider is SAS EVAAS for K-12. This system has evolved to provide the following reporting: 1.) Value-added metric -using data from grade-to-grade and subject-to-subject for districts, schools and teachers, 2.) Individual student level projections - predicts student success probabilities at numerous academic milestonesincluding grade-level proficiency, high school graduation requirements, and college success indicators, such as PSAT, SAT, and ACT, 3.) Custom scatterplots - interactive scatterplots to visualize the impact of various progress metrics and students served - such as student achievement/growth compared to various socioeconomic and demographic variables - drilling down for more detailed performance operation, 4.) Diagnostic reports - identify students at risk for underachievement by viewing incoming levels of academic preparedness and growth patterns within classrooms, 5.) Customized reports - display information in a variety of forms, such as district and school AYP dashboards, college readiness dashboards, and custom student list reports, 6.) Export function - results can be exported by authorized users for independent use and research, and 7.) Student-teacher linkages - connect and verify students with teachers having various amounts of instructional responsibility.

The SAS EVAAS team is composed of former educators, professional statisticians, policy analysts and WEB specialists with nearly 20 years experience delivering value-added modeling in a production environment. This system provides reporting to every district, public school and charter school in North Carolina, Ohio, Pennsylvania and Tennessee. It is also used by large, medium and small districts in many other states, including Connecticut, Delaware, New Jersey, New York, South Carolina, Texas and Virginia.

The Colorado Growth Model is a collection of data which enables parents, educators and community members to easily evaluate student achievement over time at public schools across the state of Colorado. The model addresses critics who complain about looking at a single year snapshot of test scores which do not reveal much except how students were able to perform on one day. The growth model shows growth- or decline- as measured in the Colorado Student Assessment Program (CSAP) test scores over time. Under the growth model, a student's progress is compared to that of other students with historically similar scores throughout the state. A student growth percentile is then calculated based on the percentage of those academic peers who experienced more growth than this student. Rhode Island is one of the states cited in this article that presently uses the Colorado Growth Model as a value-added system factored in teacher effectiveness. The growth model includes statistics for various ethnicities, genders, and grade levels of each school.

The idea that there are big differences in teacher performance is axiomatic to anyone who recalls sitting in a classroom and marveling over the impact of a great teacher, or being frustrated over the lack of learning when saddled with a clearly ineffective teacher. Thomas Kane, a professor at the Harvard Graduate School of Education, has been at the helm of the largest research study to date that has tried to address many of the questions coming from the teacher effectiveness debate. The Bill and Melinda Gates Foundation funded a massive, \$45 million, three year study under Kane's leadership, with the final report issued in January 2013. The Measures of Effective Teaching project (MET) recruited 3,000 teachers to volunteer for the study in six US school districts. The study assessed teachers of students in grades 4 through 9 using three different measures: student test scores, classroom observations by trained evaluators, and student feedback surveys. Kane reiterates throughout his commentary that the study is about more than just accountability. Being able to predict student achievement gains in the future is only one of the goals in trying to measure effective teaching. Another goal is to be able to provide feedback to a teacher on specific practices that they might change in order to see future achievement gains. A third goal would be to come up with a measure that wouldn't fluctuate too wildly from year to year or classroom to classroom. Each of the three measures - student achievement gains on state tests, student surveys, and classroom observations had different strengths and weaknesses. So, although accountability is definitely part of the discussion, it should never be the sole or overriding issue. Kane states that we will not see dramatic gains in student achievement unless we see dramatic differences in teaching. He highlights that this involves adult behavior change, which is admittedly difficult.

Thomas Kane goes on to state, "As we think about making high stakes decisions, we need to focus where benefits are highest. That's the initial tenure decision." Every time a below average teacher receives tenure, students are harmed, the status of the profession is diminished, and more effective teachers get a colleague that they will have to cover for. Kane describes excellent instruction as including higher level questioning skills, effective time management, smooth pacing, and classroom management that results in a consistently orderly environment. He looks to this MET research project as a healthy start in opening up a dialogue on why there are large differences in student achievement gains in different classrooms.

The Stanford Center for Opportunity Policy in Education (SCOPE) also conducted a study led by Linda

Darling-Hammond, which was reported in 2012. This international study centered on student learning as the primary goal of teaching. The proposal to use value-added student test achievement scores as a key measure of teacher effectiveness was cited as a major issue. The report highlights studies concluding that teachers' measured effectiveness differs significantly depending on the tests that are used. Teachers rated highly on a value-added-measure estimate of achievement on basic skills tests are often not rated highly when more conceptually oriented tests are used. There are challenges in disentangling teacher effects from those of school and home conditions, as well as from other student factors. Among these influences on learning are multiple teachers, parents, tutors, out-of-school learning supports, and the summer learning loss that substantially affects the scores of lower income students (and also reduces their measured learning gains misattributed to their next year's teacher).

The study underscores the fact that good systems must be designed so that teachers are not penalized for teaching students who have the greatest educational needs. According to this report, in order to understand how teachers' influence student learning, more information about teachers' practices and context are needed than value-added measures can provide. The report supports the use of value –added measurement data along with other measures of student learning, such as pre- and post- tests conducted by districts or schools, and learning evidence assembled by the teachers themselves.

The Stanford Center for Opportunity Policy in Education lists ten criteria for using Measures of Student Learning in Teacher Evaluations:

- Assessment of teachers' contributions to student learning should rely on multiple measures of student learning, not a single value-added-measure (VAM).
- Measures of learning should reflect the curriculum a teacher is expected to teach and the full domain of skills and competencies students are expected to develop.
- Valid measures must be used for all students, including those with special needs or limited English proficiency, as well as particularly high-achieving or low-achieving students.
- 4. Test measures intended to indicate growth must capture learning and growth validly and reliably at the student's actual achievement level.
- 5. The use of any value-added measure should take into account characteristics of the students and the context that affect student achievement gains.
- 6. Value-added-measures should be used only when there is a sufficient sample size and multiple years of data.
- 7. The evaluation system should consider evidence about student performance and teacher practice in an integrated fashion.
- 8. Methods to verify the accuracy of the data should be used routinely.
- 9. Value-added estimates should be weighted in the evaluation process commensurate with their limitations.

10. The use of student learning evidence should be a source of continual study for educators, researchers, and systems.

Conclusion

We know that teacher quality is the single-most important factor in student achievement. We also know that educators don't always agree on what quality instruction looks like, or how to properly and reliably evaluate it. Lessons from high performing school systems, including Finland, suggest that we must reconsider how we think about teaching as a profession and the role of school in our society. Standardization needs to focus on teacher education as much as teaching and learning in schools. Singapore, Canada, and Finland all set high standards for their teacher preparation programs. In these countries only the "best and the brightest" are accepted and teaching is regarded as an esteemed profession, on par with medicine, law, and engineering.

The new Annual Professional Performance Review (APPR) law in New York State sets the parameters for professional evaluation, with adjusted cost increase implications. Based on an analysis of data from 80 school districts, New York State School Boards Association (NYSSBA) estimates that districts outside the state's five largest cities expect to spend an average of \$155,355 on the new system this year alone. State exams that provide data on student achievement between two points in time. together with a value-added model, determine student growth and hard evidence of student growth plays a significant role in teacher and principal evaluations. All Districts have been asked to link student growth data to a point system that corresponds to teacher ratings of Highly Effective, Effective, Developing, or Ineffective (HEDI). New York, like every state looking to improve student outcomes, has changed focus by "keeping this end in mind." The shift from highly qualified teacher to highly effective teacher must start with an analysis of where students are in their learning. The Common Core Standards highlight deep learning and independent initiative as ultimate learning goals. Teachers and other educators across the nation need to experience this quantum shift and own it before they themselves can be evaluated and before they can effectively assess students and evaluate their progress. National experiences and international contributions all support the shift towards "deep learning" with a strong emphasis on using a variety of data to inform instruction and help teachers become more effective at their craft. It is this teacher improvement focus that needs to be stressed more than strict accountability that inconsistently verifies the validity and reliability of collected data and disregards the qualities of teaching that defy quantification. Only when effectiveness is encouraged, supported and evaluated with valid and reliable data over time and the intangible qualities of effective teacher-student engagement are documented and collected through observation and survey can we be more certain that high quality professionals deserve the right and privilege of being called "teacher."

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10

Spotlight on Professional Learning Communities: How Principal Leadership Behaviors Can Influence Student Achievement

By Karen Sealy, Thomas DeNicola, Elsa-Sofia Morote, Ed.D., Theodore Fulton, Ed.D., and Albert Inserra, Ed.D.

Abstract

The purpose of this study was to investigate teacher perceptions of principal's leadership behaviors as they relate to Professional Learning Communities (PLCs). This quantitative study utilized a validated survey and responses from one hundred and seventy three teachers. The five variables that emerged were: (1) Shared Vision and Mission, (2) Culture of Collaboration, (3) Focus on Improvement, (4) Shared Leadership, and (5) Personal Practice, and their influence on school achievement.

An independent sample t-test was conducted to evaluate the differences between high and low achieving schools on each of the five variables of PLCs. Results suggested a statistical significance between teacher perceptions of Personal Practice through their perceptions of principal leadership behaviors, between high and low achieving schools. Results of the logistic regression, indicated Personal Practice is the major predictor, followed by Focus on Improvement, of a teacher responding from a high achieving school. A path analysis determined Shared Leadership and Culture of Collaboration are the major predictors of Personal Practice, which in turn was used as a mediator of achievement.

The most promising strategy for sustained, substantive school improvement is developing the ability of school personnel to function as professional learning communities.

~Richard DuFour

Today's educational institutions face a plethora of obstacles affecting daily operations and organizational structures. External and internal factors such as greater academic challenges for students, budgetary limitations, lack of effective leadership, and increased teacher accountability have forced schools to prioritize decision making as stakeholders navigate outside influences, state and federal mandates, and augmented expectations/ accountability. Despite the growing list of challenges today's schools face, educational institutions are still charged with the task of educating students. To accomplish this task, administrators are challenged to find ways to professionally develop staff with limited resources. Fostering a Professional Learning Community (PLC) provides one method of increasing a school's capacity to address challenges daily.

The research knowledge base and the articulation of profession standards within education expanded over the past quarter century, (DuFour & Eaker, 1998). Many educators are unaware of, or are inattentive to research focusing on effective pedagogical strategies and improving student achievement. Members of a PLC make these findings the basis of their collaborative efforts toward achieving a shared vision and goals (DuFour & Eaker, 1998).

The PLC model is built upon the foundational belief that the core mission of formal education is not simply to ensure that students are taught but to ensure that they learn. The shift in perspective from a focus on teaching to a focus on learning has profound implications for schools. PLCs focus on the processes of learning and grapple with questions of what, when, and how learning should take place. Learning communities place an emphasis on organizational structures, relationships, and the nature of individuals within an organization. PLCs rely on collaboration and focus on ways that educators can work together to facilitate change and school improvement (DuFour, 2004).

Research focusing on educational reform influenced the conceptualization of processes involved in PLCs. According to Huffman and Hipp (2003), PLCs are a way of working; "a school's professional staff members who continuously seek to find answers through inquiry and act on their learning to improve student learning" (p. 4). Further, DuFour (2004) expressed concern that PLCs may lose their credibility as an important part of education reform unless educators think critically about the fundamental concepts which make up the model. As a tool for school reform, Huffman and Hipp (2003) asserted a PLC is "the most powerful professional development and change strategy available" (p. 4). What educators are looking for in today's school reform initiatives are those that result in not only improved teaching, but also in overall school improvement and student learning. Vescio, Ross, and Adams (2008) reviewed six separate research studies that scrutinized the relationship between teachers' participation in PLCs and student achievement. The results of all six studies revealed that student learning improved when teachers worked in PLCs.

The purpose of this study was to investigate teacher perceptions of principal's leadership behaviors through the frame of Professional Learning Communities: (1) Shared Vision and Mission, (2) Culture of Collaboration, (3) Focus on Improvement, (4) Shared Leadership, and (5) Personal Practice, and their relationship to school achievement.

Theoretical Perspective

PLCs have been present within the current body of research. Each definition has a slightly unique perspective, but there are major themes throughout, including (1) Shared Vision and Mission, (2) Culture of Collaboration, (3) Focus on Improvement, (4) Shared Leadership, and (5) Personal Practice.

According to DuFour, DuFour, and Eaker (2008), there are six characteristics of PLCs. "1. Shared Mission (Purpose), Vision (Clear Direction), Values (Collective Commitments), and Goals (Indicators, Timelines, and Targets) - All Focused on Student Learning; 2. A Collaborative Culture with a Focus on Learning; 3. Collectively Inquire Into Best Practices and Current Reality; 4. Action Orientation: Learning by Doing; 5. A Commitment to Continuous Improvement; and 6. Results Orientation" (pg. 15 - 17).

Richardson (2011) contributed to the research on PLCs by defining the responsibilities of educators. "In the new culture, educators assume collective responsibility for student outcomes. At the heart is the belief that a team of teachers working together can achieve more than one teacher working alone" (pg. 29).

In addition, Thessin and Star (2011) further defined the four key roles for districts in the implementation of PLCs as providing, "Ownership and support; professional development; clear improvement process; and differentiate support" (pg. 51).

The practice of building successful PLCs can extend beyond the borders of the school or district. Linder, Post, and Calabrese (2012) studied the factors that contributed to successful PLCs and how university faculty can assist in their development. The researchers selected three groups of teachers based on a match between their areas of interest and the submitted proposals. A collective case study design was used to learn about each of the PLCs and a survey was given at the end of the year to provide qualitative ratings. "The three most highly rated components of the PLCs were (a) studying a selected topic in depth; (b) having the assistance of a university faculty member; and (c) selecting, implementing, sharing, and discussing results of activities with each other" (Linder, Post, & Calabrese, 2012, pg. 18). Key learnings from this study included establishing relationships with area schools, providing guidance to groups, allowing for autonomy, and building a sense of community.

First, classroom teachers should not hesitate to join together to investigate topics of common interest... Second, educational administrators should consider PLCs as a viable method of professional development for their building and district personnel... Third, university faculty can help establish and sustain PLCs by placing the major decision-making in the hands of the teachers" (Linder, Post, & Calabrese, 2012, pg. 20-21).

These are three implications of the study for stakeholders considering the implementation of PLCs.

