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CONTENTS

About This Issue 2

WERA DISTINGUISHED PAPER

Innovations in Improving Mathematics Instruction: One School’s Story of Implementing Job-Embedded School-wide Professional Development 3
Allison Hintz, Elham Kazemi, Jessica Calabrese, Teresa Lind, Becca Lewis, Lynn Simpson, Drew Crandall

EARLY LEARNING ISSUES

Invest Early So Every Child Can Learn: Seattle’s Experience Tim Burgess 8

The Relationship Between Prekindergarten Experience and Kindergarten Readiness 10
Nancy K. Katims and N. Lynn Caulkins

P-3 in Action Across Washington: Leadership from Community, School, & District Administrators ... 19
Kristie Kauerz, Molly Branson Thayer, and Katie Kuhl

ENGLISH LANGUAGE LEARNER ISSUES

Performance of Former English Language Learners on Washington High-Stakes Assessments as Measured through the Washington Achievement Index 29
Andrew J. Parr and Greg Lobdell

How to Measure English Learners’ Development More Accurately Conor Williams. 38

LITERACY ISSUES

What Does the Research Say About Teaching Students to Think Like Scientists and Historians: Developing Content-Area Literacy Skills Aligned to the Common Core 42
Nancy E. Marchand-Martella, Ronald C. Martella, Amedee M. Martella, Charalambos Cleanthous

An Evaluation of the SRA FLEX Literacy Program: A Pre-Publication Version Shows Promise 50
Shannon Flaum-Horvath, Nancy E. Marchand-Martella, Ronald C. Martella, Charalambos Cleanthous

Improving Middle School Reading Comprehension 57
Gregory J. Benner, Nancy Marchand-Martella, Ronald C. Martella, and Charalambos C. Cleanthous

Highly Capable for All: A Study of the Implementation of Expanded Highly Capable Services in Washington State Stephen B. Martin and Michael A. Power 60

How Children Succeed: Grit, Curiosity and the Hidden Power of Character, by Paul Tough 64
Vera Risdon

Top 14 List: Recommended Summer Reading Andrea Meld 65

About This Issue

This issue of The WERA Educational Journal (WEJ) contains papers on several themes of interest to Washington educators. You will notice that most of the articles involve co-authors from different organizations. This shows the power of partnerships involving different perspectives and areas of expertise.

The issue starts with a reprint of an article that received the WERA Distinguished Paper award. The paper about the remarkable turn-around of one of the lowest performing schools in the state was prepared by a team of University of Washington and Lakeridge Elementary School (Renton) staff. The award was announced at the December 2014 conference.

Early learning has become a new focus of WERA the past three years, and three articles provide an interesting cross section of perspectives. Seattle City Council President Tim Burgess spoke at the March P-3 Symposium, and his remarks about Seattle's experience to fund pre-kindergarten education start this section. In the second article in the early learning series, staff from the Edmonds School District discuss their research about the relationship between pre-kindergarten experience and kindergarten readiness. Finally, short summaries of action research by practitioners enrolled at a new University of Washington program for P-3 leadership are provided.

Educating English language learners (ELLs) has always been a challenge, and two articles relate to this population. Research by Andrew Parr and Greg Lobdell uses state assessment data to examine how students who exit ELL status perform compared to other groups. The second article is a reprint of a blog by Conor Williams related to the challenges of measuring ELL progress and suggests possible solutions.

In the last section, professors from Eastern Washington University and others provide a series of papers on literacy issues. The first paper looks at how Common Core literacy standards can relate to social studies and science. The second paper examines the effects of a pre-publication version of a literacy program that was field tested, and teacher satisfaction with the program. The final paper in the section looks at the effectiveness of a middle school reading intervention.

The last paper is a short analysis of how districts are starting to implement new state requirements related to highly capable programs. WERA has a new special interest group (SIG) for HiCap issues, and the Fall 2015 issue of this journal will feature a number of articles related to this population (see page 67 for more information about how to submit papers for the journal). Vera Risdon reviews Paul Tough's book *How Children Succeed* which gives new insights about what it means to be "smart". Finally, Andrea Meld completes the issue by providing a short summary of books to put on your summer reading list.

As the new Editor of the WEJ, I want to thank Karen Banks for her work as Editor of the past five issues. She stepped in after Peter Hendrickson started the journal in 2010 and was Editor for five issues. I'm happy Karen has agreed to be a co-editor for the next few issues. As WERA adds membership and expand areas of specific focus, such as early learning and HiCap students and services, and as WERA promotes stronger linkages between early learning, K-12, and high education communities, the WEJ will expand the range of articles it publishes. There will be more opportunities to publish articles, be peer reviewers, and review books. Since the job of being the editor of the WEJ is too big for just one person, we need to add a co-editor with at least a 2-year commitment. I encourage you to contact me if you are interested in being involved in any of these ways.

Pete Bylsma, Editor

Innovations in Improving Mathematics Instruction: One School's Story of Implementing Job-Embedded School-wide Professional Development¹

Allison Hintz, University of Washington Bothell
Elham Kazemi, University of Washington

Jessica Calabrese, Teresa Lind, Becca Lewis, Lynn Simpson, Drew Crandall, Lakeridge Elementary School

This article describes a job-embedded school-wide professional development model currently being implemented at a high-needs elementary school in Washington State. Through the voices of various participants, including the building principal, math coaches, teachers, and university researchers/facilitators, we tell the story of our collaboration and our collective learning about mathematics teaching. Main features of the model are presented, including the development of a school-wide vision through principles and practices of high quality mathematics teaching and opportunities for collective professional learning, through “math labs” and “participatory coaching.” We focus on two salient themes: studying instructional goals and making our practice public. The article concludes with a brief description of the promising results we are finding, including a school culture that is focused on empowering teacher and student learning as well as significant and steady gains on student mathematics assessments.

How do we build strong school-wide professional communities, especially in high-poverty schools where there is enormous pressure to better serve students and improve their educational outcomes? We know that teachers and students benefit from strong school cultures that de-privatize practice and bring principals, coaches, and teams of teachers together to build a collective vision of high quality instruction (Bryk, Sebring, Allensworth, Luppescu, & Easton, 2010). The challenges in a high-poverty, consistently underperforming school seem daunting. Our story shows how a collaboration among researchers, teachers, and leaders can harness the power of teacher community and improve the rigor and quality of students' classroom experiences in mathematics.

The Lakeridge Story

In 2011 Lakeridge Elementary was identified as a bottom 5% school among all state Title I schools with persistently low scores on state summative assessments and was mandated to apply for a *School Improvement Grant*. The staff agreed to a transformation model and a rigorous, research-based, job-embedded professional development model. The plan to transform teaching and learning focused in large part on developing a school-wide vision of high quality mathematics instruction. Our collaboration began to realize this vision.

The school-wide professional development model we designed has three important components:

1. A principled vision of high quality or ambitious teaching with specific tools and practices that all teachers in the school community could begin to use with their students and that promote teacher and student learning.
2. Job-embedded math labs that allow grade-level teams, the principal, and school coaches to learn to use instructional practices and make practice public.
3. Leadership that supports and presses for teacher collaboration and experimentation.

This model is informed by the work of a network of university teacher educators at UCLA, University of Michigan, and University of Washington (Lampert et al., in press). We will describe the professional development model underway at Lakeridge and share our various perspectives, telling the story of how we are collectively deepening our understanding of teaching and learning mathematics.

¹ This article was originally published in the Spring/Summer 2013 issue of Washington State Kappan (http://www.pdkwa.org/downloads/PDK-WAStateKappan_2013_Summer.pdf). It received the WERA Distinguished Paper Award in 2014 and was presented at the AERA conference in Chicago in April 2015. This article is reprinted with permission and has been altered slightly to fit into the available space.

Developing a School-wide Vision through Principles and Practices

Our model is centered on the development of a school-wide principled view of ambitious teaching that is aligned with structured opportunities for learners to participate in meaningful disciplinary learning as articulated in the Common Core State Standards (CCSS). The vision of mathematical proficiency in the CCSS entails structuring opportunities for learners to reason about key subject matter ideas, participate in discourses of the discipline, solve authentic problems, and develop identities as competent learners. Ambitious teaching requires practices that allow teachers to build students' proficiency by engaging deeply with students' mathematical thinking, supporting meaningful participation and learning for the broad range of students in any classroom, and disrupting longstanding assumptions about who can do mathematics (Kazemi, Lampert, & Franke, 2009).

Our work rests on shared *principles for teaching*. For example, we believe children are sense-makers and there is logic in their ideas. Ambitious instruction requires clear instructional goals. Our work is also guided by *principles for growing in teaching*. For example, we believe teaching is intellectual work that requires specialized knowledge. Also, teaching is something that can be learned through repeated opportunities to practice, and there is value in making your practice public.

Our model focuses on a well-developed, research-based suite of *practices* in mathematics. Specifically, all teachers learn a core set of "instructional activities" (Lampert, Beasley, Ghouseini, Kazemi, & Franke, 2010) and a set of discourse moves (Chapin, O'Connor, & Anderson, 2009). The activities are central to the work of teaching and can be used routinely across grade levels, they have the potential to improve student achievement, and they enable us to pay attention to student thinking and engage in ambitious teaching practices in ways that support our daily work as teachers.

As we reflect on the role of principles, two salient themes emerge: the significance of clear instructional goals and the impact of making our practice public. Ms. Simpson, intermediate teacher, describes studying instructional goals, "This past year my thinking has shifted 180 degrees from thinking about the activities dictated by the curriculum to the learning objectives. I began to evaluate activities and whether or not they get us to our instructional goals." The building mathematics coach, Ms. Lind, adds, "We start with the big ideas of the unit. Everything we do must serve the big idea and the students or it is out." Mr. Crandall, primary teacher, says, "We think carefully about choosing our lessons, instead of having them chosen for us." The principal, Ms. Calabrese, adds, "The conversations now are about what and how to teach and it has to match our larger purpose, our goal."

The impact of making practice public is also significant. Ms. Simpson laughs, "It's nerve-wracking at first. Most of us would rather teach a room of children than a small group of peers. We were being asked to think and teach in ways we hadn't done before and we were doing it in front of each other! It works to our advantage because no one can be considered an expert; we know we are all learners." Mr. Crandall adds, "It has changed the culture of our school and how teachers view themselves. As opposed to just leading my class, it's about being an intellectual member of a community. Now it's a rare day that someone is not in my room. It has changed everything."

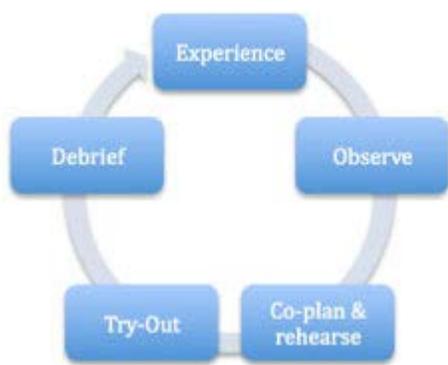
Coaching and Support

To deepen our principled vision and learn how to take up and innovate with the practices, we engage in collective professional learning through "math labs" and "participatory coaching."

Math Labs

Every month teachers are released from their classes in grade-level bands (K-1, 2-3, 4-5) to participate in a Math Lab. During each lab, we engage in a cycle of co-planning, co-teaching, and reflection. A typical lab begins with observing an instructional activity modeled by a coach or university facilitator in a classroom. Next, we co-plan and rehearse the activity with colleagues and facilitator support and visit a classroom again to retry the activity. After that, we reflect on the experience, often watching video captured during our lessons, and finally engage in collective planning for next steps in teachers' own classrooms.

Figure 1: The Math Lab Cycle



Our goals for labs are to increase teacher capacity in both instructional practices and content knowledge; provide opportunities for teachers to try, practice, and reflect on specific instructional activities; and provide coaching and feedback. “We are trying to learn theory, change practice, adjust, all while teaching publicly with our colleagues. We do it all in one day! You can say, ‘I learned it, I practiced it, I tried it, and I adjusted it.’ By the next day you’re trying it with your students,” describes Ms. Calabrese as she sums up the power of the cycle.

Teachers place an emphasis on the co-planning and debriefing portion of the cycle. Mr. Crandall explains, “I especially appreciate when our coach teaches first. It is powerful hearing

her talk about what she plans to do. Then, we watch her teach and we come back to hear her reflect on what she thought about during the lesson. That conversation changes how we teach the lesson the next day in our classrooms.”

Participatory Coaching

In between labs, the coaches and university facilitators visit classrooms weekly to understand the meaning teachers are making of their lab experiences and to inform the planning of future labs. Through “participatory coaching,” the instructional team supports teachers in enacting the practices in their classroom by modeling or co-teaching.

Especially helpful is in-the-moment support, specifically “teacher time outs.” It is common during coaching for a teacher to pause, tell students s/he needs help, and ask others to think aloud about what should happen next. You may want help understanding a mathematical idea, how to represent a student’s strategy, or where to go next in order to work toward your mathematical goal. You may want to revise something you just did and want help thinking about how to do it differently. Ms. Lewis, a math coach, notices, “This highlights the decisions teachers face - things that typically go un-discussed because we rarely have opportunities for in-the-moment discussion with colleagues.” Mr. Crandall adds, “It is a risk to show your class you’re not a perfect instructor. It’s important to show students that taking risks pays off and we are all learners all the time.” Ms. Simpson elaborates, “We are doing what we ask students to do. To know it’s okay to make mistakes in front of others. This puts us all in the mind-set of asking for help.”

Reflecting on coaching and support, Ms. Simpson says, “The person I want to be for my students is the person my coaches are for me. From helping me plan and see the road I’m supposed to be on, to talking me off the cliff when I’m ready to give up, they help me believe I can do what I’m doing. They also show me how to do it. They make me feel competent and smart.” Mr. Crandall adds, “It is kind of sneaky because even the work coaches do, they make me feel like I did it! I can’t put my finger on all the ways coaching profoundly supports my teaching.” Ms. Lind, our coach, humbly listens and replies saying,

It is amazing to think about how far we’ve come in a short time. What has happened here in the last year, the way we’ve changed classroom practice, is truly remarkable. All of the interlinked pieces, leadership, pressure with support, math labs, the expertise of the university facilitators, making practice public which requires humility and trust... without any of these pieces, this wouldn’t be happening.

She affirms there was a steep learning curve for her as well, and she thinks carefully as a coach about how to balance being a leader and a learner at the same time.

Her point is well taken. All of us, whatever our role, from teacher, student, coach, university facilitators and principal, find ourselves being leaders and learners who must be vulnerable, deeply challenged, and learning ambitiously. Ms. Calabrese, who participates in all of the labs alongside her teachers, laughs, “Everyone knows I

didn't get it the first time! People see me persevere to get things. I'm empathetic to teachers and students who are also on this trajectory." Her commitment to the labs demonstrates how much she values our learning together. She chose this time of learning over other priorities and her leadership that supports and presses teachers to take up new practices cannot be underscored enough.