Once a PLC has been implemented, part of the on-going process is to understand the benefits to the district. In 2013, an article was published about a study that was conducted by Williams to understand the differences that existed in reading achievement across different grade levels within a district that implemented PLCs and the teacher perceptions of the activities and their impact. Williams' conducted a causal-comparative research design utilizing the Texas Assessment of Knowledge and Skills (TAKS) to collected qualitative data over a five-year period. Study results were categorized into four major themes: the collaborative teacher learning, data-driven decisions, curriculum, instruction and student learning, and student learning. The quantitative aspect of the study included a repeated-measures ANOVA to analyze the overall percentage of passing rates within the elementary, middle, and high school levels. Results of the study indicated several improvements within student achievement data. After three years, there was a .33% increase mean percent passing in elementary reading scores, .75% improvement in middle school, and .67% improvement in high school achievement. Teachers at all levels expressed their beliefs that PLCs provided avenues to learn and positively impact their classroom practices. Williams concluded "This study contributed to research on PLCs by providing further evidence that potent connections among student achievement, teacher collaboration, and change continue to exist in the 21st century" (Williams, 2013, pg. 37). Williams also concluded the continuation of the PLC model as a strategy for teachers in K-12 within the district to increase student achievement.

The five PLCs components are (1) Shared Vision and Mission, (2) Culture of Collaboration, (3) Focus on Improvement, (4) Shared Leadership, and (5) Personal Practice. The current body of literature has provided the framework for the following definitions.

Shared vision and mission is the alignment of goals and objectives throughout the organization. Saban and Wolfe (2009) studied the leadership practices of 106 public school principals through a quantitative analysis of their responses to The Leadership Practices Inventory as Saban and Wolfe (2009) stated:

To motivate individuals to share your vision is a behavior that requires a trusting relationship.

To "encourage" - another behavior that is learned, meaning to hearten, to give confidence by recognizing, to show appreciation for - also requires that one have confidence in the relationship (pg. 5)

Through this study on leadership practices, mentoring was identified as an effective method of professional development for sharing a vision through relationship building.

The culture of collaboration requires that all parts of the organization are working together toward a common goal. "All department members are part of a team working towards a shared vision," (Edmonson, Brown, Irby, & Lunenburg, 2002, pg. 11). The culture of collaboration also included the practice of shared decision making. "Shared decision making was identified as the most frequently used method by which democracy and social justice can be integrated for student learning" (Wasonga, 2009, pg. 219).

A focus on improvement includes student achievement through assessments. "These formative assessments allowed me to identify areas of weakness for my students and then shape my classroom lessons based on what students still needed to understand," (Bakula, 2010, pg. 43). Embedding formative assessments allows teachers to focus on student achievement throughout a unit of study. "Having some embedded formal formative assessments or reflective lessons in a curriculum is useful because it reminds teachers to reflect back on what has been learned and hopefully guide future lessons toward unit goals," (Ayala, et al., 2008, pg. 332). Reagle (2006), also discussed focus on improvement. "This collective effort requires a comprehensive change in the school climate and encourages new systems to be developed that focus on students and best practices in teaching, learning, assessment and reporting," (pg. 3).

Shared leadership includes reciprocity and enduring learning. "Lasting leadership was intended to be not only reciprocal and purposeful, but also to embody learning that is a lasting, continuing facet of sustainability," (Lambert, 2006, pg. 253). The goal of shared leadership is to build a solid foundation to improve school achievement. "When learning is continuous and participation in that learning is broad-based and skillful, high leadership capacity and the potential of sustainable, lasting school improvement result," (Lambert, 2006, pg. 253). Printy and Marks (2006), found that principals and teachers working together is optimal for improving teaching and learning. "Best results occur in schools where principals are strong leaders who also facilitate leadership by teachers; that is, principals are active in instructional matters in concert with teachers whom they regard as professionals" (Printy & Marks, 2006, pg. 130). Shared leadership was further explored by Lindahl (2008) to clarify the importance of teacher leaders bringing the shared vision to their classroom.

Though it is clearly crucial that the formal leader prominently articulate and model the vision for a wide range of stakeholders, teacher leaders can, and should, have a strong voice in formulating the vision; they also can take leadership roles in modeling the vision in their classrooms and bringing it alive to students, parents, and peers. Teacher leaders must be included in school planning - not operational planning for administrative functions, but planning how the vision should be translated into classroom and curricular practice, and in the school culture (Lindahl, 2008, pg. 304).

Personal Practice is defined as the act of teachers sharing their strengths in a collegial environment. "An overarching PLC theme was that if one colleague was struggling, teachers were collectively responsible for supporting that teacher - in the same spirit that student learning was the responsibility of all school personnel," (Shernoff, et. al, 2011, pg. 469). Having a specific form of communication in order to address issues was also valuable within the literature. "Our evidence on the qualities of effective professional learning communities and of constructive problem talk, show the importance of respectful inquiry into the theories that inform teachers' practice," (Robinson & Timperley, 2007, pg. 259). See **Table 1.1** for an overview of the current literature related to the themes of PLCs

Methods

Participants

Fulton (2009) conducted a quantitative study using a validated survey distributed to 1,200 high school teachers across New York State from schools of varying need and achievement statuses. Fulton utilized the New York State's Need/Resource Capacity to identify the level of need and then selected high and low need and high and low achieving schools based upon the mastery percentage derived from three years of Math A scores. "Three hundred English, mathematics, sciences, and social studies teachers from high-need / high-achieving, high-need / low achieving, lowneed / high achieving, and low-need / low achieving high schools were sent a color-coded / number-coded survey called the Principal Instructional Management Rating Scale," (Fulton, 2009, pg. 82). Consent was obtained through a form letter sent to participants. Of the 173 responses that were collected and used in the data analysis, 48 were from high need and low achieving schools, 56 were from high need and high achieving schools, 38 were from low need and low achieving schools, and 31 were from low need and high achieving schools.

Measures and Procedures

The purpose of this study was to investigate teacher perceptions of principal's leadership behaviors through the frame of Professional Learning Communities: (1) Shared Vision and Mission, (2) Culture of Collaboration, (3) Focus on Improvement, (4) Shared Leadership, and (5) Personal Practice, and their relationship to school achievement.

Table 1.1Most Relevant Li	terature
Resource	Variable
Ayala, C. C., et al. (2008)	Focus on Improvement
Bakula, N. (2010)	Focus on Improvement
DuFour, R. (2004)	Professional Learning Communities
DuFour, R., DuFour, R., & Eaker, R. (2008)	Professional Learning Communities
DuFour, R. & Eaker, R. (1998)	Professional Learning Communities
Edmonson, et al. (2002)	Culture of Collaboration
Huffman, J. B. & Hipp, K. K. (2003).	Professional Learning Communities
Lambert, L. (2006)	Shared Leadership
Lindahl, R. (2008)	Shared Leadership
Linder, R., Post, G., & Calabrese, K. (2012)	Professional Learning Communities
Printy, S. & Marks, H. (2006)	Shared Leadership
Reagle, C. (2006)	Focus on Improvement
Richardson, J. (2011)	Professional Learning Communities
Robinson, V.J. & Timperley, H.S. (2007)	Personal Practice
Saban, J. & Wolfe, S. (2009)	Shared Vision and Mission
Shernoff, E. S., et al. (2011)	Personal Practice
Thessin, R. & Starr, J. (2011)	Professional Learning Communities
Vescio, V., Ross, D., & Adams, A. (2008).	Professional Learning Communities
Wasonga, T. A. (2009)	Culture of Collaboration
Williams, D. (2013)	Professional Learning Communities

This quantitative study was developed using survey results collected by Dr. Fulton (2009) for his dissertation entitled High School Principal Instructional Leadership Behavior in High and Low Need and High and Low Achievement Schools. The survey instrument, Principal Instructional Management Rating Scale, was developed by Dr. Philip Hallinger (1987). Within this study, original items were re-arranged based on the framework of Professional Learning Communities. Analysis resulted in the creation of five variables created: (1) Shared Vision and Mission, (2) Culture of Collaboration, (3) Focus on Improvement, (4) Shared Leadership, and (5) Personal Practice. A reliability analysis was conducted in order to determine the variables that could be identified from the items in the survey, resulting in reliabilities higher than 89% (see **Table 1.2**).

Table 1	.2
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Principal Instruction Management Rating Scale Reliability Analysis

PLC Component	ltems	Number of Items	Cronbach's Alpha
Shared Values and Mission	1,2,3,4,5,6,7,8,9,10	10	.953
Culture of Collaboration	16,17,18,19,20,26,27,28,29,30	10	.895
Focus on Improvement	11,12,13,14,15,21,22,23,24,25	10	.914
Shared Leadership	31,32,33,34,35,46,47,48,49,50	10	.918
Personal Practice	36,37,38,39,40,41,42,43,44,45	10	.927

Results

Research Question One

When teachers are divided into high and lowachieving schools, how do they differ in their perceptions of their principal's leadership behavior within the five components of a Professional Learning Community: (1) Shared Vision and Mission, (2) Culture of Collaboration, (3) Focus on Improvement, (4) Shared Leadership, and (5) Personal Practice? To analyze the data of research question one a *t*-test of independent means was conducted and reported on (see **Table 1.3**).

A *t*-test of independent means was conducted to understand how teachers differ in their perceptions of their principal's leadership behavior, when divided into high and low-achieving schools, across all variables, the mean scores were higher for high achieving schools. This suggests that teacher perceptions of the principal's leadership behavior are stronger in schools that are high achieving.

For the variables of Shared Vision and Mission, Culture of Collaboration, Focus on Improvement, and Shared Leadership, the score was above .05, the top row of data was used to test Levene's test for Equality. In all cases, this data was not statistically significant, indicating that teacher perceptions of those factors did not differ significantly between high and low-achieving schools. For Personal Practice, Levene's Test for Equality of Variances was also above .05, and the top row of data was used. For Personal Practice, there was statistical significance, indicating that teacher perceptions of Shared Leadership ($M_{L} = 28.08$, $M_{H} = 30.70$, $SD_{L} = 9.62$, $SD_{H} = 10.19$), and Personal Practice ($M_{L} = 26.24$, $M_{H} = 31.05$, $SD_{L} = 9.21$, $SD_{H} = 10.63$) were higher in high achieving schools.

Research Question Two

Which of the following components of a Professional Learning Community: ((1) Shared Vision and Mission, (2) Culture of Collaboration, (3) Focus on Improvement, (4) Shared Leadership, and (5) Personal Practice, predicted school achievement? Research question two was analyzed using a logistic regression and a path analysis.

A correlation analysis was performed and between the five components of PLCs and school achievement. When teachers were divided into high- and low-achieving schools, teacher perceptions of their principal's leadership behaviors were analyzed in relationship to the five components of a Professional Learning Community by using a Pearson Product Moment Correlation. There is a positive and significant relationship between Personal Practice and school achievement, indicating that schools where teachers perceive Personal Practice as a principal leadership behavior have higher achievement. All of the relations between the five variables (1) Shared Vision and Mission, (2) Culture of Collaboration, (3) Focus on Improvement, (4) Shared Leadership, and (5) Personal Practice, are strong, positive relationships that are statistically significant. This suggests that all of the variables are related in the framework of PLCs (see Table 1.4).

Table 1.3

Comparison	of the Five	Components	of PLCs on	Achievement

	Low Achievement\			0.5	0514			
	High Achievement	N	M	SD	SEM	t	đĩ	р
Shared Mission and Vision	Low Achieving	83	32.99	10.50	1.15	-1.37	167	0.17
	High Achieving	86	35.17	10.20	1.10			
Collaborative Culture	Low Achieving	84	31.42	9.09	0.99	-0.84	165	0.40
	High Achieving	83	32.63	9.53	1.05			
Focus on								
Improvement	Low Achieving	85	29.32	9.68	1.05	-1.20	166	0.23
	High Achieving	83	31.18	10.48	1.15			
Shared Leadership	Low Achieving	81	28.02	9.62	1.07	-1.71	158	0.09
	High Achieving	79	30.70	10.19	1.15			
Personal Practice	Low Achieving	83	26.24	9.21	1.01	-3.10	162	0.00
	High Achieving	81	31.05	10.63	1.18			

Table 1.4 Correlation between Achievement and Perceptions of PLC Components

		Low Achievement / Hiah Achievement	Snared Vision and Mission	Culture of Collaboration	Focus on Improvement	Shared Leadership	Personal Practice
Low Achievement /	r	1			1		
High Achievement	р						
	Ν	173					
Shared Vision and Mission	r	.106	1				
	р	.172					
	Ν	169	169				
Culture of Collaboration	r	.065	.789**	1			
	р	.402	.000				
	Ν	167	164	167			
Focus on Improvement	r	.093	.825**	.826**	1		
	р	.233	.000	.000			
	Ν	168	165	164	168		
Shared Leadership	r	.134	.771**	.762**	.820**	1	
	р	.090	.000	.000	.000		
	Ν	160	159	157	156	160	
Personal Practice	r	.237**	.720**	.758**	.783**	.852**	1
	р	.002	.000	.000	.000	.000	
	Ν	164	162	158	159	156	164

A logistic regression was applied and confirmed that Personal Practice was the major predictor of school achievement, followed by Focus on Improvement (see **Table 1.5**).

Logistic F	Regression						
		В	S.E.	Wald	Df	Sig.	Exp(B)
Step 1 ^ª	Personal Practice	0.039	0.017	5.435	1	0.02	1.04
	Constant	-1.199	0.503	5.677	1	0.017	0.302
Step 2 ^b	Focus on Improvement	-0.057	0.028	4.015	1	0.045	0.945
	Personal Practice	0.084	0.028	8.674	1	0.003	1.087
	Constant	-0.766	0.543	1.989	1	0.158	0.465

b. Variable(s) entered on step 2: Focus on Improvement.

A path analysis was designed utilizing Personal Practice as the dependent variable (Figure 1). The variables of Shared Vision and Mission, Culture of Collaboration, Focus on Improvement, and Shared Leadership were factors in the model. All relationships between the factors were positive and strong r (r = .76 to .83). Figure 1 shows that Shared Leadership had the strongest predictive impact on Personal Practices. The second highest predictor is Collaborative Culture, followed by Focus on Improvement. All three variables accounted for 76% of the variance of Personal Practice. Shared Vision and Mission, although not in the regression, correlated highly with other variables, as shown in **Figure 1**.

Discussion and Implications

The five variables of PLCs that were examined were: (1) Shared Vision and Mission, (2) Culture of Collaboration, (3) Focus on Improvement, (4) Shared Leadership, and (5) Personal Practice. Based upon our findings, Personal Practice had the greatest influence on student achievement. Shared Vision and Mission, Culture of Collaboration, Focus on Improvement, and Shared Leadership interrelate with each other. Personal Practice was selected as a mediator to evaluate how other variables relate with achievement. By examining the teacher perceptions of principal's leadership behaviors, we were able to better understand the elements of PLCs and their effect on student achievement.

The cornerstone of the PLC model shifts focus from teaching to student learning. Our findings align with Linder, et al. (2012), as he found that shared personal practice is a key part of PLC. While all of the variables are interconnected, the suggestion is that focus on personal practice can be connected with high student achievement.

In contrast, we did not find a direct relationship between achievement and three other variables of PLC, as Williams (2013) did. However, looking further, we prepared



a path analysis showing that indeed Personal Practice can play a mediator role of the other variables to predict achievement.

Based on our findings, we strongly recommend professional development in Personal Practice to begin the process of developing PLCs, especially in school districts with limited budgets.

One limitation is the lack of input from the principal's perspectives of their own leadership behaviors. We would recommend surveying the principals to see if their intended leadership behaviors are aligned with the perceptions of the teachers.

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We Know More than We Give Ourselves Credit for

As educators struggle with turning the 400-page Common Core State Standards into useable, effective curriculum documents that facilitate instruction, it has been and remains my belief that we already know how to do this work. We just have to follow the models of curriculum work that have worked in the past and served us well. We have to follow those existing and proven models to create a process that brings the local staff together to decide exactly what we want students to know and be able to do. Once we have defined those learning expectations, we then design the CCSS-based curriculum documents, articulate those within and between grade levels, and then subject those curriculum documents to the Plan, Do, Check, Act cycle that Total Quality management has proven to be successful.

If this sounds like an over-simplification, please allow me to make my case and outline a specific process that has been used successfully by numerous school districts, shows concrete results in improved student performance, teacher commitment and job satisfaction, that brings the entire educational community into both the curriculum and continuous improvement process.

Foundationally, this entire process is based on the pioneering practices and research of Larry Ainsworth and Doug Reeves, that is, Power Standards. This process of identifying the most critical, most crucial learnings, originally based on the various and sundry state standards, so different in all fifty states, becomes the basis for our current work. While the Power Standards movement came under some criticism for allegedly suggesting some standards are more important than others and that some standards are not even taught, the fundamental process of identifying the most critical, most crucial learnings that all students must master still holds great merit, especially when applied to the CCSS.

The District's Obligation

There are 400 pages of CCSS. Can districts really, legitimately expect teachers to read, interpret and teach these in isolation based on individual judgments of importance and time? It makes more sense to bring teachers together to come to know what the standards really expect, to come to consensus on how those standards will be interpreted into instruction and assessment in the district, to identify and codify the most critical, most crucial learnings that all of our students must learn, and to identify and come to consensus on what our students will learn and when they will learn it. Without these fundamental conversations between and among teachers of the various grade levels and some kind of consensus agreed to by all, no district can have a viable curriculum—aligned to the CCSS—a necessary first step in improving student performance.

Think about it! If a district has not done the work to come together and agree to exactly what is to be learned and when it is to be learned, how can that district hold students accountable for anything? If the district has not come to consensus on what is to be learned in, say third grade math, and when it is to be learned, then how can that district, in good conscience, hold students accountable for not learning what is not defined? Neither the table of contents for the approved text book nor individual teacher choice adequately define that learning. Nor do chapters in the book nor units in the teachers' edition— the essence of curriculum development is bringing the local teaching staff together to decide what is to be learned and when it is to be learned.

Such a curriculum must have clearly defined and assigned learning expectations, aligned to the CCSS, and eventually its national assessment system when that becomes available. This curriculum must then be taught by every teacher and assessed commonly and formatively to help inform instructional practice. Until a district sets reasonable, CCSS-based learning expectations for all of its classes, and then ensures those standards are being taught and commonly and formatively assessed, we will continue to "wander in the darkness" as we seek answers. Now that the author has defined the problem, usually the easiest part of any problem-solving mission, the question becomes, "how do we fix it?" That will be the purpose of this article—to share a process that has been shown to work and to bring people together to solve these problems. That process will be outlined in this article and specifically applied to the K-2 grade levels, as a point to begin the conversation and to illustrate how that process works.

The process works at all grade levels and courses, Pre-K-12, but a K-2 math example will be used due to the length of this article and to give the reader a chance to see that process broken down and specifically illustrated. By focusing on these grade levels and only one Domain of the CCSS, the article will show very specific examples and, hopefully, the reader can transfer this process and approach to other Domains, grade levels, subjects, and courses.

I must first divest myself of any claim to any longterm experience in K-2 teaching. My career was spent in the secondary level, grades 7 through 12, with seven years as a K-12 district assistant superintendent for curriculum and instruction. I am not a fully seasoned K-2 educator with any teaching experience in those grade levels, but I am a proponent of this curriculum process that brings people together to come to consensus in identifying, ordering, and defining learning expectations that can readily be translated into curriculum documents. Perhaps my lack of expertise in K-2 teaching will further exemplify the merits of this approach—if a non-K-2 person can understand it, then it is truly applicable across the board in all grade levels.

Also, the work presented here is not presented as a national exemplar of the very best work done in this area. This is the first draft of work by teachers who came together for three days and produced a complete set of Pre-K-12 curriculum documents in English Language Arts, Reading, and Math. They have taken the first step to create scaffolded, CCSS-aligned curriculum documents that will go through the Plan, Do, Check, Act cycle for continuous improvement. As their local expertise grows, their curriculum documents will improve accordingly.

It Is a Process

Anyhow, let's take a look at how this process works. Because of the size of districts, the group of teachers doing this work will vary enormously. In smaller districts I have worked with, the entire staff was involved. In larger districts, a task force is designated to do this work. This task force should represent the entire district and be representative of the entire district population, and more detailed information on this can be found in either of my books from Corwin.

In this process, the first step is to ensure the gradelevel teachers understand the CCSS, their organization, and their learning expectations. To do this, grade level teams work together to come to understand the CCSS in their own grade level. This is done by providing them the time and handout materials to look through the CCSS for their specific grade levels and identify the Clusters and Domains in their specific grade level. Kindergarten, for example, contains the Domains Counting and Cardinality, Geometry, Measurement and Data, Number and Operations in Base 10, Operations and Algebraic Thinking. These Domains are not the same in first and second grade, and we need to ensure our teachers understand and apply that to this process. Our first step is to familiarize each grade-level teacher working on this project with his or her specific grade level expectations. Before we can expect anyone to teach the CCSS, they must first comprehend the standards and the skills they expect students to know and be able to do.

Once this work is done, and the grade-level team is comfortable with the CCSS expectations for their grade level, the group then begins to do the work which is similar to the process advocated by Ainsworth and Reeves in their Power Standards work, that is identifying the most critical, most crucial learnings that all students will be expected to master. They then interpret those decisions into end-ofyear learning targets, which we call Local CCSS. This work gets to the heart and soul of teaching as teachers decide what all children must know and be able to do. These conversations can be very passionate as teachers work together to identify and verbalize those end-of-year expectations or Local CCSS in each Domain of the CCSS, and that is good.

As this work begins, I always remind the group there are three criteria for selecting these end-of-year learning targets. These end-of-year targets are based on the CCSS themselves, the state assessments system (at least until 2014 when the new national assessments are allegedly to begin), and what they believe all students must know and be able to do. This third criterion validates the teachers' experience and judgments, as they have devoted their entire lives to children, and we must recognize their commitments and knowledge. In the interest of space and time, I will focus on a single Domain of the CCSS and explain how this process is applied to that Domain. This same process is applied to each Domain, so the reader may extrapolate this process into their own specific grade level or subject and get an idea of what it looks like.

Let's look at the Domain Geometry in our example. In Kindergarten, the CCSS in the Domain Geometry has two clusters with these CCSS: Once the task force has done this, they then write their own end-of-year target or Local CCS Standard for the Geometry Domain element in very understandable, precise language to define the learning expectations for their colleagues, parents, and students. The teachers in this example wrote the following end-of-year target for Kindergarten Geometry:

- Identify and describe these two-dimensional shapes: square, rectangle, circle, triangle, oval,
- K.G.1 Geometry: Identify and describe shapes (squares, circles, triangles, rectangles, hexagons, cubes, cones, cylinders, and spheres). Describe objects in the environment using names of shapes, and describe the relative positions of these objects using terms such as above, below, beside, in front of, behind, and next to.
- K.G.2 Geometry: Identify and describe shapes (squares, circles, triangles, rectangles, hexagons, cubes, cones, cylinders, and spheres). Correctly name shapes regardless of their orientations or overall size.
- K.G.3 Geometry: Identify and describe shapes (squares, circles, triangles, rectangles, hexagons, cubes, cones, cylinders, and spheres). Identify shapes as two-dimensional (lying in a plane, "flat") or three-dimensional ("solid").
- K.G.4 Geometry: Analyze, compare, create, and compose shapes. Analyze and compare two- and three-dimensional shapes, in different sizes and orientations, using informal language to describe their similarities, differences, parts (e.g., number of sides and vertices/"corners") and other attributes (e.g., having sides of equal length).
- K.G.5 Geometry: Analyze, compare, create, and compose shapes. Model shapes in the world by building shapes from components (e.g., sticks and clay balls) and drawing shapes.
- K.G.6 Geometry: Analyze, compare, create, and compose shapes. Compose simple shapes to form larger shapes. For example, "Can you join these two triangles with full sides touching to make a rectangle?"

These standards and the skills in the CCSS Domain Geometry then become the basis for the work of identifying the most critical, most crucial learnings for all students to master. By applying Marzano's unpacking the standards process to the Geometry Domain, the task force then identifies the standards within that Domain (see above), and applies that 3-step process to those standards

- Prioritize—ID most important, most critical skills
- Unpack—ID explicit and implicit Domain skills
- Powering—ID ABSOLUTELY essential Domain skills

heart, rhombus, and star. Distinguish the relative positions of objects using terms such as above, below, beside, in front of, behind, and next to.

While the Kindergarten teachers are busy doing their work, the same work is being done by all other grade levels involved in the project. Beginning with the CCSS first grade Geometry Domain, the first grade teachers identify the Clusters and CCSS.

Applying the same process as the Kindergarten teachers used, the first grade teachers create their own end-of-year learning target:

- **1.G.1 Geometry: Reason with shapes and their attributes.** Distinguish between defining attributes (e.g., triangles are closed and three-sided) versus non-defining attributes (e.g., color, orientation, overall size) ; build and draw shapes to possess defining attributes.
- **1.G.2 Geometry: Reason with shapes and their attributes.** Compose two-dimensional shapes (rectangles, squares, trapezoids, triangles, half-circles, and quarter-circles) or three-dimensional shapes (cubes, right rectangular prisms, right circular cones, and right circular cylinders) to create a composite shape, and compose new shapes from the composite shape.
- **1.G.3 Geometry: Reason with shapes and their attributes.** Partition circles and rectangles into two and four equal shares, describe the shares using the words halves, fourths, and quarters, and use the phrases half of, fourth of, and quarter of. Describe the whole as two of, or four of the shares. Understand for these examples that decomposing into more equal shares creates smaller shares.
- Identify attributes of geometric shapes and divide shapes into two and four equal parts and describe/illustrate them as part of a whole.

To complete our three-grade scan, let's just look at the second grade. The Geometry Domain in second grade contains the following CCSS.

Applying the same process, the end-of-year target for second grade Geometry is:

• Illustrate partitioning circles and rectangles into two, three, or four equal shares using descriptive words such as halves, thirds, two halves, three thirds, etc. and illustrate and identify three dimensional shapes.

Articulating the Work

Once this work is done individually in all of the Domains in every grade level, it is time to articulate these end-of-year learning standards between grade levels. To do this work, each grade level meets separately with the grade level above and below them and answers the following questions;

- Is there a logical, appropriate transition of skills between grade levels?
- Are the CCSS Domains expressed equally and adequately from year to year?
- Do the skills represent a learnable amount of the most critical, important skills?
- 2.G.1 Geometry: Reason with shapes and their attributes. Recognize and draw shapes having specified attributes, such as

Recognize and draw shapes having specified attributes, such as a given number of angles or a given number of equal faces. Identify triangles, quadrilaterals, pentagons, hexagons, and cubes.

- 2.G.2 Geometry: Reason with shapes and their attributes. Partition a rectangle into rows and columns of same-size squares and count to find the total number of them.
- 2.G.3 Geometry: Reason with shapes and their attributes.

Partition circles and rectangles into two, three, or four equal shares, describe the shares using the words halves, thirds, half of, a third of, etc., and describe the whole as two halves, three thirds, four fourths. Recognize that equal shares of identical wholes need not have the same shape.

- Is the rigor appropriate and reflect both the CCSS and assessment system?
- Do the verbs used in the Local CCS Standard align to the verb in the CCSS?

Once these questions are answered, the grade levels meet again to finalize end-of-year learning expectations for all of the Domains in their grade level. Please remember that the Domains are not constant through all of the grade levels—they can change from year to year. So it is critical that these grade level articulation discussions be held to ensure a logical, coherent set of learning targets is established.

Another point to make is that these end-of-year targets are the most critical, most important skills that all students must master, but they are not the only standards students will be exposed to and expected to learn. Teachers are identifying the standards that all students must master in the 180 days of instruction that they have. This is critical— the creation of the learnable curriculum—what our students can learn in 180 days, not what can be taught in 180 days. The entire book can be, and in some cases is, taught in 180 days, but all of our students cannot master this much content—thus creating our current state affairs and the bell curve. I can teach my dog to whistle. He may not learn how to whistle, but I can teach him.

The Next and Most Important Step

Once this work is done, it is now time for a very important step which separates this work from most other curriculum work—to scaffold these learning expectations

within the year. If our students are to learn these end-ofyear learning standards, what must they master first quarter? second quarter? And so on. We call these withinyear learning targets Instructional Objectives (IO's) as they give the teacher the kind of specificity that allows the design of instruction and the creation of CCSS-based curricular experiences. We divide IO's into first quarter, second quarter, and so on, or trimesters, or whatever.