What We Are Finding

The model appears to be working with promising results. As many of our own perspectives shared throughout this article indicate, the culture of the school has changed. Assessments of student learning show strong growth, and classroom visits show a high level of engagement and identification with doing mathematics. End of Year One summative tests showed a 15% to 25% jump in scores in 4th and 5th grade. According to Office of Superintendent of Public Instruction (OSPI) math benchmark tests, students at Lakeridge are making significant and steady gains as they are approaching, reaching, or exceeding the district average in all grade levels. Our own project-made assessments also show significant gains in student accuracy and strategy use across all grades.



Discussion

Our work together at Lakeridge centers on improving instruction through a school-embedded professional development model. Our model includes key components of effective professional development, such as a focus on children's mathematical thinking, protocols for the use of cognitively demanding tasks, which we call instructional activities, and the discourse needed to support learning with and from those tasks (Ball & Cohen, 1999; Stein, Engle, Smith, & Hughes, 2008). Our model is helping address significant issues in improving teaching and learning; for example, teaching has become a public practice as we cultivate professional learning at the school level and situate teachers' instructional practices within the institutional setting of the schools in which they work (Cobb, McClain, de Silva Lamberg, & Dean, 2003; Little, 1999; Kazemi, 2008). With specific practices for collective professional development and a shared principled view of ambitious teaching, we are seeing meaningful shifts in teachers' practices and students' learning. Together we are developing our identities as competent learners as we engage with students' mathematical thinking and view students from an assets-based perspective (Delpit, 2012). We do not believe that any one of us has all the answers. We believe that we have to build more detailed visions of ambitious teaching through our work together.

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Invest Early So Every Child Can Learn: Seattle's Experience¹

P-3 Symposium Address by Tim Burgess, Seattle City Council President

Every child deserves a strong and fair start in school and every child can learn. These are core values we believe regardless of where a child lives, their economic status, or the color of their skin.

A few years ago, my colleagues and I set out on a journey to see how we could make these values a reality for our kids. We wanted to know what it would take and where we should invest our limited resources. Very early on we realized that changing life outcomes would mean investing very early. So, in 2011 we asked Seattle voters to renew the Families & Education Tax Levy so we could add more elementary school programs to our existing middle and high school programs. And to do that, we asked the voters to double the size of this special property tax.

Now, 2011 was not far removed from the Great Recession of 2008-2009. Some hints of economic recovery were emerging, but it was still a tough time for many. With strong political leadership from then-Mayor McGinn, myself, and community education advocates, we made the case to Seattle voters and they responded. Did they ever! Sixty-four percent voted "yes" to raise their property taxes to fund earlier investment in our kids.

That experience motivated us to look even deeper, to study the academic literature on what could change a child's life by giving them a strong and fair start. The answer we found was providing at least one year of high-quality preschool.

So, we started on a new journey to educate ourselves and build a coalition of people and organizations that could help us create a high-quality preschool program for Seattle. We brought national experts to testify before the City Council. We distributed journal articles and passed out books on early learning. We travelled to the east coast—to Boston, Jersey City, and Washington, D. C.—and met with school principals and teachers. We visited classrooms. We met with officials from the White House and federal departments.

That study mission involved about 40 individuals representing preschool providers, unions, Seattle's public schools, the Mayor and County Executive. We wanted to see first-hand preschool programs that were making a difference for their kids.

From that experience, we started to develop the Seattle Preschool Program. Modeled primarily after Boston's experience, we focused on the factors that research showed would actually move the needle in preparing kids for kindergarten and beyond. Those factors were:

- At least six hours a day, Monday through Friday, of play-based learning;
- A teacher-student ratio of 1:10;
- Lead teachers with BA degrees and early learning certification, paid on par with public school teachers;
- Continual in-classroom coaching and mentoring of teachers; and
- An evidence-based curriculum that would contribute to strong child-led instruction and social-emotional development.

We came away from our study mission and our consultation with the experts with a strong belief that we should proceed slowly; that a focus on quality was more important than quantity. We developed a ballot measure to launch the initial, four-year phase-in of the Seattle Preschool Program and placed it before voters last November.

¹ These remarks were made during lunch at the 2015 P-3 Symposium co-sponsored by WERA, the Washington Office of Superintendent of Public Instruction, and the Washington Department of Early Learning. The Symposium was held Hilton Seattle Airport Hotel & Conference Center on March 3, 2015, and City Council President Burgess was invited to speak about the city's recent efforts to create high-quality preschool education.

Unfortunately, a competing ballot measure from a citizen initiative was also advanced and Seattle voters were presented with a complicated choice—should either of the measures—Proposition 1A or Proposition 1B—be enacted into law and, if so, which one.

Voters answered the first question “yes” by a 68% margin and Proposition 1B, the city government’s preferred measure, was approved by 69% of voters. The Seattle Preschool Program was on its way to reality. Under our plan, families earning up to 300% of the Federal Poverty Level will earn free tuition and families earning more will pay on a sliding scale; the more you earn the more you will pay.

We will open our first classrooms this September. Why is this important to my city? Because nearly a quarter of all school children in Seattle Public Schools can’t read at grade level in the Third Grade. This statistic is significantly worse for our African American, Hispanic, Native American and immigrant children. Not reading at grade level in the third grade is a very strong predictor that a child won’t graduate from high school.

What the evidence shows is that kids who attend high-quality preschool, compared to their peers who do not:

- Enter kindergarten better able to learn and with stronger “executive function” skills, like knowing how to perform tasks, play well with other kids, and follow simple directions;
- Have higher graduation rates from high school and lower rates of teen pregnancy;
- Have higher college entrance and graduation rates; and
- Earn more as adults and have better health.

Who wouldn’t want these outcomes for their kids? And if that’s not enough, national research shows that every dollar invested in quality preschool returns five to seven dollars in reduced costs and economic opportunity.

How did we achieve these great results? Here are four key factors. First, we set specific goals. We did that with the 2011 Families & Education—double the tax to reach back to elementary school with our academic enrichment efforts. And, we set specific goals to establish what will become Seattle’s universal, high-quality preschool for the city’s three and four year olds. **Set specific goals.**

Second, we mustered a broad coalition of individuals and organizations to support both of these efforts. Strong community advocates are an absolute must to help spread the message—labor unions, faith-based groups, education leaders, parents, PTSA’s, and the media. **Build a coalition of advocates.**

Third, we pledged to follow the evidence of what works for kids and to remain steadfast in our commitment to focus on the children. The evidence is clear about what makes a difference for preparing our littlest learners; we didn’t deviate from the science. **Follow the evidence.**

Finally, strong political leadership is essential. Our Mayor and a strong majority of my colleagues on the City Council stood firm . . . business as usual wasn’t working—and hadn’t worked for decades—and we wanted to change course. **Have strong political leadership.**

That’s what we did in Seattle and it’s what you can do in your community as well . . . because our children need a strong and fair start.

The Relationship between Prekindergarten Experience and Kindergarten Readiness

Nancy K. Katims and N. Lynn Caulkins, Edmonds School District

This study examined three measures of kindergarten readiness for a cohort of 790 students of which about 77% had some prekindergarten experience while 23% had no prekindergarten experience. Gaps between the readiness skills of children with and those of children without prekindergarten experience were particularly strong for students from low income homes. Other factors considered were: (1) a higher percentage of low income students were in the group of students with no prekindergarten experience, and (2) students with no prekindergarten experience had lower attendance in kindergarten than students with prekindergarten experience. Implications for parent education are discussed.

Introduction

The long-term effects of quality prekindergarten experience on not only the academic achievements of students but also on participants' life outcomes have been well documented for decades. Perhaps the best known and longest running study of such outcomes is the HighScope Perry Preschool Study (Schweinhart et al., 2005) which has followed participants through the age of 40. This study has found that students from low income homes who attended quality prekindergarten were more likely to hold a job, commit fewer crimes, and graduate from high school than adults in the control group who did not have prekindergarten experience. More recent research has also documented the positive effects of high quality prekindergarten experience on improving academic outcomes (Frede et al., 2009; Hustedt et al., 2010).

The purpose of this study was to explore the relationship between prekindergarten (PreK) experience and various kindergarten readiness measures without controlling for either the quality or the quantity of a student's PreK experience. The study was conducted in a large public school district in western Washington State. Because school districts often do not have accurate information about the quality of various PreK programs in their area, and because it is difficult for districts to document the length of time any student might have received some PreK experience of various types, the study looked at PreK experience in a very simple framework –whether students had some or no PreK experience.

Readers must keep in mind various cautions about the data:

- The school district had information about students' PreK experience for only about half the students in the study cohort.
- The district did not know the quality of the various PreK programs that the students attended.
- The district did not know the length of time students attended PreK.
- Relationships reported are correlational rather than cause/effect. Therefore patterns seen between prekindergarten experience and various outcome measures simply indicate that the variables are occurring together, but we do not know if one has caused another since we have not conducted a controlled study. For example, when comparing students who either attended a program or did not attend a program, differences might be attributable to differences in parent involvement rather than in the program itself.

Sample

This study focused on students in Grade 1 in the 2014-15 school year (i.e., students in the graduating class of 2026). Information about whether or not students attended any prekindergarten experience was available for a total of 790 students (about 48% of Grade 1). Of the 790 students, 608 (77%) reported having had some PreK experience and 182 (23%) indicated they had no PreK experience. The demographics of these groups are shown in Table 1.

Table 1: Demographics for Students with Some and with No PreK Experience

<i>Demographic</i>	<i>No PreK (N = 182)</i>	<i>Some PreK (N = 608)</i>
Female	49%	47%
Male	51%	53%
American Ind./Alaskan Native	1%	1%
Asian	7%	10%
Black/African American	8%	7%
Hispanic	29%	14%
White	48%	55%
Native Hawaiian/Other Pac. Is.	1%	1%
Two or More Races	8%	12%
English Language Learner (ELL)	37%	21%
Special Education	4%	10%
Free/Reduced Meal (low income)	59%	28%

Based on this information, it appears that the group with no PreK experience has a higher percentage of students who are Hispanic, ELL, and low income, and a lower percentage of students who are Special Education, than those with PreK experience. An explanation for the higher percentage of students who are Special Education in PreK programs is that there are government-funded PreK programs designed specifically for students with disabilities.

Results

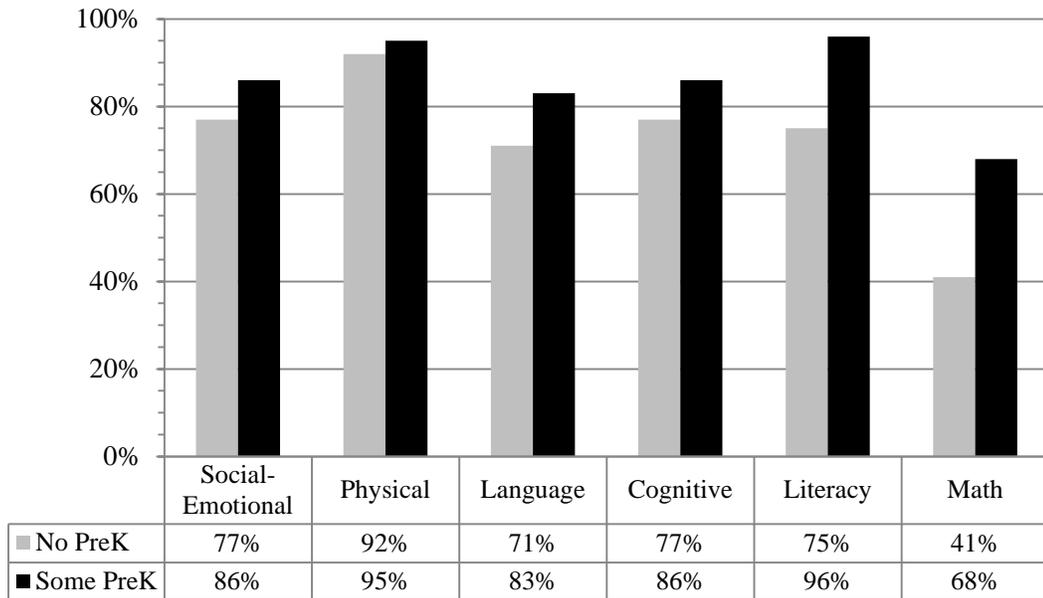
Three measures of kindergarten readiness were available for some or all of the sample:

- Data from the Teaching Strategies Gold[®] assessment given to students in 10 of the 22 elementary schools in the district – schools that implement a state program called Washington Kindergarten Inventory of Developing Skills (WaKIDS).
- Dynamic Indicators of Basic Early Literacy Skills (DIBELS) literacy screening data given to all K and 1 students in the district three times a year.
- Number of Sight Words in a kindergarten student’s vocabulary collected three times a year for all K students in the district.

Teaching Strategies Gold Assessment

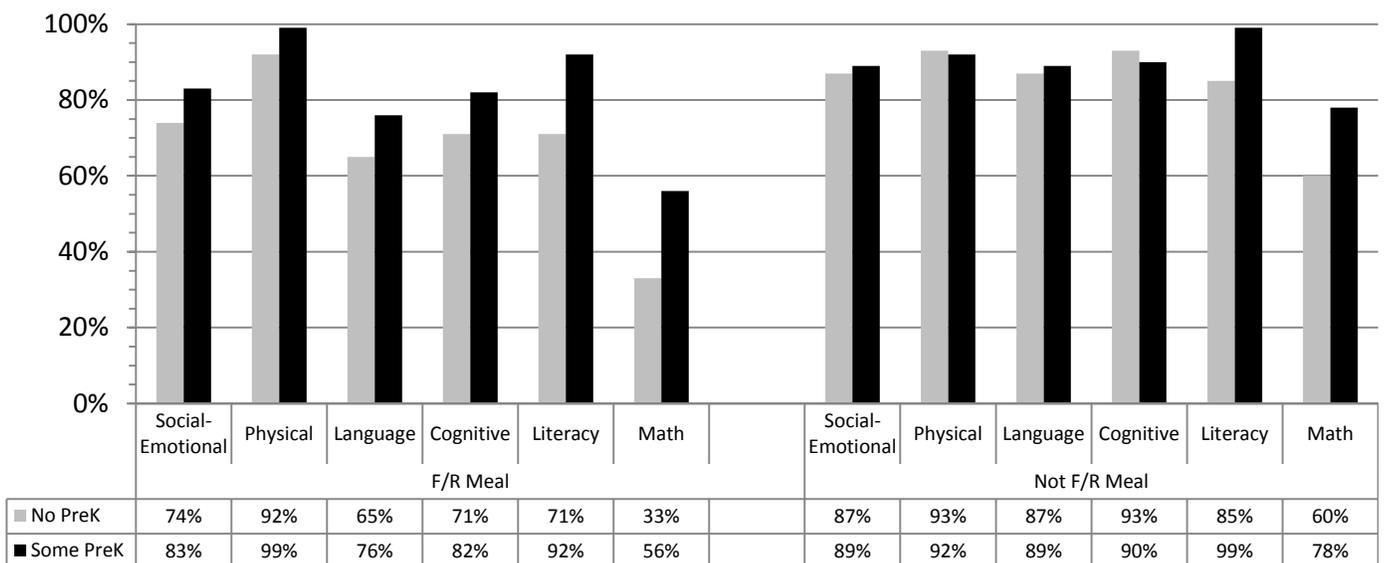
Students who attend one of the district’s 10 WaKIDS schools are given the Teaching Strategies Gold (TSG) assessment in the first two months of kindergarten, to determine the students’ level of readiness skills in six areas. Of the cohort group in this report, TSG data were available for 299 students – 200 who had some PreK experience and 99 who had no PreK experience. The percentage of students who demonstrated kindergarten readiness in each of the six tested areas is shown in Figure 1, according to whether or not they had some PreK experience.