We also assign the IO's a number representing the guarter they will be learned in and the order in which they will be learned. Instructional Objective 1.1 means it is the first learning target of the first guarter-the very first thing we want our students to learn. Instructional Objective 2.1 is the first learning target of the second quarter and so on. This allows teachers to teach the same skills/ standards at about the same time and give the same assessments graded on the same scale. Now teachers have a reason to compare assessment results and discuss instructional strategies. Teachers just taught the same standards/skills, gave the same assessments, and scored them on the same scale, so how do we account for the differences in student performance? What instructional strategies or curricular materials worked? Didn't work? Now the Professional Learning Community has something to talk about on a regular basis.

Let's get back to our example. The Kindergarten Local CCSS in Geometry is: Identify and describe these two-dimensional shapes: square, rectangle, circle, triangle, oval, heart, rhombus, and star and distinguish the relative positions of objects using terms such as above, below, beside, in front of, behind, and next to.

(M-2.G-O1.2	Identify two-dimensional shapes: square, rectangle, circle, triangle, oval, heart, rhombus, and star. (K.G.1 K.G.2)
<m-2.g-o1.3< td=""><td>Give examples to show understanding of positional words. (K.G.1 K.G.2)</td></m-2.g-o1.3<>	Give examples to show understanding of positional words. (K.G.1 K.G.2)
KM-2.G-O2.6	Draw pictures to replicate shapes. (K.G.1 K.G.2)
KM-2.G-O3.2	Demonstrate knowledge of positional words. (K.G.1 K.G.2)
KM-2.G-O4.5	Describe two dimensional shapes using attributes such as sides and corners. (K.G.1 K.G.2)

So now the Kindergarten task force deals with the question, if this is where our students are to be by the end of the year, what must students learn, and in what order must they learn it? Remember, there is more than one Domain in each grade level, and instruction must be balanced among the Domains as established in the Local CCSS, so the Geometry example is only for the Geometry Domain; other Domains will yield similar learning goals. The following Instructional Objectives were selected for the Kindergarten Geometry Domain:

This list represents all of the Instructional Objectives for the Geometry Domain in Kindergarten. KM-2.G-01.2 is the first quarter Instructional Objective that will be the second IO to be learned during first quarter, followed by KM-2.G-01.3. There are IO's for all four quarters in this example, and this may or may not be true in all grade levels, as teachers design learning expectations based on how children learn. This design decision is made by the task force based on the end-ofyear learning targets and how students best learn, not chapters of the book.

When the Instructional Objectives for all of the other Domains are included, the district now has a complete set of articulated, scaffolded learning targets that represent a learnable amount of content that is CCSS aligned and provides teachers the direction they need to design exciting, engaging CCSS-based learning experiences for students across all grade levels that will help students master the intended curriculum and prepare for the next grade level.

Now let's look at the first grade Instructional Objectives for the Geometry Domain as expressed in their

end-of-year learning target which is, Identify attributes of geometric shapes and divide shapes into two and four equal parts and describe/illustrate them as parts of a whole.

In this example, the task force decided to cluster all of the Instructional Objectives for Geometry into one quarter (second) and put them in numerical order to facilitate the design of a unit based on Geometry. The reader may or may not agree with that strategy, but it is the task force's decision to make. In this model, it is now time for the staff to implement this curriculum design and see if it works, a kind of action research, if you will.

The task force designed this activity (Plan), now the teachers will implement this decision (DO), then monitor their results—student performance, teacher satisfaction, etc. (Check), and then revise as the data indicates the need (Act). This represents a huge paradigm shift as we actively put all curriculum documents through the Plan, Do, Check, Act cycle to continuously improve our curriculum, instruction, assessment program. The task force will schedule a meeting to review all the feedback gathered through the year and make changes/revisions as the feedback and data warrant.

Now, let's look at the second grade Instructional Objectives for their end-of-year learning target for the Geometry Domain, Illustrate partitioning circles and rectangles into two, three, or four equal shares using descriptive words such as halves, thirds, two halves, three thirds, etc. and illustrate and identify three dimensional shapes.

First Grade Instructional Objectives for Geometry Domain:				
1M-2.G-02.5	divide shapes into equal parts, shade one part, and express the amount shaded as part of the whole by writing a fraction. (1.G.3)			
1M-1.G-02.6	anticipate and complete simple geometric and numeric patterns. (1.G.1)			
1M-1.G-02.7	identify plane (circle, square, rectangle, triangle, oval) and space shapes (rectangular prism, cube, sphere, cone, pyramid, cylinder) and their attributes (sides, faces, & vertices). (1.G.1)			

2M-10.G-O4.4	Identify triangles, quadrilaterals, pentagons, hexagons, and cubes, recognizing attributes such as angles or equal faces. (2.G.1)
2M-1.G-O4.5	Partitioning circles and rectangles into equal shares using descriptive words such as halves, thirds, fourths, etc. (2.G.2 2.G.3)
2M-1.G-O4.6	Demonstrate fractions by the partitioning and shading of shapes. (2.G.2 2.G.3)

Once again, we see the teachers on the task force decided to cluster all the IO's for Geometry into the fourth quarter and put them together, perhaps to facilitate the design of a unit, or perhaps the decision was made because the state assessment does not cover Geometry, so they delayed the learning experience until after the state assessment date. Whatever the reason for the decision, it, too, will go through the Plan, Do, Check, Act cycle to see how well it works.

Once the new national assessments become a reality, the design of these and other Instructional Objectives may change significantly, but at least this model allows teachers to begin the process of creating, implementing, and improving a CCSS-aligned, standards-based curriculum model. The important point here is that teachers are designing the learning expectations and then implementing those decisions to see how these learning expectations work. They then modify those expectations as the system learns more, the assessment system changes, and other realities happen. The longest journey begins with a single step, and they have taken that first step.

Final Thoughts

While this example and the focus on only one Domain of the CCSS in only three grade levels allows us the time and space to focus in on this process and its components, it is important for the reader to view this process in its entirety—to see a complete K-12 English Language Arts, Reading, and Math curriculum in this format. That can be seen in the fourth chapter of my second book, *Aligning Your Curriculum to the CCSS* from Corwin, or the reader may visit the website www:http.partners4results.org/CCSS to see a complete K-12 English Language Arts, Reading, and Math curriculum in this format. This web site is free and set up with blogging capabilities which offer the reader a chance to engage in an electronic conversation around this issue. This blogging capability is a great, free way to begin the conversation among the staff.

As stated in the beginning of this article, the reality of all of this is that we already have a proven process, the Power Standards approach advocated by Ainsworth and Reeves that can be modified and directly applied to the CCSS to create realistic, aligned learning expectations that will give our staff the focus they need to plan instruction accordingly. We then use the resulting year-end learning expectations and apply the scaffolding approach at the district level, an approach which teachers have used for years to sequence the instruction to best reflect how students learn. This establishes common, within-year learning expectations which are used to create curriculum documents that are aligned to the CCSS, scaffolded to reflect how students learn, and specific enough to provide guidance in lesson design, curricular material selection and assessments.

Please remember that in order to apply systems thinking, you must first have a system—that holds especially true for our curriculum, instruction, and assessment system. If the district does not have curriculum documents and a process that ensures:

- A defined set CCSS-aligned learning expectations that mandates what is to be learned and when it is to be learned,
- those curriculum expectations are taught in all the classrooms of the district,

- those curriculum expectations are assessed with the same common, formative assessments,
- those assessments are scored on the same scale,
- and teachers are given immediate assessment results in a format that fosters professional conversations and decisions for continuous improvement,

then the district does not have a curriculum, instruction, assessment system. The district has lots of good people working very hard to do the right thing for students, but without these defining documents and assurances that they are uniformly applied throughout the district, there is no system in place. If there is no system, systems thinking does not apply—first a district must create the system, then the district can apply systems thinking.

That is what this entire article and process are about—the first steps the reader can take to begin to build a CCSS-aligned curriculum, instruction, and assessment system that produces results. No district can have that system without the first, most crucial step—a guaranteed (taught in all classrooms throughout the district) and viable (aligned to the assessment system) curriculum. This illustration has been for a limited grade-level spread, but the reader can extrapolate this into a Pre-K-12 system to envision how this work is done. Other articles may follow to address other grade levels and areas.

I have done this work in many districts, and we always complete our Pre-K-12 curriculum work in three days. Yes, three days to build a Pre-K-12 curriculum in ELA, Math, and whatever other subjects the district is interested in doing. These documents represent a starting place, and then the Plan, Do, Check, Act cycle is used to ensure continuous improvement and refinement of the curriculum expectations. Common, formative assessments are then developed based on the Instructional Objectives; curriculum mapping is used to share curriculum experiences, resources, and instructional strategies to help students learn the standards; and a system of curriculum, instruction, and assessment is developed by the district using the leadership and talent of the local teaching staff. The beauty of this system is that it is based on national research and uses local leadership and talent to create local expertisethe district's own teachers become the experts in the CCSS and the design of curriculum, which is really how the system should work.

Feel free to contact the author to ask questions, see examples or discuss ways to do this work in your district. Thanks for all you do for children.

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Holding the Test Maker Accountable: The ISLLC Standards and the New York State School Building Leadership Licensure Assessments

By Craig Markson, Ed.D and Albert Inserra, Ed.D

Abstract

The purpose of this study was to examine the relationship of school leadership candidates' perceptions of their level of training in the Interstate School Leaders Licensure Consortium Standards (ISLLC) with their scores on Parts I and II of the New York State School Building Leader (SBL) licensure assessments. The New York State assessments were based on the ISLLC Standards. Eightyseven graduates of a K-12 school leadership preparation program from a large public university in New York State responded to the survey. The survey collected school leadership program graduates' perceptions of their level of coursework and internship training in the ISLLC Standards and their scores on the SBL licensure assessments. The results of this study showed an absence of relationships between preparation for the ISLLC Standards and scores on the New York State School Building Leadership assessments.

Purpose

The Interstate School Leader Licensure Consortium (ISLLC) Standards have become the premier standards for the profession of K-12 school leadership. The standards were designed to guide state policy-makers and educational leaders in the selection, training, licensing, and professional development for K-12 school leaders. Higher education accrediting councils, such as the National Council for the Accreditation of Teacher Education (NCATE), used the ISLLC Standards to evaluate school leadership preparation programs at colleges or universities undergoing accreditation (Council of Chief State School Officers [CCSSO] 1996; CCSSO, 2008). By 2006, 43 states adopted the ISLLC Standards as licensure requirements for school administrators (Derrington & Sharratt, 2008). On February 2, 2009, the New York State Education Department mandated passing scores on its School Leadership licensure assessments as part of the certification requirements for school leaders to practice in New York State. These assessments were based on the ISLLC Standards (Frey, 2008; New York State Education Department [NYSED], 2008a; NYSED, 2008b). As a result, the purpose of this study was to examine the relationship of school leadership candidates' perceptions of their level of training in the ISLLC Standards with their scores on Parts I and II of the New York State School Building Leader (SBL) licensure assessments.

Theoretical Framework

A timely and comprehensive analysis of a large body of research on approaches to educational leadership was conducted by Leithwood, Jantzi, and Steinbach (1999). This was timely in that it was a representative sample of 10 years of research on the subject and during the same decade when the original 1996 ISLLC Standards were written (CCSSO, 1996). Leithwood et al. (1999) analyzed121 articles that dated back as far as 1988 and were among four different educational leadership journals. These were national and international journals which included: the Journal of School Leadership; Educational Administration Quarterly; Educational Management and Administration; and the Journal of Educational Administration. In their analysis, Leithwood et al. (1999) identified 20 different leadership concepts, which they dispersed into one of six broader categories. These six types of school leadership approaches included: "instructional, transformational, moral, participative, managerial, and contingent leadership" (p. 7). According to Cornell (2005), the broad school leadership categories noted by Leithwood et al. (1999) could all be linked to the ISLLC Standards.

ISLLC Standard One was "An education leader promotes the success of every student by facilitating the development, articulation, implementation, and stewardship of a vision of learning that is shared and supported by all stakeholders" (CCSSO, 2008, p. 14). ISLLC Standard One was defined by the following functions listed in **Table 1**.

ISLLC Standard One was associated with transformational leadership (Cornell, 2005). Leithwood et al. (1999) attributed the origins of transformational leadership to Burns' Publisher Prize and National Book Award winning work entitled *Leadership* (1978). Burns (1978) initially referred to this form of leadership as "transforming" (p. 4) leadership. Burns (1978) maintained that most leaders were "transactional" (p. 4) in that they would exchange favors with their followers.

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The example Burns used was that a politician would promise jobs in return for votes or government funding for political campaign contributions. The transforming leader, on the other hand, identified, addressed, and harnessed the potential needs of the followers. This type of leader aimed for satisfying higher needs that fully engaged the followers. In short, the transforming leader created "a relationship of mutual stimulation and elevation that converts followers into leaders and may convert leaders into moral agents" (Burns, 1978, p. 4). This was the early origins of what would become a major part of ISLLC Standard One (CCSSO, 2008, p. 14; Cain et al., 2011).

ISLLC Standard Two was "An education leader promotes the success of every student by advocating, nurturing, and sustaining a school culture and instructional program conducive to student learning and staff professional growth" (CCSSO, 2008, p. 14). ISLLC Standard Two was defined by the functions listed in **Table 2**.

Table 1 ISLL	C Standard One Functions
Function	Descriptors
A	Collaboratively develop and implement a shared vision and mission
В	Collect and use data to identify goals, assess organizational effectiveness, and promote organizational learning
С	Create and implement plans to achieve goals
D	Promote continuous and sustainable improvement
E	Monitor and evaluate progress and revise plans
Note. Adapted from Edu	icational Leadership Policy Standards: ISLLC 2008, by the Council of Chief State School Officers,

Note. Adapted from *Educational Leadership Policy Standards: ISLLC 2008*, by the Council of Chief State School Officers, 2008, p. 14 and from *A project focusing on alignment of research based leadership practices, ISLLC Standards and principal evaluation*, by L. C. W. Cain, C. D. Clawson, and J. L. Martin, 2011, Saint Louis University, Missouri, p. 14.

Table 2 ISLLC Standard Two Functions

Function	Descriptors
A	Nurture and sustain a culture of collaboration, trust, learning, and high expectations
В	Create a comprehensive, rigorous, and coherent curricular program
С	Create a personalized and motivating learning environment for students
D	Supervise instruction
E	Develop assessment and accountability systems to monitor student progress
F	Develop the instructional and leadership capacity of staff
G	Maximize time spent on quality instruction
Н	Promote the use of the most effective and appropriate technologies to support teaching and learning
1	Monitor and evaluate the impact of the instructional program
Note. Adapted from Edu	icational Leadership Policy Standards: ISLLC 2008, by the Council of Chief State School Officers,

2008, p. 14 and from A project focusing on alignment of research based leadership practices, ISLLC Standards and principal evaluation, by L. C. W. Cain, C. D. Clawson, and J. L. Martin, 2011, Saint Louis University, Missouri, p. 20.

According to Cornell (2005), ISLLC Standard Two contained four key components: "the school culture, the instructional program and curriculum development, student learning, and professional staff development" (p. 39). Central to these components as well as many of the functions of ISLLC Standard Two was whether or not the school leader was perceived as the instructional leader of the school (Smith & Andrews, 1989). Smith and Andrews identified a link between teacher job satisfaction and the academic performance of their students. They argued that teacher job satisfaction and student achievement strongly depended on "teachers' perception of the school principal as the instructional leader" (Smith & Andrews, 1989, p. 10). Instructional leadership related to the central components of ISLLC Standard Two identified by Cornell (2005).

ISLLC Standard Three was "An education leader promotes the success of every student by ensuring management of the organization, operations, and resources for a safe, efficient, and effective learning environment" (CCSSO, 2008, p. 14). ISLLC Standard Three was defined by the following functions listed in **Table 3**.

According to Cornell (2005), ISLLC Standard Three had three main dimensions that included: "managing time, space, and resources"; "School safety"; and the third was "Managerial leadership" (p. 42), which included such attributes as managing the personnel, budget, and school property. Fullan, Miles, and Taylor (1981) described these characteristics as "Organization Development (OD)" (p. 8) and argued they applied both directly as well as indirectly to school effectiveness, as the latter portion of ISLLC Standard Three suggested (CCSSO, 2008). Fullan et al. (1981) maintained that the concepts from organization development were borrowed from the business world and later were applied to public organizations such as schools. However, Fullan et al. (1981) suggested that organization development applied to schools was "badly in need of stock taking" (p. 8). These concerns were echoed by Murphy (1990) who attributed this to School Leadership preparation

Table 3 ISL	LC Standard Three Functions
Function	Descriptors
А	Monitor and evaluate the management and operational systems
В	Obtain, allocate, align, and efficiently utilize human, fiscal, and technological resources
С	Promote and protect the welfare and safety of students and staff
D	Develop the capacity for distributed leadership
E	Ensure teacher and organizational time is focused to support quality instruction and student learning
Note. Adapted from <i>Ed</i> 2008, p. 14 and from <i>A</i> evaluation, by L. C. W.	ucational Leadership Policy Standards: ISLLC 2008, by the Council of Chief State School Officers, project focusing on alignment of research based leadership practices, ISLLC Standards and principal Cain, C. D. Clawson, and J. L. Martin, 2011, Saint Louis University, Missouri, p. 25.

Table 4	ISLLC Standard Four Functions
Function	Descriptors
А	Collect and analyze data and information pertinent to the educational environment
В	Promote understanding, appreciation, and use of the community's diverse cultural, social, and intellectual resources
С	Build and sustain positive relationships with families and caregivers
D	Build and sustain productive relationships with community partners
Note Adapted	from Educational Leadership Policy Standards: ISLLC 2008 by the Council of Chief State School Officers

Note. Adapted from *Educational Leadership Policy Standards: ISLLC 2008*, by the Council of Chief State School Officers, 2008, p. 15 and from *A project focusing on alignment of research based leadership practices, ISLLC Standards and principal evaluation*, by L. C. W. Cain, C. D. Clawson, and J. L. Martin, 2011, Saint Louis University, Missouri, p. 30.

Table 5	ISLLC Standard Five Functions
Function	Descriptors
А	Ensure a system of accountability for every student's academic and social success
В	Model principles of self-awareness, reflective practice, transparency, and ethical behavior
С	Safeguard the values of democracy, equity, and diversity
D	Consider and evaluate the potential moral and legal consequences of decision-making
E	Promote social justice and ensure that individual student needs inform all aspects of schooling
Note. Adapte 2008, p. 15 a evaluation, b	ed from <i>Educational Leadership Policy Standards: ISLLC 2008,</i> by the Council of Chief State School Officers, and from <i>A project focusing on alignment of research based leadership practices, ISLLC Standards and principal</i> by L. C. W. Cain, C. D. Clawson, and J. L. Martin, 2011, Saint Louis University, Missouri, p. 34.

programs not properly preparing future administrators in strategies that affect the management of organizational outcomes.

ISLLC Standard Four was "An education leader promotes the success of every student by collaborating with faculty and community members, responding to diverse community interests and needs, and mobilizing community resources" (CCSSO, 2008, p. 15). ISLLC Standard Four was defined by the functions listed in **Table 4.**

According to Cornell (2005), contingency leadership was the core skill required for ISLLC Standard Four. "Contingency theories of leadership analyze how situational factors alter the effectiveness of behavior and the leadership style of a particular leader" (da Cruz, Nunes, & Pinheiro, 2011, p. 8). School leaders needed to utilize different leadership styles because of the rapidly increasing cultural diversity of America's school population. Different cultures had different needs and one leadership style did not fit all (Mercer, 2000; Muse, 2008).

According to Tirmizi (2002), the origins of contingency leadership theories dated back to the 1960s and 1970s, with Fiedler's Contingency Theory being the most prominent. Fiedler (1965) began by analyzing which leadership style best fits a given situation. Fiedler maintained that it would be wrong to assume that all groups or teams in an organization were alike and each called for the same leadership style. To determine which leadership style fits a given situation, groups and the job environment needed to be categorized. The leadership side of this equation was defined by a leader's ability to influence a group to achieve a common goal (Fiedler, 1965).

ISLLC Standard Five was "An education leader promotes the success of every student by acting with

integrity, fairness, and in an ethical manner" (CCSSO, 2008, p. 15). ISLLC Standard Five was defined by the functions presented in **Table 5**.

According to Cornell (2005), ISLLC Standard Five was based on moral leadership. Leithwood et al. (1999) argued that what distinguishes moral leadership was the assumption that "the critical focus of leadership ought to be on the values and ethics of leaders themselves" (p. 10).

From the late 1960s to the early 1980s, Farguhar (1981) found ethics to be a nearly excluded topic from educational leadership preparation programs, textbooks, and journals. Farguhar's study contemplated if ethics could and should be taught in school leadership preparation programs. Furthermore, Farguhar's study analyzed the extent to which ethics was being taught in such programs as well as how it was being taught. Finally, how ethics should be further developed in educational leadership programs was also examined. Farguhar suggested that ethics could and should be taught in school leadership preparation programs. This was supported by Sergiovanni (1990), whose nine-step leadership strategy for producing outstanding school performance was based on moral leadership. Ethics was not being taught widely as well as adequately and should be a distinctive part of school leadership preparation programs (Farquhar, 1981). Farguhar (1981) concluded that competency in ethics was "an intellectual capacity, arrived at through cognitive development, and its nurture should be approached inductively in an educational administration problem-based way" (p. 203).

ISLLC Standard Six was "An education leader promotes the success of every student by understanding, responding to, and influencing the political, social, economic, legal, and cultural context" (CCSSO, 2008, p. 15). ISLLC Standard Six was defined by the following functions listed in **Table 6**.

According to Cornell (2005), ISLLC Standard Six was based on participative leadership. Participative leadership was a concept adopted from Yukl's (1994) work, where it was argued that the central focus for leaders should be on group decision-making processes (Leithwood et al., 1999).

Murphy and Hallinger (1992) attributed the importance of leaders being able to manage the group decision-making process to the school reform movements of the 1980s and 1990s. School reform was taking place amidst a larger movement of governmental decentralization or large government units passing down problems or challenges to smaller units. The political impact on schools was greater "school-based management, accountability, and systematic decentralization" (Murphy & Hallinger, 1992, p. 79). Murphy and Hallinger (1992) argued that prior to decentralization forces, schools had been somewhat shielded from political and economic forces. School leaders were now required to justify their decisions amidst the political and economic context, which would become part of the core of ISLLC Standard Six (CCSSO, 2008; Murphy & Hallinger, 1992).

The ISLLC Standards were based on feedback from numerous stakeholders, such as school leaders, teachers, parents, students, and researchers over many years (CCSSO, 2008).

The original ISLLC standards were produced in 1996 (CCSSO, 1996). According to Murphy (2000), they were "what practitioners and researchers have told us are critical aspects of effective [school] leadership" (p. 412).

I. Data Sources

The data for this study originated from a larger study, written by Craig Markson for a doctoral dissertation at

Dowling College (2013). Permission to conduct the study was obtained through both the Internal Review Board for the Protection of Human Subjects in Research (IRB) of the doctoral program and the university in which the study was conducted. The setting for this study was a large public university in New York State and the participants were graduates of this university's K-12 school leadership preparation program from May 2009 through August 2012. The New York State Education Department mandated its School Building Leader licensure assessments for school leadership candidates, effective February 1, 2009.

The May 2009 through August 2012 list of graduates was generated by the participating university, and represented the most recent period of graduates required to take the New York State School Leader assessments during the writing of the Markson (2013) study. The list included the mailing addresses of 638 graduates, 593 of which were still valid as confirmed by the 45 returned as undeliverable by the U.S. Postal Service. Of the 593 surveys sent to the valid mailing addresses, 87 completed surveys were returned, resulting in a response rate of 14.67 percent. One of the completed surveys was removed from the study because the reported scores on the School Building Leader licensure assessments was identified as an outlier, which was distorting the normal distribution curve.

II. Method

Each prospective participant was sent a letter informing him or her about the research study, stating it was voluntary, anonymous, and confidential. The survey was returned in non-identifiable mailing envelopes. The participants were provided a coverletter with instructions for completing the survey and a debriefing letter, which thanked respondents for their participation. A self-addressed, stamped return envelope was also provided. To ensure a high rate of return, the survey mailings were preceded by an email from the program director and Dean of the school from

Table 6	ISLLC Standard Six Functions
Function	Descriptors
А	Advocate for children, families, and caregivers
В	Act to influence local, district, state, and national decisions affecting student learning
С	Assess, analyze, and anticipate emerging trends and initiatives in order to adapt learning strategies
Note. Adap 2008, p. 15 <i>evaluation</i> ,	ted from <i>Educational Leadership Policy Standards: ISLLC 2008,</i> by the Council of Chief State School Officers, and from <i>A project focusing on alignment of research based leadership practices, ISLLC Standards and princip</i> by L. C. W. Cain, C. D. Clawson, and J. L. Martin, 2011, Saint Louis University, Missouri, p. 39.

which the participants graduated. This email encouraged graduates to participate in the survey, the results of which might guide the program for future enhancements.

The survey included three parts. For the purpose of this study, parts II and III of the survey were utilized. Part II of the survey asked participants to selfreport their test score results on Parts I and II of the New York State School Building Leader Assessments. Part III of the survey included 44 questions with Likert response 1-5 options, regarding participants' reported attitudes toward school leadership preparation training in their program coursework and internship. Part III of the survey instrument was adapted from the 1996 ISLLC Standards (CCSSO, 1996); and the 2008 ISLLC Standards (CCSSO, 2008); Green (2009) and a survey created by Impagliazzo (2012). The respondents were presented with an item in the form of a statement that describes an event related to learning an ISLLC Standard leadership skill in the coursework and in the internship. For each statement, respondents were asked to express their levels of agreement that they learned the behavior in their coursework and their internships. The 5-point Likert scale consisted of the following possible responses: (1) strongly disagree, (2) disagree, (3) slightly agree, (4) agree, and (5) strongly agree (Impagliazzo, 2012).

Four correlation analyses were conducted to determine if any of the selected variables in coursework and internship preparedness in the ISLLC Standards were related to participant scores on Parts I and II of the School Building Leader licensure assessments. A Pearson Product-Moment correlation analysis, with a 95% confidence interval, was used to analyze the relationships between the variables.

III. Results

Table 7illustrated the relationship betweencoursework preparation for the ISLLC Standards andscores on Part I of the New York State School BuildingLeader (SBL) Assessment.

The results illustrated in **Table 7** showed that there were no statistically significant relationships between school leadership program graduates' coursework preparation for the ISLLC Standards and their scores on Part I of the SBL exam, p>.05. Although not statistically significant, preparedness in ISLLC Standards One, Two, Three, Four, and Six actually had an inverse relationship with scores on SBL Part I. Coursework preparation for ISLLC Standard Two accounted for the greatest degree of variance on scores for Part I of the SBL examination. However, it accounted for only 4.21% of the variance, which was not statistically significant and there was an inverse relationship.

Table 8 illustrated the relationship betweeninternship preparation for the ISLLC Standards and scoreson Part I of the New York State School Building Leader(SBL) Assessment.

Table 7

Correlations for Coursework Preparation in ISLLC Standards with scores on SBL Part I

		SBL Part 1	ISLLC 1 Coursework	ISLLC 2 Coursework	ISLLC 3 Coursework	ISLLC 4 Coursework	ISLLC 5 Coursework
ISLLC 1	r	027					
Coursework	r ²	0.07%					
ISLLC 2	r	205	.685				
Coursework	r ²	4.21%	46.95%				
ISLLC 3	r	106	.524	.566			
Coursework	r ²	1.13%	27.47%	32.03%			
ISLLC 4	r	175	.854	.716	.564		
Coursework	r ²	3.08%	72.97%	51.34%	31.77%		
ISLLC 5	r	.027	.698	.576	.480	.778	
Coursework	r ²	0.08%	48.67%	33.12%	23.08%	60.46%	
ISLLC 6	r	050	.659	.620	.635	.651	.652
Coursework	r ²	0.25%	43.38%	38.48%	40.28%	42.39%	42.53%

The results displayed in **Table 8** showed that there were no statistically significant relationships between school leadership program graduates' internship preparation for the ISLLC Standards and their scores on Part I of the SBL exam, p>.05. Although not statistically significant, preparedness in ISLLC Standards Two, Four,

and Five actually had an inverse relationship with scores on SBL Part I. Internship preparation for ISLLC Standard Two accounted for the greatest degree of variance on scores for Part I of the SBL examination. However, it accounted for only 3.53% of the variance, which was not statistically significant and there was an inverse relationship.