**Figure 1: Teaching Strategies Gold
Percent of Students Demonstrating Kindergarten Readiness**



In terms of kindergarten readiness for students in the 10 WaKIDS schools, a higher percentage of students with PreK experience demonstrated kindergarten readiness skills compared to students without PreK experience, in all six areas tested. The largest differences between these two groups were in the two “academic” areas of math and literacy. The smallest difference between the two groups was in the Physical (gross and fine motor) area. These results are more enlightening when viewed in terms of whether students were from low income homes. Figure 2 shows the percent of students demonstrating kindergarten readiness in the six areas assessed by TSG according to whether they were from low income homes (as defined by being on the free or reduced meal program) as well as whether or not they had any PreK experience.

**Figure 2: Teaching Strategies Gold By Meal Status
Percent of Students Demonstrating Kindergarten Readiness**



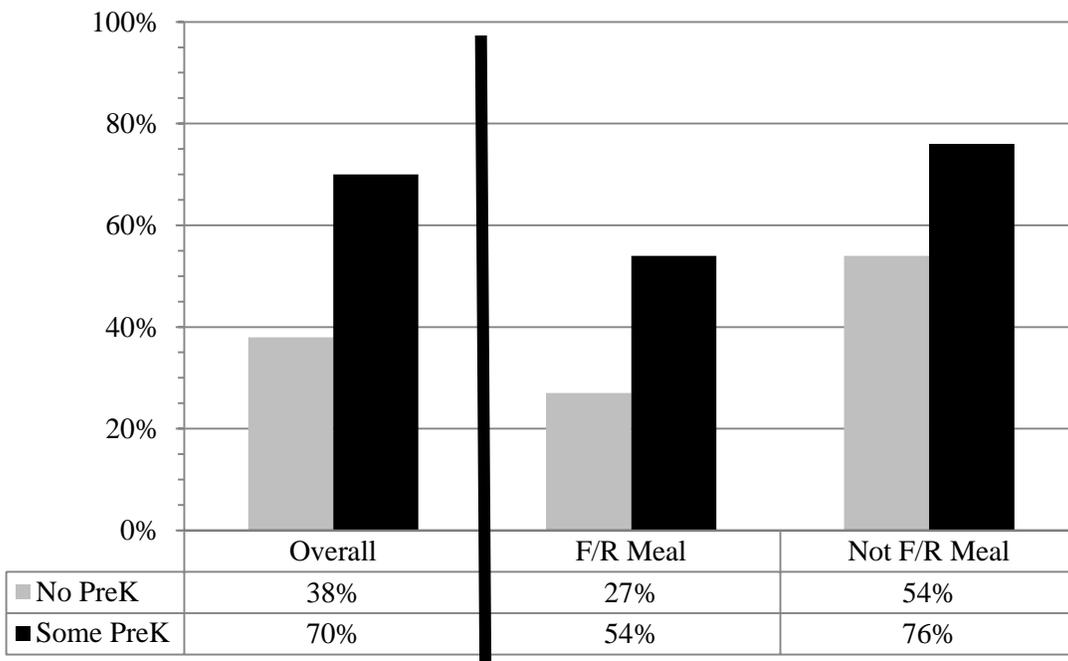
The data shown in Figure 2 add an important dimension to these results. For students from low income homes, the pattern between those with some PreK experience and those without remained similar to the pattern for the overall group. However, for students who are not from low income homes, there was very little gap between the two groups, and for two of the areas (Physical and Cognitive), a slightly higher percentage of the group with no PreK experience had readiness skills over those with some PreK experience. Even for this group, the largest difference between students with PreK experience compared to those without remained in the area of math.

Dynamic Indicators of Basic Early Literacy Skills (DIBELS)

The DIBELS assessment is a screening test of foundational literacy skills designed to identify students according to how much support they may need in order to become successful readers. Fall kindergarten DIBELS scores were available for 761 (about 96%) of the 790 Grade 1 students for whom we had PreK experience information. The Composite score provides information regarding the level of support the student needs at that point in time. Students who are ready for Core Support are ready for regular classroom instruction without additional intervention outside the regular program.

Figure 3 shows the percentages of students with and without PreK experience who were ready for Core (classroom) literacy instruction for the overall group as well as for those from low income homes (on the free/reduced meal program) compared to those not from low income homes.

**Figure 3: Fall DIBELS Composite Overall Group and By Meal Status
Percent of Students Ready for Core Support**

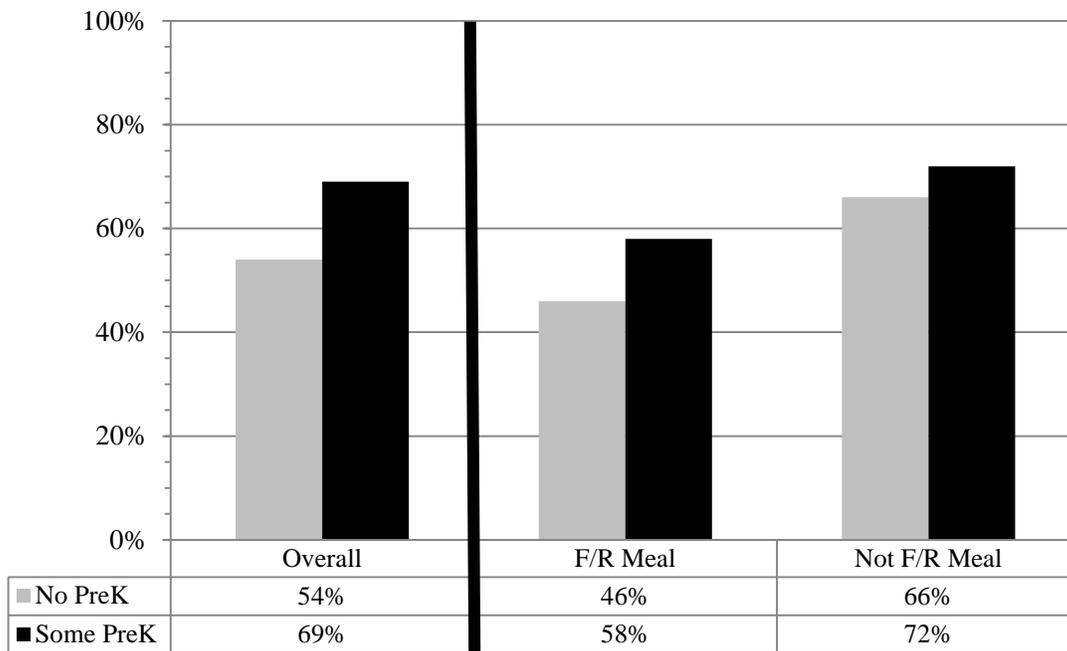


The fall DIBELS data indicate a similar pattern of results as seen in the fall TSG kindergarten readiness data – a lower percentage of students with no PreK experience were ready for regular kindergarten classroom instruction in comparison to the group with some PreK experience. And again, the gaps were larger for students from low income homes compared to students not from low income homes.

While we see that students enter kindergarten with varying levels of need that reflect differences in PreK experience as well as their socio-economic status, *to what extent do the gaps present in the fall persist throughout the kindergarten year?*

The DIBELS assessment is administered to every kindergartener again in the spring of the kindergarten year. Figure 4 shows the spring DIBELS results for the same cohort of students.

**Figure 4: Spring DIBELS Composite Overall Group and By Meal Status
Percent of Students Ready for Core Support**



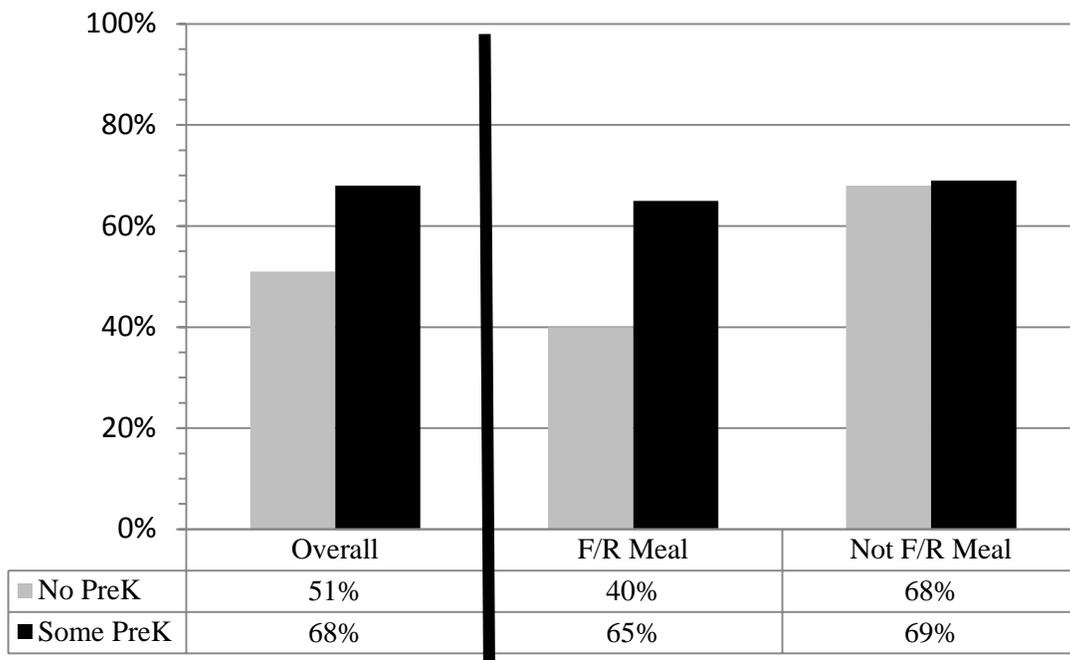
The spring results indicate that much of the difference between students with and those without PreK experience in the fall decreases to a great extent after a year in a kindergarten class. This result is evident for students both from low income homes and those not from low income homes, although the PreK gap for students from low income homes is 12 percentage points compared to a PreK gap of 4 percentage points for students not from low income homes.

Sight Words

Another measure collected districtwide for kindergarteners both fall and spring is the number of sight words that students have in their vocabulary. Sight words are words that appear very frequently in text that children are able to recognize automatically on sight. Research indicates that fluent word identification assists students in comprehending text.

Kindergarten sight word information was available for about the same number of students as the DIBELS information. Figure 5 shows the percentages of students with and without PreK experience according to their level of sight word vocabulary in the fall of kindergarten.

**Figure 5: Fall Sight Words, Overall Group and By Meal Status
Percent of Students Who Met/Exceeded Target**

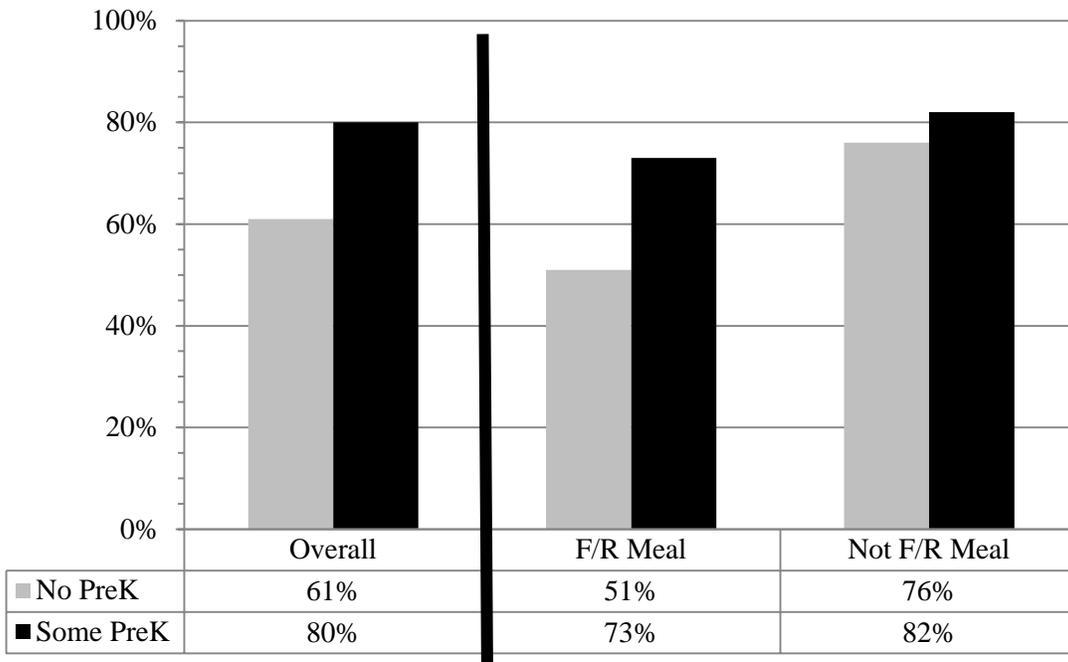


The overall fall sight word results illustrate a similar pattern of results as indicated in the other fall outcome measures – a lower percentage of students without PreK experience were at or above fall sight word expectations in comparison to the group with some PreK experience. When the results are disaggregated according to whether or not students were from low income homes, the data show that basically the entire gap found in the overall fall sight word data was attributable to students from low income homes. For students who were not from low income homes, there was no gap in fall sight word expectation between students who attended some PreK and those who did not.

While students enter kindergarten with varying levels of sight word vocabulary according to their PreK experience coupled with their socio-economic status, *to what extent do the gaps present in the fall persist throughout the kindergarten year?*

Figure 6 shows the spring sight word results for the same cohort of students. It is important to note that the spring expectation for kindergarten sight words is quite high (25 or more words) compared to the fall expectation (1 or more words).

**Figure 6: Spring Sight Words, Overall Group and By Meal Status
Percent of Students Who Met/Exceeded Target**



While the percentage of students who met the spring expectation increased for all categories compared to those who met the fall expectation, the gaps between groups did not change much and in some cases increased. Specifically, the spring results indicate that:

- All groups increased in their percentage of students meeting expectation from fall to spring.
- The gap between those with no PreK experience and those with PreK experience who met sight word expectations increased slightly from 17 percentage points in the fall to 19 percentage points in the spring.
- For students from low income homes, the gap between those with no PreK experience and those with PreK experience who met sight word expectations decreased slightly from 25 percentage points in the fall to 22 percentage points in the spring.
- For students not from low income homes, the gap between those with no PreK experience and those with PreK experience who met sight word expectations increased from a 1 percentage point difference in the fall to a 6 percentage point difference in the spring.

Discussion

Other Factors to Consider

As noted in the introduction, these data are correlational rather than cause-effect. In other words, we do not know for a fact that having attended a prekindergarten “caused” the students to have better readiness skills. There may be other factors that are also part of the constellation of characteristics of students who attend prekindergarten that may be the underlying “cause” of the students’ higher level of readiness. Or, on the other hand, there may be characteristics associated with students who did not attend prekindergarten that may “cause” them to have a lower level of readiness skills.

One factor to note is that a much higher percentage of low income students were in the non-PreK group than in the PreK group. Specifically, 59% of students with no PreK experience were on the free or reduced meal program,

compared to only 28% in the group who had some PreK experience. We do know from decades of research that students from low income homes enter school with disadvantages, perhaps attributable to fewer books and other reading material in the home, fewer opportunities for enriching experiences such as trips, visits to museums, participation in a variety of structured activities, and such. There were also more ELL students in the non-preK group which could certainly explain a difference in English language and literacy readiness skills.

Another variable to consider is parental awareness of what factors contribute to student success and parents taking action on this knowledge. At a simple level, one could argue that parents who are aware of the benefits of prekindergarten education are more likely to enroll their children in such a program. While we do not have quantitative data to measure parent involvement and awareness, one surrogate variable is attendance. Parents who understand the value of students attending school on a regular basis are more likely to ensure that their children attend school every day except in cases of illness.

With this in mind, kindergarten attendance data for the cohort of students under study are available. Table 2 shows the numbers of excused and unexcused absences during the kindergarten year for each group of students according to whether or not they attended prekindergarten, and Table 3 shows these data disaggregated by whether or not students were on the free or reduced meal program.

Table 2: Mean Number of Kindergarten Days Absent by PreK Experience

<i>Absences</i>	<i>No PreK</i>	<i>Some PreK</i>
<i>Excused</i>	9.2	8.0
<i>Unexcused</i>	1.2	0.5
<i>Total</i>	10.4	8.5

Table 3: Mean Number of Kindergarten Days Absent by PreK Experience and Income Status

<i>Absences</i>	<i>On Free/Reduced Meal</i>		<i>Not on Free/Reduced Meal</i>	
	<i>No PreK</i>	<i>Some PreK</i>	<i>No PreK</i>	<i>Some PreK</i>
<i>Excused</i>	9.5	9.1	8.8	7.6
<i>Unexcused</i>	1.5	0.9	0.7	0.4
<i>Total</i>	11.0	10.0	9.5	8.0

These results indicate that:

- Students who did not attend prekindergarten tended to have higher absenteeism in kindergarten than those who did attend PreK.
- Students from low income homes tended to have higher absenteeism in kindergarten than those who are not from low income homes.

Summary of Results

Across the three measures of kindergarten readiness, results showed that:

- Students with some PreK experience on average had higher kindergarten readiness skills than those who had no PreK experience.
- Gaps between students with some PreK experience and those with no PreK experience were much larger for students from low income homes.

- The gap between students with PreK and those without PreK on the DIBELS screening measure narrowed considerably from fall to spring of the kindergarten year.
- The gap between students with PreK and those without PreK on the Sight Word measure did not narrow from fall to spring of the kindergarten year, although all groups showed a great deal of growth. This measure assesses just one component of reading development.

Other factors to be considered in this study:

- The group with no PreK experience included a much higher percentage of ELL students as well as students from low income homes than the group with some PreK experience.
- The group with no PreK experience had higher absenteeism in kindergarten than students with some PreK experience.

We do know from decades of research that low income students who attend high quality PreK programs experience academic and lifelong benefits. The current study, which found that students with some PreK experience were more likely to enter kindergarten with essential readiness skills than those with no PreK experience, did not control for either the quality or the quantity of the students' PreK experience. Despite the lack of such controls, the pattern of results was strongly in favor of students' having some PreK experience entering kindergarten better prepared to learn grade-level expectations. And in particular, the benefits associated with having some PreK experience were far more evident for students from low income homes than for those not from low income homes.

Implications

There is currently a great deal of work under way in Washington State and nationally to improve the quality of PreK programs and to establish a level of consistency of best practices across PreK programs. While this is a laudable goal, the findings of this study suggest that perhaps our resources could be better spent focused on parent education for low income parents. At a minimum, such parent education should address helping low income parents:

- know how to interact with their preschoolers in the most effective ways;
- recognize what a quality preschool looks like;
- find quality preschools that are free or affordable for them;
- know how to best prepare their children to be successful when they start school; and
- understand the importance of ensuring their children's optimal attendance at school.

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P-3 in Action Across Washington: Leadership from Community, School, & District Administrators

Kristie Kauerz, Molly Branson Thayer, and Katie Kuhl, University of Washington

This article summarizes Action Research Projects from the 2014 cohort of the Washington P-3 Executive Leadership Institute at the University of Washington. The projects highlight strategies taken across Washington state to bring greater coherence to the P-3 continuum, improve the quality of learning opportunities provided to young children in Washington, and close achievement gaps early. The projects are presented in clustered themes: cross-sector work, professional development for teachers, data-driven improvement, engaged families, and transitions, continuity, and pathways.

Introduction

Over the past decade, the nation has increasingly focused on the continuum of learning that begins at birth and continues through 3rd grade. Washington is seen to be a leader in “P-3” (pre-natal or pre-school through 3rd grade) approaches, with multiple efforts taking root in school districts, communities, and regions across the state. P-3 approaches hold promise to close achievement gaps early because this is the period of a child’s development in which foundational knowledge, skills, and dispositions are learned in cognitive, physical, and social-emotional domains.

While children from birth to age 8 spend most of their learning time with parents, other family members, and adults who teach in early learning programs and elementary schools, research increasingly points to the important role of school administrators to create and support environments and programs that meet the needs of young learners. For P-3, “administrators” include elementary school principals and early learning program directors and site managers who supervise teachers, manage budgets and other organizational resources, and set overall priorities for change.

To build and support a cadre of administrators in the state who are well equipped to ensure Washington’s young children have a high-quality continuum of learning that begins at birth and extends through elementary school regardless of race, class, culture, or zip code, the College of Education at the University of Washington designed and launched the Washington P-3 Executive Leadership Institute in 2014. Funded by the Bill & Melinda Gates Foundation, the Institute is the first in the nation to address the growing need for administrators to be able to navigate the complexities of system change, work effectively across organizational boundaries, and make a significant difference for young students. The Institute is a year-long, credit-bearing course of study that culminates with an Action Research Project that requires participants to apply their P-3 knowledge and leadership to their home communities and school districts.

Each member of the 2014 cohort of the P-3 Executive Leadership Institute completed an Action Research Project, either individually or as part of a collaborative team. Their projects were designed after strategic analyses of gaps in their current practices and were informed by a rich curriculum based on the *Framework for Planning, Implementing, and Evaluating PreK-3rd Grade Approaches* (Kauerz & Coffman, 2013). A summary of these projects are presented below in clustered themes. Each description includes a brief summary of the Action Research Project, the school district or community in which it was implemented, and the members of the 2014 Washington P-3 Executive Leadership Institute who led the effort.

Cross-Sector Work

One hallmark of P-3 approaches is the collaboration of organizations and partners that have traditionally not worked together, often referred to as Cross-Sector Work. In some cases, a K-5 elementary school might begin offering on-site PreK and, as a consequence, build understanding of the importance of high quality learning opportunities as a precursor to kindergarten (“pre-school”) and establish relationships with the teachers and families of those PreK

children. As elementary schools' recognition of the importance of PreK deepens, they begin to understand the importance of building partnerships not just with their on-site PreK, but also with the broader birth-to-five system that includes Head Start, community-based child care, family child care, and others. The Action Research Projects below depict efforts to strengthen and formalize partnerships and shared commitments between and among 0-5 and K-12 systems and organizations.

Creating an Evergreen P-3 Approach *Evergreen Public Schools, ESD 112*

Prior to the 2014-15 school year, Hearthwood Elementary School in Evergreen Public Schools faced the challenge of effectively integrating early learning into its community in order to create one PreK through 5th grade (P-5) school that included *all* children, staff, and families. At the same time, the district faced the challenge of not having a strong, much less replicable, action plan for developing P-5 schools throughout the district. To address this, Gaelynn Mills and Tracy Schuster undertook an Action Research Project to move Hearthwood Elementary from a K-5 school to a true P-5 school. Underlying this work was the belief that *if* they aligned and implemented research-based strategies focused on meeting student needs from PreK through 5th grade, and *if* they acquired the adequate district supports and resources, *then* all students at Hearthwood would have the appropriate learning conditions to succeed both academically and developmentally. To inform this work, feedback was collected from the early learning community, district administrators, K-5 teachers, PreK teachers, and elementary principals using tools aligned with the *Framework for Planning, Implementing, and Evaluating PreK-3rd Grade Approaches* (Kauerz & Coffman, 2013). These data informed the creation of a comprehensive PreK-5th grade Action Plan that ensures a collective approach to improving the education of, and unifying, all Hearthwood students. The process of engaging stakeholders, and the intentional inclusion of PreK voices, to drive the design of a collaborative action plan about PreK-5th grade instructional improvement is a clear win for Hearthwood Elementary and has become a recommended approach for other schools in the district. (*Tracy Schuster is the P-5 Principal of Hearthwood Elementary School and Gaelynn Mills is the Early Learning Coordinator in Evergreen Public Schools in Vancouver, WA.*)

True Inclusion: Building a Bridge between Early Learning and Special Education *Experimental Education Unit (EEU) at the University of Washington Seattle, ESD 121*

Even *within* a school, there can exist divisions between programs and/or funding streams that support learning opportunities for young children. For example, for several years the ECEAP (Early Childhood Education Assistance Program) and blended preschool program in ESD 121 operated separately within the walls of the Experimental Education Unit (EEU) at the University of Washington. With that in mind, and knowing that an essential duty of maintaining an inclusive community is regular reflection on practice, Chris Matsumoto and Brittney Lee, administrators at the EEU, undertook an Action Research Project to adjust classroom rosters to combine children with special needs and their typically developing peers with at risk children who qualify for ECEAP. The result of this was the creation of a more diverse and truly inclusive setting for all of the preschool students at the EEU. This integration of children and programs also led to a change in student ratios that, ultimately, increased the time and intensity spent on specially designed instruction with students who have an IEP (Individual Education Plan) and kindergarten readiness for all. With this new approach to blended classrooms, the EEU developed a comprehensive preschool program that is aligned with current research regarding both children with special needs and children at risk of school failure. Not only does this create a supportive environment for young children, but it also creates a more authentic, diverse, and meaningful setting in which to train the next generation of teachers and interventionists, one of the primary goals of the EEU. (*Chris Matsumoto is the Principal and Brittney Lee is the Assistant Principal at the Experimental Education Unit at the University of Washington.*)

Professional Development for Teachers

Classroom teachers – whether in a community-based child care or a 2nd grade class – are crucial to the quality of children’s learning experiences. Teachers improve their effectiveness in the classroom and increase their abilities to meet the needs of diverse learners when they engage in meaningful, on-going, and relevant professional development that focuses on building instructional and pedagogical strategies that focus on the PreK-3rd grade age continuum. Teacher effectiveness also increases when teachers are supported to work together and collaborate across PreK-3rd grade classrooms (“vertical teamwork”). This next set of Action Research Projects tackled these issues by addressing the need to align and improve professional development for classroom teachers, PreK-3rd grade.

Building Membership in Our Early Learning Community *Sumner School District, ESD 121*

Professional development is not always connected to a bigger picture or a shared vision for what a district or community wants to achieve. Teachers and administrators may receive new information and new skills, but they may not gain an understanding of how that information and those skills contribute to improved outcomes for children. Sumner School District believes that belonging to a community that has shared values is an essential component of increasing teacher effectiveness. The district also believes it should not expect different outcomes for children until there is changed behavior of the adults that work with them. To address this, Laurie Sjolund and Pam Stoner undertook an Action Research Project focused on creating membership, building relationships, and strengthening skills for adults in the community so that they can support the children in their care. Their effort concentrated on three existing distinct yet overlapping Professional Learning Communities (PLC) that were in various stages of development: Early Learning, Kindergarten Literacy, and Elementary Principal. Laurie and Pam worked with these PLCs to bring them the information and support each need to succeed independently, but also to work together as part of a district-wide cohesive Early Learning Community. The district Early Learning Community is supported through shared professional development opportunities and the establishment of a common belief system around Early Literacy and Language. By strengthening PLCs and providing common membership to a comprehensive Early Learning Community that includes teachers and administrators across the birth-through-3rd grade continuum, this project gives incentives and friendly accountability to improve teaching practice to change outcomes for children. *(Laurie Sjolund is the Early Learning Coordinator and Pam Stoner is the Early Learning Center Director for the Sumner School District.)*

Coordinating Professional Development to Increase Teacher Effectiveness *Clover Park School District, ESD 121*

Coordinating professional development within the context of a large school district can be a substantial challenge. Jennifer White’s Action Research Project focused on coordinating a professional development plan for educators in the district’s Head Start, ECEAP, Early Childhood Special Education, and Kindergarten classrooms. Getting to a coordinated plan required planning and funding from three separate departments in the district, but the challenge proved worth taking on. Due to Jennifer’s efforts, the district will provide coordinated professional development for all PreK and K teachers that covers multiple topics, including classroom behavior management, literacy and math. By sharing professional development among ages and grades, Clover Park School District is increasing teacher effectiveness and a shared understanding of appropriate instructional practices across the early childhood developmental continuum. *(Jennifer White is the Early Learning Program Manager at the Clover Park School District.)*

Equitable Professional Development Selection Method *ESD 121 and ESD 189*

Two members of the 2015 cohort of the Washington P-3 Leadership Institute recognized that decisions regarding professional development (PD) are often made using an *ad hoc* process, resulting in training that ignores input from important constituents, neglects areas of greatest need, uses resources inefficiently, and does not measurably

improve student outcomes. Josephine Escalante and Cindy Lewan’s Action Research Project tackled this challenge by re-thinking how PD is selected, especially in the context of working toward a more aligned P-3 system. Together, Josephine and Cindy designed a new approach to selecting professional development that can be used by decision-makers at multiple levels. Their approach is a data-driven, comprehensive, and collaborative process that meets the needs of all interested parties in an equitable and efficient way, takes into account scarce resources, and produces the maximum possible impact. This selection process includes four phases. In the first phase, survey data are collected from all involved stakeholders. In the second phase, data are analyzed for purpose and need. The third phase is an analysis of available resources – people, money and time. The fourth and final phase uses a decision matrix that calculates the maximum benefit from each PD topic. This Action Research Project holds promise for expanding the diversity of voices included in the selection process for PD, as well as for ensuring that PD topics are intentional, cohesive, and have clear links to improved outcomes for children. (*Josephine Escalante is the Executive Director of the Burlington Little School, a non-profit private preschool in ESD 189. Cindy Lewan is the Director at Coho Kids Time of Boys and Girls Clubs of King County in ESD 121.*)

Data-Driven Improvement

One principle of comprehensive P-3 approaches (and other education reform efforts) is that current and relevant data should be used to drive improvement. For a number of reasons – including the episodic nature of child development, wherein young children may not “meet standard” at a predictable time, and the important influence of families, teachers, and environment on child learning – P-3 approaches should incorporate data on both how children are doing and how adults are doing. Effective use of multiple data sources can identify achievement gaps, drive instructional change, re-focus professional development, and realign resources. The following Action Research Projects attend to data-driven improvement and share a common theme of data carousels. “Data Carousels” are data sharing events that provide opportunities to familiarize and engage staff, families, and community partners in a collective examination of data.