		SBL Part 1	ISLLC 1 Internship	ISLLC 2 Internship	ISLLC 3 Internship	ISLLC 4 Internship	ISLLC 5 Internship
SLLC 1	r	.028					
Internship	r ²	0.08%					
SLLC 2	r	188	.676				
Internship	r ²	3.53%	45.70%				
SLLC 3	r	.104	.577	.596			
nternship	r ²	1.08%	33.34%	35.51%			
SLLC 4	r	057	.820	.706	.612		
nternship	r ²	0.33%	67.26%	49.82%	37.45%		
SLLC 5	r	039	.673	.629	.499	.722	
nternship	r ²	0.16%	45.33%	39.59%	24.92%	52.06%	
SLLC 6	r	.030	.608	.535	.654	.626	.55
Internship	r ²	0.09%	36.98%	28.64%	42.75%	39.21%	31.23

Table 9

Correlations for Coursework Preparation in ISLLC Standards with scores on SBL Part II

		SBL Part 2	ISLLC 1 Coursework	ISLLC 2 Coursework	ISLLC 3 Coursework	ISLLC 4 Coursework	ISLLC 5 Coursework
ISLLC 1	r	066					
Coursework	r ²	0.44%					
ISLLC 2	r	239	.685				
Coursework	r ²	5.73%	46.95%				
ISLLC 3	r	058	.524	.566			
Coursework	r ²	0.33%	27.47%	32.03%			
ISLLC 4	r	114	.854	.716	.564		
Coursework	r ²	1.30%	72.97%	51.34%	31.77%		
ISLLC 5	r	.047	.698	.576	.480	.778	
Coursework	r ²	0.22%	48.67%	33.12%	23.08%	60.46%	
ISLLC 6	r	076	.659	.620	.635	.651	.652
Coursework	r ²	0.58%	43.38%	38.48%	40.28%	42.39%	42.53%

Table 9illustrated the relationship betweencoursework preparation for the ISLLC Standards and scoreson Part II of the New York State School Building Leader(SBL) Assessment.

The results depicted in **Table 9** showed that there were no statistically significant relationships between school leadership program graduates' coursework preparation for the ISLLC Standards and their scores on Part II of the SBL exam, p>.05. Although not statistically significant, preparedness in ISLLC Standards One, Two, Three, Four, and Six actually had an inverse relationship with scores on SBL Part II. Coursework preparation for ISLLC Standard Two accounted for the greatest degree of variance on scores for Part II of the SBL examination. However, it accounted for only 5.73% of the variance, which was not statistically significant and once again, there was an inverse relationship.

Table 10 displayed the relationship between internship preparation for the ISLLC Standards and scores on Part II of the New York State School Building Leader (SBL) Assessment. The results illustrated in **Table 10** showed that there were no statistically significant relationships between school leadership program graduates' internship preparation for the ISLLC Standards and their scores on Part II of the SBL exam, p>.05. Although not statistically significant, internship preparedness for all of the ISLLC Standards had inverse relationships with scores on SBL Part II.

Internship preparation for ISLLC Standard Four accounted for the greatest degree of variance on scores for Part II of the SBL examination. However, it accounted for only 5.33% of the variance, which was not statistically significant and once again, there was an inverse relationship.

VI. Conclusions

While the New York State School Building Leadership assessments were based on the ISLLC Standards, there were no statistically significant relationships between school leadership program graduates' level of preparedness in the ISLLC Standards and their scores on the State assessments. Although not statistically significant, what was surprising was the mere presence of inverse relationships. Furthermore, what was even more surprising was the ISLLC Standard that caused the greatest degree of variance on each State assessment had an inverse relationship. The strongest possibility for these results was that the current New York State School Building Leadership assessments were not be properly aligned to the ISLLC Standards. Evidence of this was not only based on the findings of this study but on the fact that the New York State Education Department plans on revising the State's School Building Leadership assessments starting in 2013 and mandating the updated assessments for all school leadership candidates in 2014 (New York State Education Department, 2013). In short, after only 3 years of State testing on the ISLLC Standards, the State plans on overhauling the assessments.

The New York State Education Department had contracted with a foreign company to create, implement, and grade the SBL licensure assessments (Pearson Education Inc., 2009). This company was headquartered in London but is publicly traded on the New York Stock

Table 10	Co	orrelations for	Internship Prep	paration for ISLL	.C Standards wi	th scores on SB	L Part II	
		SBL Part 2	ISLLC 1 Internship	ISLLC 2 Internship	ISLLC 3 Internship	ISLLC 4 Internship	ISLLC 5 Internship	
ISLLC 1	r	227						
Internship	r^2	5.16%						
ISLLC 2	r	208	.676					
Internship	r²	4.34%	45.70%					
ISLLC 3	r	089	.577	.596				
Internship	r²	0.79%	33.34%	35.51%				
ISLLC 4	r	231	.820	.706	.612			
Internship	r ²	5.33%	67.26%	49.82%	37.45%			
ISLLC 5	r	223	.673	.629	.499	.722		
Internship	r ²	4.96%	45.33%	39.59%	24.92%	52.06%		
ISLLC 6	r	145	.608	.535	.654	.626	.559	
Internship	r ²	2.12%	36.98%	28.64%	42.75%	39.21%	31.23%	

Exchange ("PSO Profile | Pearson, Plc Common Stock -Yahoo! Finance," n.d.). The SBL licensure assessments were created well after the curriculum had been established in K-12 school leadership preparation programs throughout New York State. This begged the question as to whether or not the company, which designed the New York State's School Leadership Assessments, had done its due diligence in ensuring its exams were aligned to the curriculum already being taught in these programs.

The school leadership program in the setting where this study was conducted had its course syllabi aligned to the ISLLC Standards prior to the implementation of the State exams (Markson, 2013). Therefore, there should have been a relationship among its graduates' perceptions of their preparedness in the ISLLC Standards and scores on the SBL Assessments. The New York State Education Department will be using the same company that created the old SBL Assessments to create the new SBL Assessments that will be mandated in 2014 ("NYSTCE Program Update," n.d.). As a result, future studies should continue to investigate the relationship between school leadership program graduates preparedness for the ISLLC Standards and their scores on the revised School Building Leadership Assessments.

VII. Implications of the Research

If the results of this study remain consistent with future studies, both in New York State and in other states, then state education departments need to reassess how they contract with private companies to produce and implement school leadership licensure assessments. Perhaps the colleges or universities that deliver the school leadership program curricula need to be more involved in the development of the licensure assessments, to ensure greater alignment of curricula with assessments. Accountability could be maintained by having private companies responsible for randomizing the questions and answers as well as grading such assessments.

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ABSTRACT

In order to increase student engagement in science as proposed by the National Science Education Standards, comparisons of a hands-on treatment and traditional instruction were investigated. This study involved the comparison of the effects of traditional instruction versus previously-tested tactual resources on the achievement and attitudes of first-, second- and third- grade students in science. One goal of this study was to determine whether the tactual materials are more beneficial than traditional instruction. In addition, a correlation was sought between primary students' learning style preference, academic achievement and attitude.

Introduction

Hands-on learning addresses the National Science Education Standards' call for student-engagement reform in science instruction. Yet, due to contentment in direction of scope and sequence found in textbooks, educators feel more inclined to omit tactual resources (Tausan, 2011). Traditional instruction is not the most gainful to primary students. According to Barak and Dori (2011), research demonstrates that tactual learners dominate the primary-school population. However, educators continue to present academic content driven by textbooks. This group tends to learn new and difficult information best when actively engaged with resources they manipulate (Mitchell, 2008) and Terregrossa et. al (2010).

A variety of learners can benefit from the use of hands-on instruction as noted by Trochta (2008) and Lauria (2010). Tactual resources are notorious for assisting in the improvement of language skills for bilingual students (Tavakolizadeh & Qavam, 2011). A study in a California elementary school, yielded data which revealed that the longer ESL students participated in active learning, the higher their scores were in the areas of reading, math, writing and science (Bostrom, 2012). Special-needs students who have difficulty in mathematics are motivated to strive to improve their academic achievements (Peltenberg et al, 2009). Curricula incorporating hands-on learning can assist immigrants and students from low socio-economic areas become more engaged in learning and persist to complete their education (Cabral, 2006).

Research indicates achievement and attitude toward learning increases as a result of hands-on learning. According to Bredderman (1982), over 57 significant handson learning studies yielded evidence of influential tactual resource-assisted instruction. The students included in the studies performed 20% higher than groups using traditional methods. The most significant increase was acknowledged in attitude (Bredderman, 1982). In 2001, Cantelmo's counterbalanced design which involved previously-research tactual resources with science vocabulary yielded statistically higher achievement and attitude-test scores than with traditional learning (Sullivan et al, 2001). Similar findings were evidenced in Lister's (2005) and O'Connell, Dunn, & Denig's (2003) primary studies.

Rationale

Due to the complexity of the previously-tested tactual resources in these more recent studies, Mitchell (Dunn & Mitchell, 2008) experimented with tactual resources which were easier for young children to create. In an effort to determine the effects of these innovative, previouslytested resources and traditional instruction, Mitchell proceeded with research exclusively involving second-grade students.

Sixty-seven participants' science achievement- and attitudinal-test scores on three different, but comparable units were taught with three alternative strategies. One method was traditional lecture, and the others were two hands-on resource categories. One group of tactual resources consisted of materials that were previously tested in several studies. The other included materials that were fairly novel with very little exposure. A counterbalanced research design indicated that the use of tactual materials, regardless of whether they were previously tested or innovative, produced higher achievement-test gains and more positive attitudes than traditional instruction. The study confirmed benefits of tactual resources with young children in the second grade. However, an expanded study was necessary.

Purpose of the Study

In 2011, an additional comparison study evaluating traditional instruction and one of the tactual resources from the previous study was conducted. Participants of this study included second-grade students, first-grade students and third-grade students. The study was expanded to determine if alternative results would be achieved with a larger sample size. Since the previous study only included second-grade students, the researcher decided to incorporate lower and higher academic levels. The identical science units were utilized. A single tactual resource (task cards) from the 2005 study was incorporated as opposed to the six original resources. Those resources were all designed to provide a hands-on experience in learning. Using one resource (a puzzle) that students were most familiar with was better suited as it required less explanation of its functionality. Due to the incorporation of even younger students, this was a necessary element.

Participants

A convenience sample of primary-grade consenting classes comprised of first through third academic levels in an urban area were studied. The sample included (106 first-grade students); (92 second-grade students) and (85 third-grade students). The participants comprised three heterogeneously grouped classes for each academic level. One class on each grade level was considered the control (C1, C2, and C3) and the other two received the experimental task-card treatment (1E1, 1E2, 2E1, 2E2, 3E1 and 3E2) presented in Table 1.

Materials and Procedures

The study began with a paper-and-pencil pretest to evaluate the knowledge of students regarding the secondgrade level science unit. The intervention occurred over a three-week period during which the researcher visited the students one time per week and provided instruction to all groups by means of a design incorporating lecture or hands-on materials. The posttest followed the same format as the pretest utilizing the same paper-and-pencil test.

Next, two different approaches to teaching the unit of chemical and physical changes were employed. One form was utilizing traditional methods. A science textbook was read aloud to the first grade students collectively. When appropriate, students who were advanced in reading abilities recited text as well as the instructor. In the second and third grades, students took turns reading the text aloud. This method was employed only in one class per grade level as presented in Table 1. These classes were considered the control groups. The other treatment was task cards. Task cards are puzzle-like cards that contain a picture on one side and corresponding information on the other. For example, a picture of a rusty nail was featured on one side of the front of the card. On the same side, but on the other side, the words "chemical change" appeared. Down the middle, a wavy line was cut. Students were encouraged to fit the cards together. These resources were self-corrective. They had matching stickers on the backside of the card. The student who put the "chemical change" portion of the card next to the nail could see for themselves that they had the correct response. The task cards contained the information presented in each chapter of the text. Each pair of students was provided a Ziploc bag containing the cards for the particular chapter that was being reviewed on a given day. Cooperatively, they assembled the resources

Grades	Textbook	Task Cards	Task Cards
First	Control Group	1 st Experimental Group	2 nd Experimental Group
N= 106	(C1)	(1E1)	(1E2)
Second	Control Group	1 st Experimental Group	2 nd Experimental Group
N= 92	(C1)	(2E1)	(2E2)
Third	Control Group	1 st Experimental Group	2 nd Experimental Group
N= 85	(C1)	(3E1)	(3E2)

and read aloud. Some children read them as they completed them; others arranged all cards and then recited them.

Each class session was approximately 30-45 minutes. This depended on the grade level and task. The instruction with task cards was much quicker than the textbook especially when it came to readability. The first grade students were able to recite the information of the chapter quickly. However, it could not have simply been recited quickly and not comprehended by others. Therefore, students were encouraged to read at a decent pace. This was also true of the other grades.

Results

Data were examined through a single-factor, withinsubjects analysis of variance (ANOVA) of gain scores to determine effects of science achievement with each treatment presented in **Table 2**. As students' tactual preference increased so did their test performance and

Table 2: Mean Scores of Tactual Preferences

attitude. More specifically, the mean difference performance in the no tactual preference group was 2.66. In the group where students had a low preference, the difference was 8.93. The mean difference for the medium-preference students was 16.55 and 21.43 for the high-preferenced group. It increased as the preference did respectively (shown in **Table 2**). The mean scores of the control group were lower than the tactual students. Their growth was 6.27. Whereas the tactual students' mean scores showed more growth (18.56). The tactual students who were provided a treatment had a gain of 12.29.

The treatment did not correlate with the students' attitudes or tactual preference (shown in **Table 3**). This was because it was a random sample. The students were not aware of their tactual preference during the study. Yet, there was a high correlation between the mean differences of treatment at the < .001 level (.000). The tactual students' mean difference scores grew at a higher pace than the control group.

actual Pref.	Pretest	Posttest	Attitude
lo Preference N=62	2		
<i>l</i> lean	77.66	80.32	1.42
Standard Deviation	14.924	15.756	.714
Range	60	70	2
<i>l</i> inimum	40	30	1
<i>l</i> laximum	100	100	3
ow Preference N=1	4		
<i>l</i> lean	71.43	80.36	3.00
Standard Deviation	23.157	24.295	1.109
Range	80	85	3
<i>l</i> inimum	10	15	1
laximum	90	100	4
/ledium Preference N=	71		
<i>l</i> lean	63.03	79.58	4.00
Standard Deviation	17.798	12.471	.478
Range	70	50	2
<i>/</i> linimum	20	50	3
laximum	90	100	5
ligh Preference N=1	36		
<i>l</i> lean	68.90	90.33	4.60
Standard Deviation	17.456	11.851	.624
lange	85	50	4
<i>l</i> inimum	15	50	1
<i>I</i> laximum	100	100	5

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			ANOVA Table				
			Sum of Squares	df	Mean Square	F	Sig.
ATT * TREAT	Between Groups	(Combined)	1.551	1	1.551	.777	.379
	Within Groups		560.541	281	1.995		Î
	Total		562.092	282		1	
TACPREF * TREAT	Between Groups	(Combined)	.117	1	.117	.083	.774
	Within Groups		397.869	281	1.416		
	Total		397.986	282			1
MNDIFF * TREAT	Between Groups	(Combined)	8038.482	1	8038.482	45.156	.000
	Within Groups		50022.118	281	178.015	1	Ī
	Total		58060.601	282		i –	T

The effect size shown in Table 4 (.138) revealed a small effect size. This was because they were provided the method of learning that was best for them (according to the learning style assessment issued). The control group contained students who had a tactual preference. Furthermore, not providing those students a tactual method of instruction put them at a disadvantage to score higher on the post test.