Data Data Everywhere! How One Community Has Begun to Use Data Across Systems *Whatcom County, ESD 189*

In Whatcom County, the evidence that P-3 alignment strategies support better outcomes for Head Start and ECEAP preschoolers continues to drive the work of seven local school districts. Despite strong partnerships and shared professional development, collecting and sharing data across systems continues to be a challenge. Using data to inform instruction and evaluate systems for improving outcomes for children and families has been a cornerstone of the work at the Opportunity Council of Whatcom. For her Action Research Project, Kim Walbeck demonstrated an approach to working with local districts and community partners to share data, better analyze the collective data, and plan for next steps toward realizing the goal of closing the achievement gap. She organized and facilitated a “Data Summit” for school district leaders and community stakeholders from across Whatcom County to participate in a “Data Carousel.” Using a set of protocols, Summit participants analyzed data, identified concerns, diagnosed root causes, and created next steps for the work. A collective approach to data analysis promotes shared understanding of both problems and solutions. Kim plans to continue to share the Whatcom County Data Carousel process, action plans, and lessons learned. (*Kim Walbeck leads the Head Start and ECEAP programs for the Opportunity Council in Whatcom County.*)

Engaging Families in P-3 Data Carousels *Neighborhood House, Seattle Community Organization, ESD 121*

While Neighborhood House has used data carousels in its early learning programs as a way to support a more reflective learning culture for the entire organization, families and community members have not been consistently involved. For her Action Research Project, Ericka Newman worked with two University of Washington faculty, Joe Lott and Ann Ishimaru, to review her organization’s existing use of “Data Carousels.” This consulting support allowed Neighborhood House to leverage the reflections and lessons learned to implement a P-3 Data Carousel *with families* as part of the High Point PROMISE initiative, a cradle to college pipeline designed to change the trajectory

for the low-income children and families living in High Point. Through this, families were encouraged to think about what the data mean to them, to ask questions, and to interact with program staff. Using a respected process for data examination to engage key stakeholders who are often left out of data-driven decision-making bolstered Neighborhood House's ability to identify ways in which it can improve its programming and better serve the community. (*Erica Newman is the Child Development Director for Neighborhood House.*)

Engaged Families

Without doubt, families have profound influence on young children's learning and development. Comprehensive P-3 approaches ensure that families are not just informed (e.g., via monthly newsletters) or merely involved (e.g., via one-time annual events), but rather are deeply engaged as active and full partners in helping their children develop, learn, thrive, and achieve. One of the biggest challenges in family engagement efforts is the increasing diversity of families – in terms of language, culture, work schedules, and comfort with formal education systems. Meaningful engagement of families requires systematic, intentional, and focused attention. Several members of the 2014 cohort of the Washington P-3 Executive Leadership Institute devoted their Action Research Projects to family engagement.

Engaged Families Support Early Learning Project Kent School District, ESD 121

Family engagement efforts are often one-way — schools share information with families but there are limited opportunities for two-way exchange. Theresa LaRonde's Action Research Project created the Engaged Families Support Early Learning (EFSEL) project in the Kent School District. The goal of EFSEL is to strengthen family engagement, moving beyond parent involvement to build a co-constructed partnership with families that support children's education. Theresa based the project on the research of Karen Mapp from Harvard Graduate School of Education and national guest faculty for the Institute. Theresa's goal was to provide opportunities for parents and staff to work together, using the Community Café model that is designed to bring people to the table as equal partners for discussion and active listening. Building on Kent's family engagement work in their Parent Academy for Student Achievement program, the EFSEL project uses parent leaders to deliver a curriculum to other parents that was designed to increase parents' understanding of preschool and kindergarten expectations and how parents can be better engaged in their child's education. EFSEL will increase the understanding of early learning program and school district staff of how parents view themselves in the learning process; how education, communication, and parenting are viewed within the cultural context of diverse families; and increase staff comfort with authentic family engagement. (*Theresa LaRonde is the Kent Youth & Family Services Early Learning Director.*)

Introducing Families to the School System Auburn School District, ESD 121

A common challenge facing school systems is the strong need to identify and reach out to the families of young children who do not participate in formalized early learning opportunities and those not yet connected to the official school system. To address this, Tami Petrina from the Auburn School District designed an Action Research Project to connect elementary schools with community programs and services, and to conduct outreach to families with the goal of creating partnerships supporting the learning of young children. Building on efforts already in place, Tami facilitated a collaborative district partnership with Dick Scobee Elementary, the district's Family Engagement department, and community-based organizations. Called the Scobee Parent and Child Education Program (SPACE), this collaboration incorporates multiple strategies to reach its program goals of increased family engagement and improved early learning, including: increased outreach to families, building families' capacity to support their children's early learning, providing parents and teachers with a common language to learn from each other, creating parent partnership and leadership opportunities, and providing high quality early learning experiences. Through increased access to the school system and enhanced support for families, the Auburn School District is building stronger and more effective partnerships among parents and schools. (*Tami Petrina is Assistant Director of Student Special Services for the Auburn School District and oversees all Early Learning (PreK) programs in the district.*)

Parent Academy: Seamless Learning Between School and Home Edmonds School District, ESD 189

Often, families experience a disconnect between their child's PreK experiences and entry into Kindergarten and the K-12 system. To create a stronger link between PreK and Kindergarten, Chris Fulford and Karen Schreiber designed and piloted Parent Academy, an intentional opportunity for families to learn about literacy and mathematics expectations needed for success in Kindergarten and beyond, in the Edmonds School District in August 2014. Parent Academy is a series of sessions across the school year that provide interactive parent professional development so families are active learners as their children transition from PreK to Kindergarten. The school district already has in place two opportunities for parents of PreK-age children to become better acquainted with the Kindergarten transition process – one a parent/child program and the other a PreK parent meeting. Parent Academy extends this school-family partnership by adding three sessions – one just prior to the start of Kindergarten to inform families about grade level expectations in kindergarten and beyond; one in Winter during which instructional coaches teach parents about the ongoing literacy and math skills Kindergarteners need; and one in Spring that focuses on the importance of summer skill building to reduce fade out. This systematic and sustained approach to building and supporting a continuous cycle of parent support before and across the Kindergarten year represents a substantial reform effort to make children's early learning experiences more seamless and to ensure that families are fully engaged as partners in their child's success. *(Chris Fulford is Principal at Lynndale Elementary and Karen Schreiber is the district Early Learning Manager, both in the Edmonds School District.)*

Successful Early Learning Depends on Effective Teachers and Family Engagement Seattle ESD 121

Continuing education while working as a full time preschool teacher is a significant challenge for educators in the field. However, as qualification requirements rise, teachers are increasingly being asked to meet these standards. In attaining this higher education, teachers often face barriers of both access and availability. Ruth Brown, the Executive Director of Causey's Learning Centers in Seattle, recognized the gap between existing levels of education, heightened standards, and the issue of access and availability, and used her Action Research Project to support the creation of a local Career Pathway for early childhood educators in her area without degrees. Specifically, Ruth targeted community colleges, including North, Highline, and Seattle Central, and successfully enrolled teachers from her own Center, as well as the Centers of her fellow directors of the South East Directors Consortium. Their teachers comprised the first cohort of early learning teachers to pursue higher education degrees from the community college in their local neighborhood. These teachers are now on a career path from certification, to Associates degrees, to Bachelor's degree. By providing community-based access, using a familiar and existing network, and employing peer-learning opportunities, this Action Research Project created a meaningful and accessible pathway for preschool teachers to access higher education and connect them to the larger P-3 system. *(Ruth Causey-Brown is Executive Director of Causey's Learning Center and manages several Early Childcare and School Age Enrichment Programs throughout central and south Seattle.)*

Wellpinit Family Math Night Spokane ESD 101

Because of the recent attention to reading on grade level by 3rd grade, many school-based family engagement strategies focus on reading and literacy. And yet, the importance of strong early math skills is undisputed. To expand families' understanding of early math, Kim Ewing's Action Research Project, implemented at Wellpinit Elementary School in Spokane, included a family math night to which K-5 families *and* families of the Tribal pre-school were invited. The evening engaged families in specific math content that would enhance parents' abilities to support their children as they transition from home to school and back to home. The evening included dinner, instruction on specific math games and activities, opportunities for families to practice and engage with materials, and take-home math games. Games included manipulatives like blocks, dice, cards, and game boards. Making math curricular content accessible for families in a supportive environment is instrumental in creating pathways for the home-school connection. Engaging with the whole community, in this case P-5, is another way in which meaningful partnership and relationships form not only between school and parents, but among families as well. *(Kim Ewing is the Principal at Wellpinit Elementary School near Spokane, WA.)*

Transitions, Continuity, and Pathways

The transition from PreK to Kindergarten is one of the most often-addressed issues when districts and communities begin to address the P-3 continuum. This transition represents a key point during children's early learning in which many changes occur. These changes include a shift in academic demands and curricular focus, a decrease in the time children have interacting with teachers, an increase in their daily social environment (because of increased numbers and variety of peers and adults that a Kindergartner interacts with) and, often, a decrease in families' connections with teachers and schools. Beyond the PreK to K transition, stability and consistency are important for young children from birth all the way through 3rd grade. Continuity and Pathways Action Research Projects focus on strategies such as Access and Continuity of Services and PreK-3rd Grade Pathways. At the heart of Continuity and Pathways is an attempt to assure that children's access and opportunities for extended learning are met and that policies and practices that ensure a stable high-quality learning opportunity exist for every PreK-3rd grade child.

Creating Predictable Transition Systems within Seattle Public Schools *Seattle Public Schools, ESD 121*

Over the past five years, funding constraints have curtailed the Seattle Public Schools' (SPS) community outreach efforts and have led to organizational efficiencies such as centralization of enrollment. Such efficiencies, while arguably good for the district, do not always benefit children and families. Families most adversely affected by the opportunity gap often have the least understanding of the mechanics of enrollment or the school choices available to them. Limited access to digital information or in-person contact with people knowledgeable about SPS policies and practices results in delayed or late enrollment of children from economically disadvantaged families. In this Action Research Project, Mary Fickes and Sharon Giri took an intentional and comprehensive step back to identify all of SPS Early Learning department's efforts to welcome new Kindergarten families and to make the transition from home, child care, or preschool understandable and smooth. With this inventory of programs, they created a year-round "map" of SPS' Kindergarten transition efforts, including both new and ongoing initiatives. Compiling all of this information provides a clearer, more straightforward source that can be used to engage families, teachers, and communities in closing the achievement gap. In addition, this compilation represents a cross-systems improvement that contributes to the continuity and alignment between the youngest learners' early education and the Seattle Public Schools. *(Mary Fickes is the Early Learning Coordinator at Seattle Public Schools and Sharon Giri is Head Start Curriculum/Assessment and Disabilities Coordinator for the Seattle Public Schools' Head Start program.)*

Make Way for PreK: Building a System for Successful Transitions from PreK *Seattle Public Schools, ESD 121*

Most children enter Kindergarten from community preschools, child care settings, family home care, or family/friend/neighbor care. In many instances, there is no formal communication regarding a child's developmental strengths and needs between preschool teachers, child care providers or caregivers, and the Kindergarten teacher. Kathi Linquist addressed this gap through her Action Research Project that focused on creating a set of protocols and procedures to assist community preschool and child care programs to connect with elementary schools in order to develop and strengthen relationships. Kathi's approach recognizes that relationships are necessary at three levels: Administrator, Educator, and Family. Her project also recognizes that a crucial first step – because it supports relationships at the other levels – is to bring together administrators from early childhood and early elementary to determine a shared vision, language, and system. With specific guidance, like that developed in this Action Research Project, there is a stronger likelihood that communication will be clear and relationship-building will be successful and sustainable. When stakeholders from different systems build strong relationships, successful transitions can form for young children, families, and educators. *(Kathi Linquist is the Program Manager at Daybreak Star Preschool for the United Indians of All Tribes Foundation.)*

Building Bridges: Creating Connections Between Public School Preschools, Community Preschool Providers, and Parents to Improve Access and Enhance the Quality of Early Learning for All
Enumclaw School District, ESD 121

Despite a diversity of available programs, a vast number of preschool-age children in Enumclaw School District do not access preschool of any kind prior to entering Kindergarten. Enumclaw is a rural community with a mix of early learning opportunities including private preschools and child care programs, a Special Education Developmental Preschool, and ECEAP housed at Southwood Elementary serving the entire school district. Susan Arbury and April Schroeder's Action Research Project addressed the issue of young children's limited participation in preschool offerings. First, they identified three possible reasons for children not participating in one of the community's early learning programs: lack of money to pay for private preschool; lack of awareness of available services; or lack of programs that fill the income gap between ECEAP and private offerings, where there is great variation in the quality and content of early learning experiences. To address these discrepancies, Susan and April promoted alignment through several targeted strategies. Outreach was expanded to include both early learning providers and families. For early learning providers, the district offered three seminars during the 2014-15 school year so that they could learn about Kindergarten standards. For families, the district offered a *Ready for Kindergarten* project during which families learned kindergarten readiness activities. The district also extended its outreach and recruitment increased for ECEAP, resulting in increased enrollment and doubling the number of available slots. In addition, a tier of slots was created for families who do not qualify for ECEAP but still cannot pay for private preschool. By enacting multiple strategies targeted to both early learning providers and families, Susan and April created meaningful increase to the number of children accessing high-quality preschool programs. (*Susan Arbury is principal at Southwood Elementary School in Enumclaw. April Schroeder operates a child care center in Enumclaw and is a member of the Enumclaw School Board.*)

Effective PreK to Kindergarten Transitions *Highline School District, ESD 121*

Although transition is often thought to be something that happens for a child, the Highline School District team recognized that things needed to change not just at the child level, but at multiple levels throughout the system. Research tells us that a smooth transition into kindergarten matters not just for a child's initial days or months of elementary school, but has far reaching implications for that child's academic and social/emotional success through eighth grade and beyond. A team of leaders from Highline School District's central office, three elementary schools, and two community-based early learning centers undertook interrelated Action Research Projects to support quality transition opportunities through four key areas of focus: District wide Efforts, School-Based Efforts, Center-Based Efforts, and Community-Based Efforts. Through school board advocacy, increased access to early learning experiences, strengthened partnerships with providers and families, instituting common transition practices for principals to use with all students, and early identification of student needs, the Highline School District increased communication with families, developed a community of practice among educators, and increased awareness of the importance of transition practices among system leaders. The district's research validated findings that transition opportunities are essential for both children and families to feel prepared for successful beginnings in the K-12 system, and their projects demonstrated that comprehensive P-3 approaches require intentional effort at multiple levels, engagement of multiple partners, and a system-wide dedication to common goals. (*Angelica Alvarez is an elected member of the Highline School Board. Kathy Emerick and Anne Reece are principals in the district, at Hilltop Elementary and White Center Heights Elementary, respectively. Anna M. Griebel is Principal at Sheridan Elementary in Tacoma. Jeannie Kelly is the director of child development at Easter Seals Angle Lake Child Development Center, in SeaTac. Kellie Morrill is the Prenatal to 3rd Grade Campus Director at Educare of Greater Seattle, in partnership with White Center Heights Elementary. Jenniffer Reinig is an Instructional Leadership Executive Director in Highline School District.*)

Strengthening the Educational Pathway of Quality Learning for Preschool and Kindergarten Students in the Mount Vernon School District Mount Vernon School District, ESD 189

Understanding that all too often children must navigate an unclear, bumpy pathway from one educational system to another, arriving at their new educational setting without the necessary skills and abilities, the Mount Vernon School District (MVSD) and Skagit Islands Head Start began a collaborative project to ensure a stable pathway of high-quality learning opportunities for every child from preschool to kindergarten. Guided by the Action Research Project of Lori Knudson and Rebecca Richter, this project included multiple local preschools, home care providers, and district leaders. Lori and Becky began their work by collecting the perspectives of MVSD and Head Start administrators, principals, kindergarten teachers, and preschool teachers; to do this, they used a self-assessment tool that accompanies the *Framework for Planning, Implementing, and Evaluating PreK-3rd Grade Approaches* (Kauerz & Coffman, 2013). With collaborative input from multiple stakeholders, Lori and Becky were able to begin to build up program opportunities and enhance collaboration. Under their leadership, there are new Pre-K and K professional development opportunities, including mathematical practices training and cross-grade level exchange programs for teachers to better understand the learning environments and differentiated instruction in multiple ages and years. For young children, the focus is on creating smooth transitions for all preschoolers. A kindergarten leadership team was formed with teachers representing each building in the district, and work is being done to create alignment with registration and screening processes. With streamlined and coherent systems for adults, MVSD and its partner Head Start are building smoother experiences for children. *(Lori Knudson is a previous elementary principal and now district curriculum director for Mount Vernon School District. Rebecca Richter is the education program manager with Skagit Valley College/Skagit Islands Head Start.)*

The Pathway for Effective Pre-K to K Transitions and Beyond Everett School District, ESD 189

While families are central to the PreK to Kindergarten transition, they are often not engaged until the point of actual transition. Monica DeFelice, Shannon Koehnen, and Kelly Marks decided to change this with their Action Research Project situated in Everett Public Schools. Together, they undertook a collaborative engagement focused on aligning, refining, and improving kindergarten transitions in tandem with family engagement. Multiple steps were taken to expand and deepen outreach and communication with families to support transitions. The project began with surveys of families to better understand their needs and priorities. With that input, changes were made to the “Garfield Getting Ready for Kindergarten” event, making it more interactive for families. Efforts were also made to locate transitional families before the start of kindergarten, rather than waiting for the formal start of the school year. Lastly, a family wall was constructed in the Garfield Elementary School entry area to foster more personalized connections among families and staff. Through this project, the families at Garfield Elementary School have a more comprehensive and meaningful relationship to the school itself, which eases the transition for them and their young children. In addition, the district now has a new model for elementary schools to use as they examine transitions and family engagement. *(Monica DeFelice is the ECEAP Program Manager, Shannon Koehnen is the principal of Garfield Elementary School, and Kelly Marks is the Early Learning Facilitator. All of three are employed by Everett Public Schools.)*

Connected Learning: Guidance for Effective Transition Prekindergarten through 3rd Grade Yakima, ESD 105

Initiatives that address transition often focus narrowly on the transition from PreK to Kindergarten. The team from ESD 105 recognized a lack of a clear pathway for students and families transitioning not just from early learning settings into school, but also from grade level to grade level through 3rd grade. Lexi Catlin, Lynn Harlington, and Susan Petterson designed and implemented an Action Research Project focused on Continuity & Pathways and Cross Sector Work from the *Framework for Planning, Implementing, and Evaluating PreK-3rd Grade Approaches* (Kauerz & Coffman, 2013). The scope of their work began with collaboratively creating an operational definition of transition that would support all stakeholders in communicating about the project’s goals. They then explored current research to understand and support the need for transitions, as well as its impact on student success. The

result of their work was the compilation and publication of a guide for practitioners, administrators, and families that addresses best practices for transitions and continuums of learning from Preschool to Third Grade. The document presents clear and succinct strategies that can be enacted not just in the PreK to K transition, but as children transition into 1st, 2nd, and 3rd grades. At each grade level, the strategies change to match the developmental trajectory of children. The principles of student-centeredness and a strength-based approach, with careful considerations of academic and social emotional outcomes, as well as safe and secure learning environments guided the project. With their project, Lexi, Lynn, and Susan not only expanded the notion of transition, but also created an invaluable resource that is useful not just in their own community, but across the state and the nation. *(Alexandra (Lexi) Catlin is an RTI Instructional Coach for West Valley School District in Yakima. Lynn Harlington serves as EPIC's Director of Early Childhood. Susan Petterson is the Director of Federal & Early Childhood Programs in Selah School District.)*

Conclusion

As evidenced by this summary of Action Research Projects conducted by participants in the 2014 Washington P-3 Executive Leadership Institute, P-3 work is multi-faceted, sometimes messy, and requires the involvement and investment of multiple partners. While the projects presented here are grouped into four major themes, these are not fully comprehensive or representative of the full scope of possible district and community strategies to increase the alignment and coherence of learning opportunities for children from birth through 3rd grade. In fact, P-3 approaches are not static projects with definitive endpoints. There will always be new partners to bring in, additional alignment to strive for, and on-going need to deepen children's access to and experience of high-quality learning opportunities. These Action Research Projects, though, clearly demonstrate how a dedicated group of leaders – equipped with knowledge, skills, and desire – can create meaningful systemic change in school districts and communities.

Reference

Kauerz, K., & Coffman, J. (2013). *Framework for planning, implementing, and evaluating PreK-3rd grade approaches*. Seattle: University of Washington.

About the Authors

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Performance of Former English Language Learners on Washington High-Stakes Assessments as Measured through the Washington Achievement Index

Andrew J. Parr, Washington State Board of Education
Greg Lobdell, Center for Educational Effectiveness

The inclusion of a Former-ELL student group in the revised Washington Achievement Index provided a readily accessible opportunity to examine the academic performance of Current- and Former-ELL students. An analysis of more than 2000 schools described in the Index showed that for both proficiency and growth rates, Former-ELL students outperform the All Students group in the elementary school grades, perform about the same in middle school grades, and perform lower in high school. The analysis also shows that the 5-year graduation rate for the Former-ELL student group is among the highest in the state.

Introduction

The development of the revised Washington State Achievement Index (AI) was guided by policy of the Washington State Board of Education (SBE) and the Washington legislature's call to action to create a single aligned accountability system serving both state and federal accountability needs as set forth in RCW 28A.657.110. One of the critical issues faced by the design team of the AI was the issue of validity of assessing non-English speaking students on an English only assessment (Abedi, 2002; Solorzano, 2008). Another critical issue addressed by the team was the manner in which to hold English language learners (ELLs) accountable for achievement without imparting a disproportionately high impact on any school's rating (Huang, Han, and Schnapp, 2012).

The SBE convened the Accountability and Achievement Workgroup (AAW) comprised of diverse stakeholders to support in the design of the AI over an 18-month period (State Board of Education, 2014). Based on strong support from the AAW, the design of the revised AI included "Former-ELL" as one of the targeted at-risk subgroups. This subgroup is made up of any student who, at any point in their K-12 educational career, was in the English Language Learner program and exited that program by achieving language proficiency as measured by the Washington English Language Proficiency Assessment (WELPA). With the inclusion of the Former-ELL subgroup in the revised AI, for the first time the state had a readily accessible data set including detailed educational outcome (performance) information on proficiency, student growth, and graduation rates for Former-ELL students.

This research was initiated by State Board of Education staff to serve several purposes. This paper addresses an analysis about the performance characteristics of the Former-ELL subgroup with respect to reading and math proficiency rates, reading and math growth rates, and 5-year graduation rates. The reader is referred to a comprehensive report prepared for the Washington State Board of Education (SBE, 2014b) for more information. We report here on the academic performance of the two most rapidly growing subgroups in Washington; ELLs and Former-ELLs, but the emphasis here is on the latter. These two student groups have some unique qualities that pose some serious challenges to accountability systems.

- ELLs are required to be assessed in a language other than their home or primary language. No other subgroup is required to do the same.
- As ELLs become more fluent in English, they tend to perform better on the state assessments and, after demonstrating English proficiency, are then reclassified as Former-ELLs. In other words, the higher performing students who are just becoming proficient on the assessments are removed from the group.
- Once reclassified as Former-ELLs, students possess the language skills necessary to speak, read, and write in English, but often have not mastered the content-specific vocabulary required to engage in the content area assessments in a meaningful way, especially in the upper grades.
- After being reclassified as a Former-ELL student, a student typically requires at least a couple of years to demonstrate proficiency on the content area assessments. This time period may be considerably longer or

shorter depending on the grade level at the time of exiting, the primary language, the type of Bilingual program exited, and other factors.

Examining the academic performance of Former ELLs through the AI is complicated by another important factor, the number of years as a Former-ELL. Evidence exists to show that Former-ELLs who have been out of a Bilingual program for five years (for example) are more likely to be proficient than a Former-ELL out of a Bilingual program for only one year. In other words, the years out of program are positively correlated with proficiency rate. The work we present here does not take this into account, which certainly is a limiting factor that can only be overcome by examining student-level data with years as a Former-ELL as a student variable.

One criticism of Washington's assessments that are used for state and federal accountability is that the assessments are administered only in English. On the reading assessment, ELLs do not have the opportunity to use some of the language accommodations that are available on the math assessment. This means that the reading assessment is measuring a student's ability to read, comprehend, and decode entirely in English when their primary language is not English. On the other hand, ELLs have translation materials at their disposal while taking the math assessment, which means that the ELLs are being assessed on their math proficiency in a combination of their primary language and English. On this basis, you might expect ELLs to perform at higher levels on the math assessment as compared to the reading assessment, but this is not borne out in the analyses that follow.

Methodology

One out of every 11 students in Washington has English language skills low enough to qualify to be served in Transitional Bilingual Instructional Programs (TBIP) and the ELL subgroup is the fastest growing subgroup in Washington State (OSPI, 2014). However, when we consider the transition rate of ELLs to Former-ELL students, it is safe to say that the Former-ELL subgroup is expanding in numbers at least as large as the ELL group.

Data Sources

The primary data source for this analysis is the Washington 2013 AI data file as published on the OSPI/State Board website (OSPI, 2014b). The AI data released in the spring of 2014 used assessment results from the 2010-11, 2011-12, and 2012-13 spring testing windows. The assessments used in the AI, collectively known as the Washington Comprehensive Assessment Program (WCAP), include the Measure of Student Progress (MSP) for grades 3-8 in reading, writing, mathematics, and science; the High School Proficiency Exam (HSPE) for grade 10 reading and writing; and the End-of-Course (EOC) examinations in grade 10 mathematics and science. These are the same assessments used for accountability under the Federal No Child Left Behind Act (NCLB).

The unit of analysis for the AI and in this paper is the school. The students noted above are served in 295 school districts (Local Educational Agencies). In order for any group to be analyzed (based on the data source) in the AI, the group must have at least 20 continuously enrolled (CE) students in the school by subject area. For example, an elementary school which serves grades K-5 will assess students in grades 3, 4, and 5. If that school's ELL group assessed 8 students at 3rd grade, 7 students at 4th grade, and 6 students at 5th grade in reading, the total assessed in reading would be 21 students ($8 + 7 + 6 = 21$). Thus, the ELL group for this school would be $N \geq 20$ and the data would be used in this analysis. Due to accountability rules applied to the AI, the reader should remember that the Former-ELL students referenced in this work are only those who were continuously enrolled at schools with 20 or more Former-ELL students in assessed grades. The performance of the Former-ELL student group is not for all Former-ELL students, just those from schools with a reportable Former-ELL population.

Performance Indicators

Three performance indicators were used in the 2013 AI and are thus used in this analysis. The AI data file contains building-level aggregated data for proficiency, growth, and graduation. Proficiency is reported as the percent of students meeting or exceeding standard on the WCAP assessments in reading, writing, math, and science. Growth is reported as the median student growth percentile (MSGP) for the building in reading and math as derived from the Student Growth Percentile (SGP) Growth Model (Betebenner, 2011). High school graduation is reported as the 5-year graduation rate computed following the Adjusted Cohort Graduation Rate methodology (ACGR) described by the OSPI (2014c).

This analysis is limited by the data that were used to create the Washington Achievement Index. Specifically, the data used in this analysis have the following caveats:

- Proficiency data were provided at the building level for each grade served in that building. Only data for CE students are used in the Index proficiency calculations.
- Median Student Growth Percentile data were provided only at the building level per content area and for the CE students only. That is, grade by grade MSGP data were not provided.
- Graduation rate data were provided only for the 5-year Adjusted Cohort Method.

The analyses provided below describe the academic performance of the Former-ELL, Current-ELL, and the All Students group. Table 1 shows how the three-year average count of CE students varies by grade level and is based on the reading assessment. Table 2 shows how the three-year average count of schools varies by school level, based on the reading assessment. The analyses describe a large number of students and schools.