Finally, the learning-style assessment ELSA (Elementary Learning Style Assessment) was issued to determine the correlation between learning-style and method of treatment. Students were unaware of their diagnosed learning-style preference(s) during the instruction and assessment phases of the study. Therefore, students' knowledge of their learning-style preferences did not have any impact on their achievement or attitudes.

Discussion

The expansion of the 2005 study corroborates the use of hands-on materials not only in second-grade classrooms, but with primary students on different age and academic levels. The larger sample size is a powerful piece. The results demonstrate that even with a larger population, the same results were obtained. In addition, the varied elements of the 2011 study demonstrate the positive effects of utilizing these resources (especially with students whose learning-style preference stipulates that choice). Also the development of two investigations adds a distinct element

	Eta	Eta Squared
TT * TREAT	.053	.003
ACPREF * TREAT	.017	.000
NDIFF * TREAT	.372	.138

not usually evidenced in traditional manuscripts that review one research study. The progression of the study and unpacked elements help us comprehend the underlying message of student engagement with manipulatives as it relates to two studies as opposed to one.

Both studies indicate hands-on learning was more effective than traditional instruction according to achievement test score gains and Cohen's d Effect size results. In addition, both show an interaction between students' tactual preferences and the treatment they received. Thus confirming when students are provided instruction through their tactual preference, academic achievement and attitudes improve. Controversy continues to exist regarding textbook reliance versus hands-on resources in dissemination of academic content for primary students. This is an unfortunate dilemma because it is simple to follow the scope and sequence provided in a text. It can also add confidence to educators. Yet, tactual resources are necessary for most young learners especially when processing new and difficult information. In order to address the National Science Education Standards concern regarding lack of student engagement, tactual-resource implemented in many classrooms have yielded positive results. Research indicates the success in academic achievement and attitudes as an outcome of incorporation of said materials. It may require additional work to construct these resources manually or electronically.

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THE APPLICATION OF NARRATIVE PEDAGOGY TO PROMOTE EXCELLENCE FOR NURSING STUDENTS IN THE CLINICAL SETTING

> By Janet Raman, Ed.D., Jennifer Bryer, Ph.D. and Elsa-Sofia Morote, Ed.D.

ABSTRACT

The purpose of this study is to determine if the use of Narrative Pedagogy, by utilizing a thinking-in-action activity, will aide in the nursing students' growth in their clinical practice through reflective thinking.

In this qualitative study, a thinking-in-action activity based on Narrative Pedagogy was created for eight students to describe their experiences in the clinical setting. Students were asked to write down what happened during one particular experience and the thinking they did during that time. The students' writing reflected their thought process, not their actions. The purpose of the thinking-in-action activity was for students to describe how they were "thinking like a nurse."

Next, the students were asked to share their stories by writing a 2-3 page essay which was submitted and presented orally during a 2-hour clinical session. By sharing their collective interpretations, clinical educators and students transform knowledge and challenge the assumptions underlying nursing practices.

In general, students felt that Narrative Pedagogy positively impacted their learning and enhanced the development of their clinical practice with the predominant themes of Safety, Caring, Assembling, Staying and Questioning.

INTRODUCTION

The clinical setting has become increasingly complex in the current health care environment. Nurse educators have recognized the limitations of traditional pedagogies in the clinical setting. The need for innovative, student-centered learning is essential in order to transfer knowledge to practical situations and discover new ways of thinking about clinical situations.

Narrative Pedagogy with its emphasis on how students learn and experience thinking can be an effective evidence-based approach to clinical education.

Narrative Pedagogy enables students to begin thinking about their clinical experiences from multiple perspectives. In addition, Narrative Pedagogy and its attention to the Concernful Practices of Schooling Learning Teaching can prepare students to become comfortable with public and communal thinking and dialogue in order to discover new understandings of their clinical experience (Diekelman, 2001). Students write, read, and interpret narratives (stories) to evoke new ways of thinking and explore knowledge embedded in actual nursing practice.

The purpose of this study is to determine if the use of Narrative Pedagogy, by utilizing a thinking-in-action activity, will have a positive effect on the nursing students' growth in their clinical practice through reflective thinking.

THEORETICAL FRAMEWORK

To successfully provide care in a holistic manner for those in need, the nurse and/or the nursing student must integrate theoretical knowledge and problem solving abilities with the ability to think critically in his or her practice. Although Jones (2008) and Etheridge (2007) mention that this can be difficult, the opportunity for nursing students to integrate all that is learned in the classroom and the lab occurs for the nursing student in the clinical setting. This becomes an extremely important process as employers continue to state that nursing education programs are not adequately preparing new graduates for practice (Candela & Bowles, 2008). How can the nursing instructor facilitate learning for the nursing student, thus preparing the nursing student for excellent nursing practice in increasingly complex healthcare settings? Hsu (2006) noted there is little time "allocated to development of clinical judgment, problem solving or nursing care skills" (p.625). One way to do this is through the use of Narrative Pedagogy. Narrative Pedagogy brings to mind the experiential wisdom emphasized in the practice of Zen and is derived from a Heideggerian hermeneutical sense of interpreting and inquiring about phenomena and of being (Diekelman, 2001; Ironside, 2005a; Ironside, 2005b). Narrative Pedagogy is a philosophy as well as a teaching strategy developed to enhance "thinking, practicing, teaching and learning" (NLN, 2008, p. 1) and should serve to stimulate the process of clinical practice in nursing. The Concernful Practices of Schooling Learning Teaching describe how teachers, students, and clinicians experience teaching and learning and they are: gathering, creating places, assembling, staying, caring, interpreting, presencing, preserving reading, writing, thinking and dialogue, questioning and inviting (Diekelman, 2001; NLN, 2008).

It is known that learning is an active, personal process (Gaberson & Oermann, 1999), and learners have to construct their own knowledge (Lunenberg & Ornstein, 2004). Current writings indicate that content has to take root in the thinking of students and transform the way they think (Lunenberg & Ornstein, 2004). It is further noted that clinical practice requires critical thinking and problem-solving abilities, specialized psychomotor and technological skills, and a professional value system (Gaberson & Oermann, 1999). Therefore content cannot be separated from students' thought processes (Lunenberg & Ornsein, 2004) and thinking must be promoted in nursing students. Many studies (Candela & Bowles, 2008; Etheridge, 2007; Jones, 2007) indicated that multiple resources should be utilized to prepare nursing students for practice. Although not all (Evans & Bendel, 2004) feel that Narrative Pedagogy provides significant learning opportunities, most believe that it does provide alternative interpretive pedagogies (Diekelmann, 2001; Young, 2004) to "explore ...practices of thinking, and interpreting as central to understanding the nature of experiences" (Diekelmann, 2001, p. 54). This encourages a cooperative learning environment where all contribute, thereby advancing learning (Lunenberg & Ornstein, 2004). Narrative Pedagogy uses a hermeneutical approach to bring together all pedagogies into a converging conversation (Diekelmann, 2001). Studies (Ironside, 2003, 2005, 2006; Lemonidou, Papathanassoglou, Giannakopoulou, Patiraki & Papadatou, 2004; Scheckel & Ironside, 2006) show that focusing on thinking and reflecting and discussing actual experiences (Etheridge, 2007; Jones, 2007) in a group

Table 1	Description of Students in the Sample			
Student:	Age:	Gender:	Ethnicity:	Grade in Course:
1	22	Female	Black	Pass
2	21	Female	Black	Pass
3	48	Male	Black	Pass
4	26	Female	White	Pass
5	31	Male	White	Pass
6	49	Female	White	Pass
7	60	Male	White	Pass
8	37	Female	White	Pass

(Ironside, 2005b) reveals practical wisdom and knowledge to engender the community (Diekelmann, 2001), and enhances the nursing students' performance. Beard and Morote (2008) conclude that "learning does occur when narrative pedagogy is used" (p. 10).

RESEARCH DESIGN AND METHODOLOGY

For this pilot study eight students from a first semester Fundamentals clinical class (see Table 1) in a nursing program in eastern Long Island, New York, participated. Students practiced developing their professionalism and nursing skills by combining actual clinical practice with reflective thinking. This was accomplished by developing nursing diagnoses and other documents that provided them with opportunities to utilize the nursing process of assessment, diagnosis, planning, implementation and evaluation. This class was scheduled for two hours on one day and six hours on the following day in the clinical setting which was at a highly active public hospital in Long Island, New York. Usually on the first day, students gather information in order to process it for use with patients in the clinical setting the following day. In order to answer the research question, a written assignment titled "Grand Rounds Written Narrative Assignment" was created by the researchers and based on the work of Andrews and Young (2007). The subjects consented to the confidential use of their work for this study. Institutional Review Board approval was obtained from the college that ran the nursing program and from Dowling College.

The assignment "Grand Rounds Written Narrative Assignment" (**Appendix A**) was a reflective assignment designed to elicit thoughtfulness regarding an experience that the student had during his or her first clinical course in the associate degree nursing program. Students were asked to write about a particular experience and the thinking they did during that time. The students' writing reflected their thought process, not their actions. The purpose of the thinking-in-action activity was for students to describe how they were "thinking like a nurse." Students

were given two weeks to write at least 2-3 pages about how they are learning to think like nurses. Next, the students were asked to share their stories during a short clinical day. By sharing their collective interpretations, the clinical educator and students transformed knowledge and challenged the assumptions underlying nursing practices. The responses to the assignment were analyzed using the qualitative method of coding for emerging themes through content analysis. In addition, the researchers collected the students' final scores for the clinical component of the course. Examining phenomenological data elicited from student reflections about the people and events based on their observations (Gall, Gall & Borg, 2007) in the "Grand Rounds: Written Narrative Assignment" should enhance understanding of the study participants' abilities to "think like nurses".

Themes	Number of times theme was identified
Gathering: Bringing in and Calling forth	6
Creating Places: Keeping Open a Future of Possibilities	4
Assembling: Constructing and Cultivating	14
Staying: Knowing and Connecting	9
Caring: Engendering Community	20
Interpreting: Unlearning and Becoming	5
Presencing: Attending and Being Open	4
Preserving: Reading, Writing, Thinking and Dialogue	2
Questioning: Meaning and Making Visible	10
Inviting: Waiting and Letting Be	1
Safety	27

Results

All of the above 8 students successfully completed their clinical rotation for the semester and received grades of "Pass". Ten patterns or practices of students and teachers emerged from the students' narratives. These Concernful Practices of Schooling Learning Teaching (Diekelman, 2001) were identified in the coding process along with an additional theme of safety. See **Table 2**.

The predominant themes that emerged were: Safety, Caring, Assembling, Staying, and Questioning.

Safety

Students repeatedly identified issues with safety and/or lack of safety in the clinical practice setting. Student 5 shared: "prioritizing his safety because the last thing this patient was at the time, was safe." Student 7 wrote: "Should an eighty two year old woman, under these conditions, lugging an IV rack, be told she should do it alone?" The students were very concerned about infection control practices. Student 2 said: "This concerned me because the aids are touching the sheets, the food, and everything, they get around to more rooms than the nurses do, so it is a scary thought that they are carrying around those microorganisms."

Concernful Practices

Embedded in the students' narratives were many of the Concernful Practices of Schooling Learning Teaching (Diekelman, 2001). Most often Caring, Assembling, Connecting and Questioning were brought forth.

Caring

Student 1 wrote this about a patient who visited her unit frequently: "Oh my goodness, his situation probably didn't get any better but I hope his health does." "I went in his room to give him a new ID bracelet and it almost brought me to tears..." Student 5 wrote this about his patient: "He was not a heavy man so the workload was light, but still just left for dead." And yet Student 7 mentioned: "the rest of the day was spent trying to keep him clean and doing further damage to himself by pulling on the foley causing him great distress."

Assembling

Student 8 asked: "Why is she diapered when she can go to the bathroom herself?" and "Why shouldn't the nurse allow me to help her to the bathroom?" Student 3 mentioned: "I had to look at an array of possibilities to find meaningful patterns relating to the problems she was experiencing."

Staying

Student 1 mentioned: "His response really made me think twice about the assumption that I made about him earlier." And, Student 2 shared: "What excited me the most that day was that I got to see his wounds being cleaned by the nurse. I had seen pictures of pressure ulcers in the textbook but I had never seen one in real life."

Questioning

A very concerned Student 4 wrote: "When I spoke to the CNA she said that 'Mr. C. is always complaining.' She went on to mention "It was very disturbing because she wasn't the least bit concerned about spreading the infection." Student 5 asked: "but if no one is going to take the time to check up on him why not put him in the bed closest to the door so that when you walk by you are able to see if he is o.k." The students' papers also contained much thoughtfulness related to the Concernful Practices of Gathering, Creating Places, Interpreting, Presencing, Preserving, and Inviting. Student 7 questioned: "Whatever the answers something felt different here and I would appreciate any ideas that anybody has." Overall, the assignment proved to be rich in thoughtfulness about the Concernful Practices of Schooling Learning Teaching (Diekelman, 2001). Please refer to **Table 2**.

These results suggest that the students discovered new ways of thinking about clinical situations from multiple perspectives which aided in the growth of their clinical practice.