Table 1: Number of CE students comprising the student groups

	Grade 3	Grade 4	Grade 5	Grade 6	Grade 7	Grade 8	Grade 10
Former-ELL Group	5,497	7,069	7,559	7,832	7,730	7,646	6,472
Current-ELL Group	8,578	6,947	6,030	5,026	3,978	3,477	2,875
ALL Students Group	61,116	61,481	62,170	62,642	62,654	62,698	59,693

Table 2: Number of schools with reportable subgroups

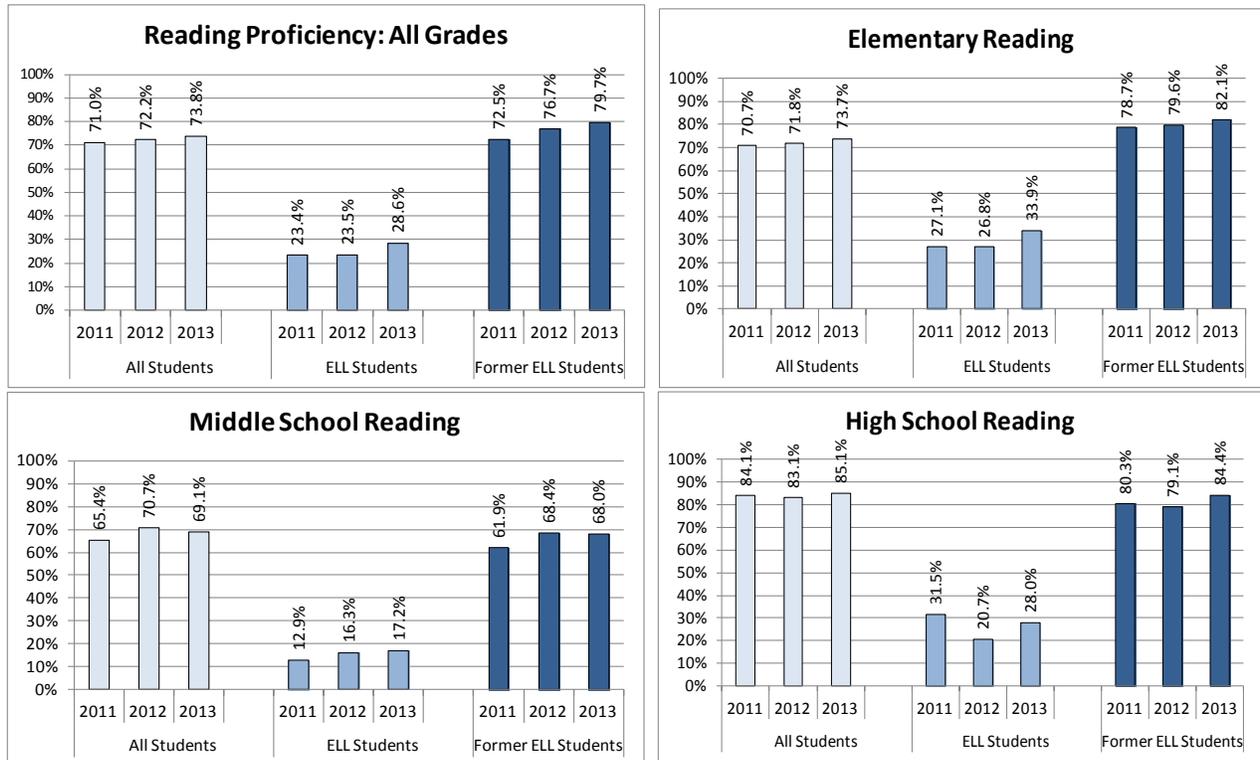
	All Students	Current-ELL	Former-ELL
Elementary Schools	1,025	319	373
Middle Schools	346	131	214
High Schools	266	34	97
Total	1,637	484	684

Results

Proficiency Rates

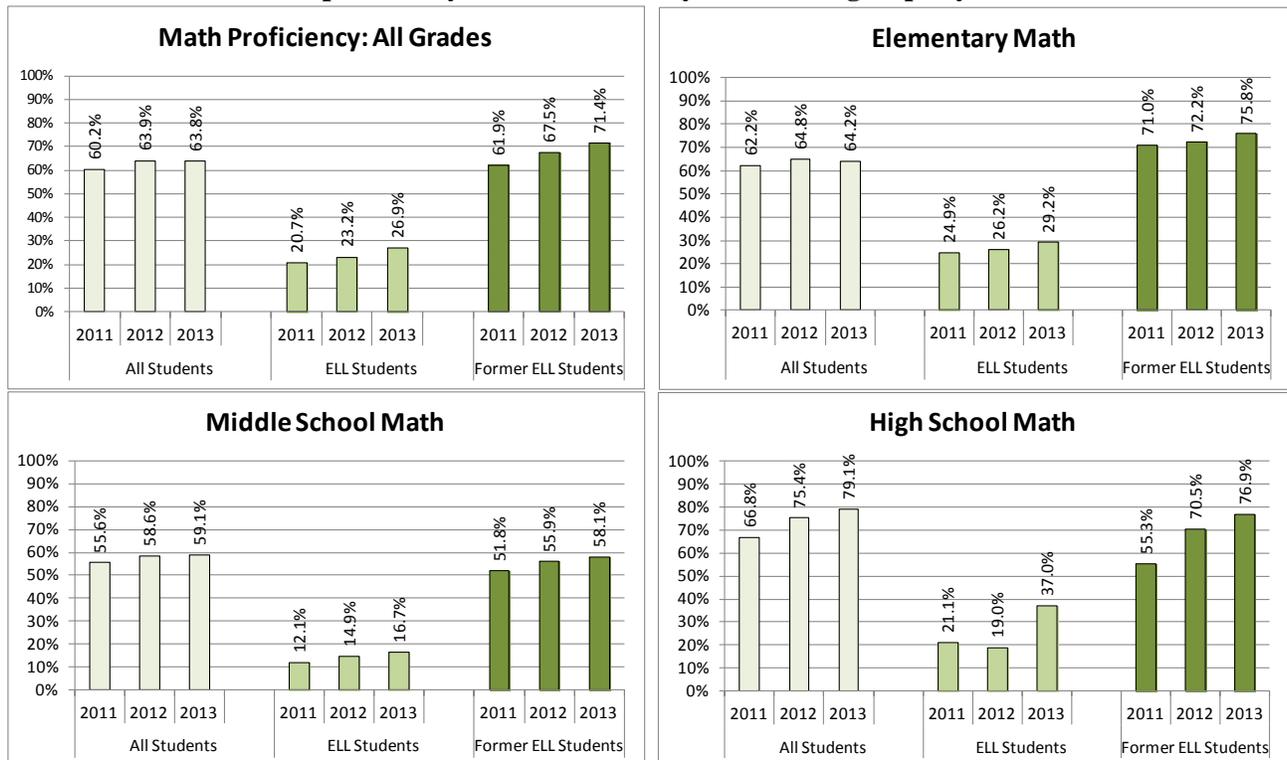
The average reading proficiency rates for the three student groups are presented in Table 3 for all schools and by school level. For the reading proficiency rates, the Former-ELL student group outperforms the All Students group in elementary schools, performs at a similar level in middle schools, and underperforms at the high school level. The Current-ELL student group performs at a lower level than the other groups at all school levels.

Table 3: Reading proficiency rates for analyzed student groups by school level



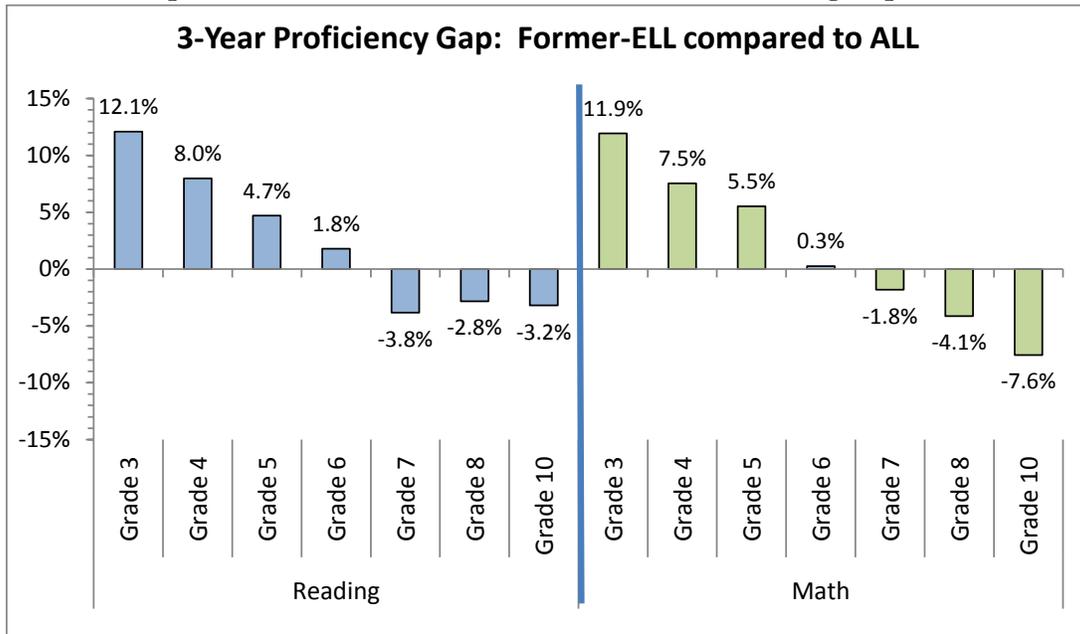
The average math proficiency rates for the three student groups are presented in Table 4 for all schools and by school level. The math proficiency rate for the Former-ELL student group is greater than that for the All Students group in elementary schools, about the same in middle schools, and lower at the high school level. The Current-ELL student group performs at a lower level than the other groups at all school levels.

Table 4: Math proficiency rates for the analyzed student groups by school level



An alternative way of portraying the data is to compare the Former-ELL students to the All Students group. In the graph below, the proficiency rate attributed to the All Students group is subtracted from the corresponding rate for the Former-ELL student group. In this data portrayal (Figure 1), a positive value results when the Former-ELL student group performed at a higher level than the All Students group, and a negative value results when the Former-ELL student group performed at a lower level than the All Students group.

Figure 1: Difference in performance level between the Former-ELL student group and the All Students group



When collectively considered, the proficiency results for the ELL students and the Former-ELL students leads one to speculate that the MSP administration in English-only may not be providing valid results. The results provide evidence that, once English language fluency is acquired, the group proficiency rates become comparable to the All-Students group. One might speculate further that the challenges of increasingly difficult content and complex vocabulary required to meet standard in the middle school and high school grades are difficult to overcome for some Former-ELLs who have not fully mastered the English language.

Growth Rates

The data set created for the AI did not include grade by grade median student growth percentiles but rather, school-level medians only. Unlike proficiency, the SGP medians can be presented only at the elementary, middle, and high school configurations. It is also important to remember that these growth calculations are normative, rather than absolute growth. In a normative growth calculation, larger groups will tend to regress toward the mean which implies that larger groups will tend toward a MSGP of 50 (growth at the 50th percentile).

The three-year average MSGPs for the Former-ELL and All Students for reading and math by school level are shown on Figure 2 and Figure 3, respectively. For the reading growth measure, the Former-ELL student group performs at a higher level than the All Students group at the elementary and middle school levels, but performs at a lower level in high schools. For math growth, the Former-ELL student group performs at a higher level than the All Students group at the elementary and middle school levels, and at approximately the same level in high schools.

Figure 2: Average MSGP for reading by school level

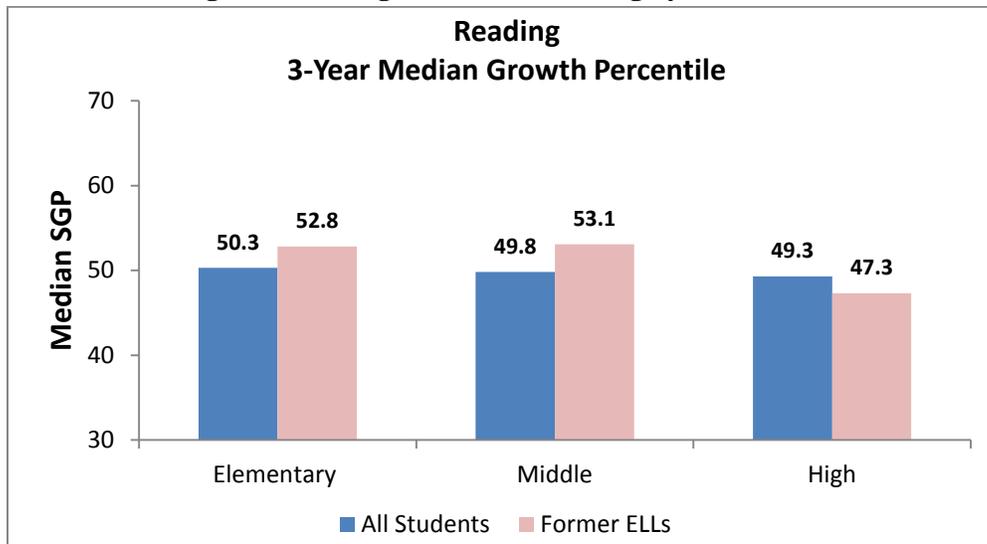
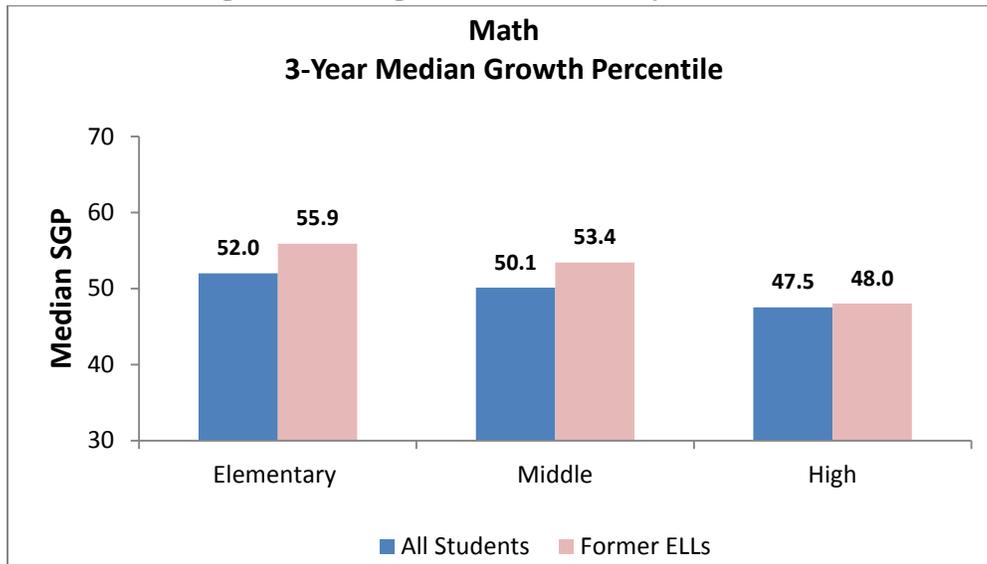


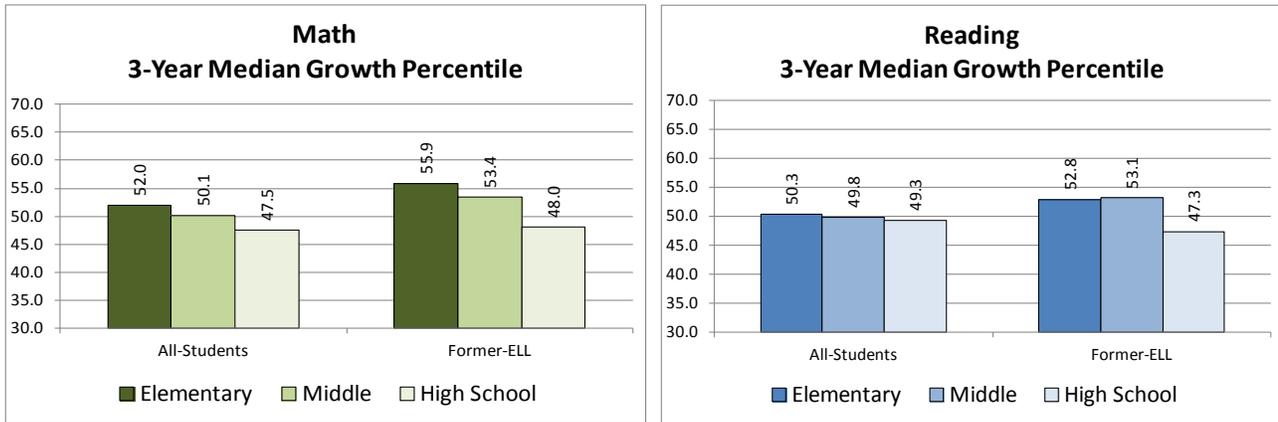
Figure 3: Average MSGP for math by school level



In this different portrayal for math growth (Table 5), see how the average MSGPs decline as grade levels increase from elementary to middle to high schools for both the Former-ELL and All Students group. The systematic change is not at all well developed in the reading average MSGP data. The systematic decline is not readily explainable given the nature of the AI data set. However, we might speculate that the design or usage intent of different assessments contributes to the reading differences.