Importance of Study

The art and practice of nursing requires the integration of technical skills, didactic knowledge and reflective thought. Nurse educators need to move from teaching in a task-oriented fashion to techniques that are more learner-centered (Hsu, 2006) to prepare students for current practice situations. Nurse educators recognize that reforming nursing education through the use of new pedagogies will aide in meeting contemporary challenges (Ironside, 2006). Narrative Pedagogy and the Concernful Practices of gathering, assembling, staying, caring, presencing, interpreting, preserving reading, writing, thinking and dialogue, questioning, inviting and creating places offer a new language to describe shared experiences and meanings (Diekelman, 2001). Narrative Pedagogy with its emphasis on how students learn and experience thinking can be an effective evidence-based approach to clinical education. It enables students to begin thinking about their clinical experiences from multiple perspectives. Narrative Pedagogy positively impacted nursing students' learning and enhanced the development of their clinical practice.

Similar studies should be done on a larger scale involving more nursing students from a variety of nursing programs with a broader demographic, to determine if the findings will be similar.

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APPENDIX A:

GRAND ROUNDS: Written Narrative Assignment

Please reflect upon an experience that you have had in clinical this semester. Write about your experience and all the thinking you did during the experience (and since the experience). When you write down what happened, remember this is not about just describing what you did. Rather, describe the experience you had in as much detail as you can.

Try first describing this experience and then go back and put in your thinking. Pay close attention to describing what was going through your head during the experience. Your thinking might be about frustrations, fears, or ethical concerns, or it might be about your surprise at what you saw or your excitement about being a nurse. I anticipate that your reflections will take 2-3 pages. The purpose of this assignment is to describe how you are learning to think like nurses think. So the most important part of describing the experience is not just what happened, but what you were thinking at the time.

Perhaps these phrases will help you get started:

- I was confused (or surprised) when...
- I didn't know what to do (or say) when...
- I saw something that disturbed me...
- I now understand that...
- I have always wondered about...
- I still question....

You will hand in this paper on XXXXXXX in clinical.

Please remember not to mention the patients by names or room numbers, only initials.

You will then present your paper by reading it to the group.

If you have any questions, feel free to contact me @ XXXXXX.edu

From the Field:

TRANSPORTATION OF PARENTALLY PLACED STUDENTS WITH DISABILITIES - UPDATE¹

By: Susan Fine² Harris Beach, PLLC

Introduction

Boards of Education of New York state school districts are mandated to provide transportation to any student who attends a nonpublic school within the distance limitations prescribed by New York Education Law § 3635(1), usually 15 miles, so long as all other statutory criteria are met. New York Education Law §4402(4)(d) imposes additional requirements for transportation of students with disabilities attending nonpublic schools.³ This article summarizes statutes and their application by the Commissioner of Education (Commissioner), the New York State Review Officer (SRO), and the Courts of New York, and addresses a recent change in the analysis under Section 4402(4)(d).⁴

Boards of Education must provide transportation to any student who attends a nonpublic school of the parents' choosing within the distance limitations prescribed by New York Education Law § 3635(1)(a).⁵ The maximum distance such a student must be transported is fifteen (15) miles, as measured by the nearest available route from the home to the school. N.Y. Educ. Law §3635(1)(a). A district's voters may approve an extension of the fifteen mile limit. In addition, Education Law § 4402(4)(d) requires that students classified pursuant to the Individual with Disabilities Education Act (IDEA), 20 U.S.C. §1400 *et seq.*, be transported up to 50 miles for parentally placed students with disabilities who attend nonpublic schools when the essential components of the student's Individualized Education Program (IEP) are fulfilled at the nonpublic school. A recent decision by the Supreme Court, Albany County has altered the parameters for determining whether or not a nonpublic school's program provides a program similar to that recommended by the Committee on Special Education (CSE), thereby entitling a student to receive transportation up to 50 miles from his or her school district of residence. In order to understand the decision's impact, a review of how Education Law § 4402(4)(d) has previously been interpreted is necessary.

Transportation pursuant to Education Law §4402(4)(d) is not required under a variety of circumstances. First, and most obviously, the fifty mile limit in Education Law §4402(4)(d) is not mandated for a student who has not been classified as a student with a disability by the CSE. See Appeal of Jane G., 38 Ed. Dept. Rep. 1 (1998) (Despite ADHD diagnosis, student ineligible for Section 4402(4)(d) transportation where CSE had not met to determine if student was eligible for special education). Second, students who have been *declassified* by the CSE are also ineligible for transportation pursuant to Education Law § 4402(4)(d). See Appeal of a Student with a Disability, 46 Ed. Dept. Rep. 102 (2006). Third, Decisions of the SRO make it clear that transportation beyond the Education Law § 3635 statutory limit may be denied if the student "does not attend the private school for the purpose of receiving special education services similar to those recommended by the CSE." See Application of a Child with a Disability, Appeal No. 07-082. Fourth, where transportation beyond the statutory limit was previously provided by mistake, a school district need may discontinue the transportation. Application of a Student with a Disability, 33 Ed. Dept. Rep. 712 (1994).

The most difficult task is to determine whether or not a child is attending a nonpublic school in order to receive special education services similar to those in the student's IEP. How dissimilar must the parent-selected program be

¹ This is an update of an article originally published in the Long Island Education Review, Fall 2011, Volume 10 Issue 2, and does not address transportation of students parentally placed in charter schools or in public school districts other than the students' district of residence.

² Ms. Fine is a Senior Counsel at Harris Beach, PLLC practicing from the firm's Uniondale, New York office. Ms. Fine's practice focuses on special education and special education litigation matters. ³ Education Law § 4402(4)(d) requires boards of education to provide transportation up to 50 miles for students with disabilities if the child attends the nonpublic school in order to receive "services or programs similar to special education programs recommended for such child by the local committee on special education.

⁴ This article does not serve as a substitute for legal advice. Specific legal counsel on these issues should be addressed to your school attorney whenever they arise.

⁵ Parents must generally request transportation by April 1 of the preceding school year for their children to be eligible for transportation to a nonpublic school for transportation authorized pursuant to Education Law § 3635.

before a school district may deny a request for transportation to a nonpublic school that is up to 50 miles away?⁶ The following decisions demonstrate the need to carefully compare the programs and services recommended for the student and those actually provided at the nonpublic school.

In Application of a Child with a Disability, Appeal No. 99-002, the SRO determined that transportation to a Montessori school that provided no specially designed instruction to an orthopedically impaired student was not required "because this child was not attending [the private school] for the purpose of receiving the special services or programs recommended by the CSE." Accordingly, reimbursement for transportation was not warranted. In *Application of a Child with a Disability*, Appeal No. 06-069, the SRO found that a general education college preparatory school with small class sizes and a tutoring program was not similar to the resource room program recommended in the student's IEP, and again, transportation was not required.

Two other proceedings highlight how the SRO analyzes this issue. Both involved students unilaterally placed at the Sappo School (Sappo), a private school that has not been approved by the Commissioner of Education as a school with which districts may contract to instruct students with disabilities. In Application of a Child with a Disability, Appeal No. 07-073, even though the SRO determined that the student's school district offered the child a FAPE, the SRO found that the Sappo program was similar enough to require that the student be provided transportation. The student's IEP recommended a general education program, with the support of consultant teacher services for about half the school day in an integrated setting and for one period daily in a non-integrated setting, plus resource room services, a shared aide, individual hearing services, and individual occupational therapy, together with program modifications and accommodations, testing accommodations, and assistive technology. The SRO found that Sappo provided the student with phonologically-based reading programs, resource room, occupational therapy and accommodations. In addition, the student attended classes with between five to seven students, "mitigating the need for a consultant teacher in reading language arts and a shared aide." Appeal No. 07-073, p. 15.

On the other hand, in *Application of a Child with a Disability*, Appeal No. 07-082, the SRO determined that Sappo's program was not similar to that offered by the student's IEP, and accordingly, transportation by the student's school district of residence was not required. The CSE had recommended placement in a 15:1 special class for all core subjects, together with speech language

therapy and specialized reading instruction. Sappo provided the student with a phonologically based reading program, counseling, and a small student to teacher ratio, as had been recommended by the CSE. However, Sappo's classes were comprised of special education and nonspecial education students and were taught by general education teachers, the student had access to a special education teacher only once per month, and was not provided speechlanguage therapy. The SRO relied heavily upon the distinction between the special class program recommended by the CSE and the instruction by general education teachers in an inclusive setting provided by Sappo, together with Sappo's failure to provide speechlanguage therapy. These services were deemed critical to the student's IEP and thus, when not provided by Sappo, the placement was deemed dissimilar.7

Recent change in analysis of Education Law § 4402(4)(d) transportation issues

How the Commissioner reviews these issues when special education services are provided not by the nonpublic school, but instead by a public school district pursuant to Education Law § 3602-c, has changed. Before the statute was amended in 2006, the student's school district of residence was responsible for developing an education plan and providing the services at the nonpublic school or another location. In those circumstances, the Commissioner found that when it was the district of residence, and not the nonpublic school, that was providing all special education programs and services to the student, transportation beyond the 15 mile limit was not required. *Application of a Student with a Disability*, 32 Ed. Dept. Rep. 712 (1994); *Application of a Student with a Disability*, 32 Ed. Dept. Rep. 467 (1993).

The Commissioner applied this same principle to questions under the present version of Education Law §3602c, where the CSE of the school district in which the nonpublic school is located (school district of location) formulates the student's individualized education service plan (IESP), but the school district of residence ultimately pays for the services. In *Appeal of Students with Disabilities*, 51 Ed. Dept. Rep. ____ (2012) (Dec. 16,341), two students attended Hope Hall, a

⁶ Comparison of the CSE's recommended program to the nonpublic school's program for the purpose of determining whether transportation must be provided is a completely separate from analysis of the appropriateness of either the IEP or the parent's unilateral placement of the student.

⁷ It should be noted that the Commissioner will only engage in the analysis where the school district of residence disputes that the nonpublic school offers a program similar to that recommended in the IEP. In *Appeal of a Student with a Disability*, 48 Ed. Dept. Rep. 223 (2008), the school district only defended its decision to deny transportation based upon the distance between the student's home and the nonpublic school. Therefore, the Commissioner did not examine whether the Kildonan School, a school not approved by the Commissioner of Education as a school with which districts may contract to instruct students with disabilities, offered a program similar to that recommended by the school district. Instead, the Commissioner determined that transportation was required. The Commissioner ruled that for purposes of Education Law §§ 3635 and 4402(4)(d), distance between home and school must be measured by shortest route, not safest or most practicable route.

nonpublic school registered as a general education school and which did not provide any special education programs or services. Rather, special education services were provided by Gates-Chili school district, the school district in which Hope Hall was located. The Commissioner reasoned that "the placement cannot be considered a school which offers a program similar to that recommended in the child's IEP for purposes of transportation" pursuant to Education Law §4402(4)(d) since the school provided no special education programming. However, in a proceeding pursuant to Article 78, the Supreme Court, Albany County, reversed this decision and remanded it to the Commissioner for further proceedings as follows:

[T]he Court finds that the Commissioner's determination lacks a rational basis because Hope Hall unquestionably provides petitioner's children with special education services through an arrangement with the Gates-Chili Central School District. ... The matter must, therefore be remitted to the Commissioner for a determination as to whether the programs offered by Gates-Chili at Hope Hall are similar to the special education programs recommended for the children by the School District's CSE within the meaning of Education Law § 4402(4)(d). *Matter of Lombardo v. King*, (Albany Sup. 2013), *Index No. 4185-12*, unpub.

Accordingly, even though the student's school district of residence is financially responsible for special education services provided by the school district of location pursuant to Education Law § 3602-c, it could still be required to provide transportation.

On remand, the Commissioner conducted a detailed review of the IEPs of both students in comparison to the programs and services provided pursuant to the students' IESPs developed by the Gates-Chili school district at Hope Hall. Appeal of Students with Disabilities, 52 Ed. Dept. Rep. (2013) (Decision No. 16,490). With regard to the first student, the Commissioner noted that the IESP failed to provide resource room services, which was part of the student's IEP, and recommended group counseling, rather than the individual counseling called for in the IEP. Finally, the student's IEP called for placement in a 12:1+1 special class for 3 hours daily. Although Hope Hall educates its students in classes limited to 12 students. there was no evidence that these were special education classes. The Commissioner noted that there was no evidence by which to determine if the "content, methodology" or delivery of instruction at Hope Hall was adapted to meet the unique needs of the student, or that Hope Hall provided any of the program modifications, accommodations, supplementary aids and services or testing accommodations recommended in the IEP."

With regard to the second student, the Commissioner noted that the IESP recommended that resource room services be provided 3 times weekly for 40 minute sessions, rather than the 5 times weekly for 44 minute sessions recommended in the student's IEP. The IEP recommended that the student be placed in a 12:1+1 special class for English, math, science and social studies. The Commissioner noted that the record did not reveal if the classes were staffed by special education teachers or whether the student received specially designed instruction in those classes. The record contained no evidence of the specific services either student received at Hope Hall. The Commissioner concluded that:

> Based on the record before me, I cannot conclude that the services provided to the students by Hope Hall are similar to those recommended by respondent's CSE or by the CSE of Gates-Chili. Accordingly, the placement cannot be considered a school which offers a program similar to that recommended in the students' IEPs for purposes of transportation as contemplated by Education Law §4402(4)(d)...

Thus, the Commissioner followed the directive of the Supreme Court by first determining that the special education services provided by Gates-Chili were not similar to those found in the students' IEPs and additionally noted that the evidence did not establish that Hope Hall provided the special class setting delineated in either student's IEP. The Commissioner relied on the differences between the IEPs and IESPs of each student and the special class settings recommended in their IEPs vis-à-vis the general education setting at Hope Hall.

Conclusion

School districts must be familiar with the transportation limits and the restrictions found in Education Law §§ 3635 and 4402(4)(d) as they make decisions affecting student placement and provision of services. Transportation costs remain a significant burden, particularly under the tax cap, but transportation of a classified student to a parentally selected school cannot be denied on that factor alone. Fundamental to the decision about whether transportation must be provided up to a distance of 50 miles is the similarity of services provided at nonpublic school schools selected by parents to the services recommended in the IEP. When making this comparison, school districts must examine both the services provided by the nonpublic school and any services offered and provided by the school district of location in an IESP. The basic rules explained here will help guide these decisions. School districts should consult their school attorneys with regard to specific situations.

Ms. Fine is a Senior Counsel at Harris Beach, PLLC practicing from the firm's Uniondale, New York office. Ms. Fine's practice focuses on special education and special education litigation matters. She can be reached at sfine@harrisbeach.com or (516) 880-8377. Dear Colleague:

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