- MSP is a summative grade-level assessment, whereas the HSPE is a high school exit exam and the high school math growth is based on end of course assessments.
- The high school HSPE represents a two-year growth measure whereas the elementary and middle school MSP represents one-year growth measures.

Table 5: Average MSGPs for the Former-ELL and All Students groups by school level

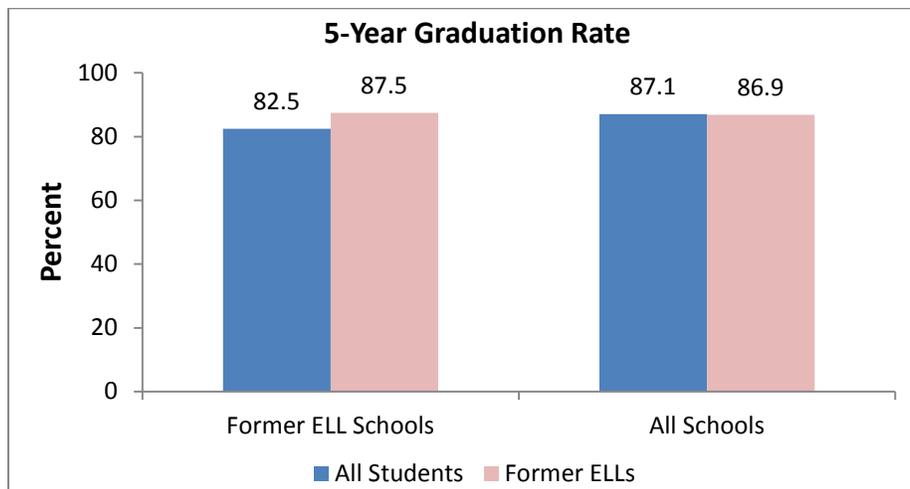


Graduation Rates

The Washington Office of Superintendent of Public Instruction (OSPI) calculates graduation rates using both a 4-year adjusted cohort and 5-year adjusted cohort method. In both methods, the beginning cohort is the group of 9th graders (OSPI, 2014c). In both cases, the cohorts are “adjusted” for students who transfer in and out, as well as for dropouts. The difference is that in the 5-year method, students who require a 5th year of high school to graduate are counted as graduates in the graduation rate calculation. This is an important accommodation, particularly for students with disabilities (SWD) and ELLs. The primary rationale in using the 5-year adjusted cohort method in the revised Achievement Index was to obtain a more accurate view of high school attainment for the two student populations.

To augment the view of Former-ELL graduation rates, we also chose to report the data for Former-ELL graduation rates relative to the high schools which had at least 20 ELL students at 10th grade (those schools with the ELL cell active in the revised AI data set). With reasonable certainty, it may be assumed that schools which have the ELL cell active at 10th grade are typified by higher ELL enrollments throughout the K-12 system and in their districts. Figure 4 shows that when all high schools are considered, the 5-year graduation rate for the Former-ELL group is about the same as that for the All Students group. However, when the subset of Former-ELL high schools is examined, the figure shows that the graduation rate for the Former-ELL students exceeds the rate for the All Students group.

Figure 4: Five-year graduation rate for the Former-ELL and All Students groups



Discussion

Every assessment is an assessment of language according to the American Educational Research Association, the American Psychological Association, and the National Council on Measurement in Education (2014). It only follows that if a student is not proficient in the language of the assessment, the instrument will likely underestimate the student's knowledge of the subjects being assessed.

The academic performance of the ELL student group on proficiency, growth, and graduation indicators is among the lowest in Washington, but the performance of the Former-ELL student group is among the highest in the state. When the assessment results are collectively considered, one could conclude that the assessments, as administered, are not providing valid results for the ELL students and perhaps some of the Former-ELL students depending on grade level and the number of years since exiting TBIP. While convenient, using the Achievement Index as a data source limits our discussion to student groups comprised of continuously enrolled students at schools with reportable populations. The preliminary findings reported here should not automatically be generalized to all Current-ELL or Former-ELL students.

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How to Measure English Learners' Development More Accurately¹

Conor P. Williams, New America Foundation

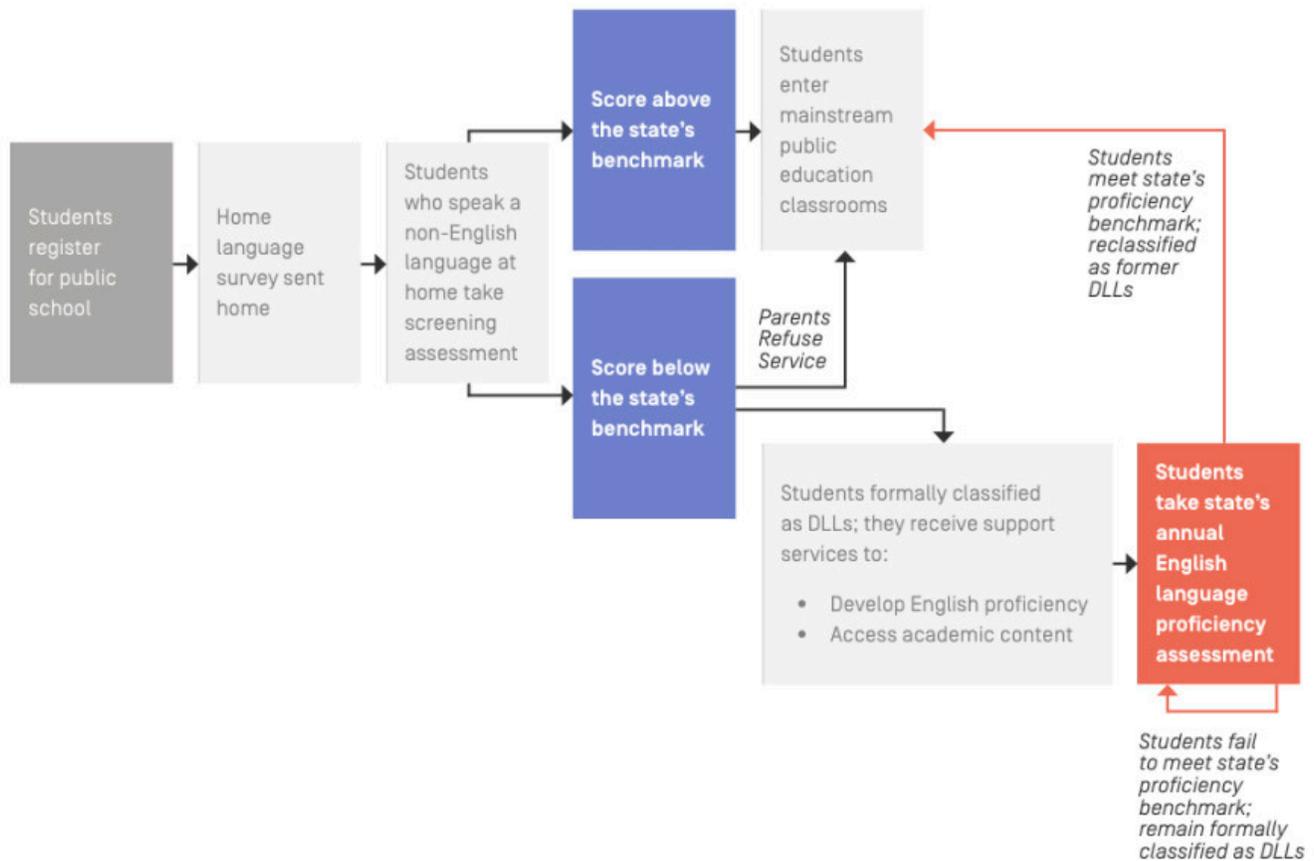
The ancient Greek philosopher Heraclitus famously posited (Plato in *Twelve Volumes*, 1921) that it is impossible to step into the same river twice. That is, by the time you go back for the second dip, the water you touched the first time is long downstream. This makes it challenging to get clear understanding of the river: is it full of fish? What's its temperature? Etc. Each splash into the water is simply one slice of time. To get more complete knowledge, you'd need to measure it over a longer period of time.

This is as good an analogy as any for illustrating the challenges of responsibly assessing language learners. Each assessment is a limited time slice, and since these students' abilities will show up differently on assessments—whether they are measuring English language proficiency *or* content knowledge—as their English language skills develop. This is why we usually measure these students' linguistic and academic *growth*, rather than focusing only on their proficiency. We want to monitor how they're performing over time, even when they fall short of mastery. But there are other problems with how we use assessments to define these students' success.

Like any good diagnosis of a problem, we need to start by outlining the status quo. In our current system, we check the English language abilities of all students and then classify those with “limited English proficiency” as “English Learners” (though different states use different terms for this classification). Students who fall into this group must, pursuant to No Child Left Behind² (Williams, 2015b), receive research-based language support services. These continue until their English skills develop to a point when they're able to access instructional content in English, participate in mainstream academic classes (taught in English), and demonstrate their academic knowledge on the state's math and literacy assessments. When students reach that point, they are reclassified as “*former* English Learners” and cease to be language learners as far as the state is concerned. At that point, No Child Left Behind requires that states monitor the academic performance of former ELs for two years after they are reclassified. Here's a diagram of the process from my 2014 paper, *Chaos for Dual Language Learners* (Williams, 2014a):

¹This article was published on March 27, 2015 by EdCentral and was reprinted with permission. The original article can be found at <http://www.edcentral.org/totalenglishlearners/>. The article uses several terms to refer to language learners: dual language learners (DLLs) and English learners (ELs), and predominantly uses “EL” because that is the term used in the federal legislation being discussed.

²No Child Left Behind (NCLB) refers to a 2001 law that was the most recent iteration of the Elementary and Secondary Education Act of 1965 (ESEA), the major federal law authorizing federal spending on programs to support K-12 schooling. ESEA is the largest source of federal spending on elementary and secondary education. (McCann, undated).



There's a basic level of systemic coherence to the approach: screen students to assess their linguistic strengths and needs, offer supports, measure their academic progress, check their English development, and end language services when they are no longer necessary.

But it has a data problem related to the river analogy I used above. We often hear about achievement gaps between students classified as English Learners (ELs) and students who are not classified. But there's a problem with that framing. As Working Group for ELL Policy researchers Megan Hopkins, Karen D. Thompson, Robert Linqanti, Kenji Hakuta, and Diane August (2013) put it in an article several years ago, current policies create "a 'revolving door' effect, as more [English] proficient students exit and less [English] proficient students enter the EL subgroup." That is,

Under current policy, the more successful schools are in reclassifying their ELs, the more poorly their EL subgroup performance looks...This poses a problem for accountability because it provides faulty information about the performance of the EL subgroup on long-term outcomes.

In other words, once an EL student develops his or her English language skills to a point where he or she begins to perform well on math and literacy assessments, he or she leaves the EL group. As a result, the EL group isn't a static pool of students. Each time educators dip into that "river" with an assessment, they're surveying a meaningfully different group of students.

Not only does this contribute to an unfair and inaccurate narrative about language learners—that, as a group, they are supposedly a drag on schools' academic performance—but it makes accountability systems problematic. As Hopkins and her co-authors put it, "as former ELs are systematically removed from the subgroup, it becomes impossible to determine which schools and practices are successful for these students."

And without information about how various instructional practices support English acquisition, it's hard to set appropriately rigorous expectations for students, teachers, schools, or districts or to build comprehensive policy systems that support ELs. As I chronicled in *Chaos for Dual Language Learners (op. cit.)*, states define ELs in a wide variety of ways—but most of federal law treats these students as a constant, commonly-defined subgroup. But if one state uses a low English proficiency bar and reclassifies many ELs after just a year or two of language services (Illinois State Board of Education, 2013), it's hard to compare their approach (let alone their results) with a state that uses a different approach (Flores, Painter, & Pachon, 2009), and generally takes longer to reclassify ELs.

Those differences in policies mean that each state's EL subgroup can vary in important ways from other states' EL populations. It's impossible to set the right reclassification policies without considering states' approaches to ELs' language supports, assessment, and more. To do that, we'd need better data on how ELs—and former ELs—develop and perform over a much longer time frame.

Fortunately, there's a straightforward fix to this problem. Congress could simply require that districts monitor former ELs beyond the current two years—all the way until graduation. Hopkins and her co-authors suggest doing this by creating a "Total English Learners" (TELEs) subgroup. This new grouping would make it possible for states to disaggregate the achievement data of all current and former ELs, which would make it possible to see how different states' approaches to educating ELs work across a longer time horizon.

In addition, this change would dramatically change how the education system views—and treats—language learning students. When I discussed the TEL proposal with a colleague who works with DLLs on a daily basis, she was excited enough to reanalyze her students' math achievement data in that way. The results were amazing: she found that the TEL group started slightly behind native English speakers at the beginning of this year, but outgrew—and outperformed—the native English speakers by the mid-year interim assessment. She agreed that this provided a more accurate reflection of these students' knowledge than the current system.

So: whenever it gets serious about rewriting No Child Left Behind, Congress really should consider making this (relatively easy) fix. Let's hope that day comes soon (though I wouldn't hold my breath) (Williams, 2014b; Williams, 2015a).

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What Does the Research Say About Teaching Students to Think Like Scientists and Historians: Developing Content-Area Literacy Skills Aligned to the Common Core

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The Common Core State Standards establish guidelines for literacy in science, history/social studies, and technical subjects. These guidelines are designed to help students tackle the types of complex text often encountered in college and careers. Students with learning disabilities often have difficulty comprehending this type of text. This paper offers teachers a way of promoting access to and success in science and history/social studies text using content enhancements designed to help students to think like scientists and historians.

Keywords: content-area literacy, complex text, Common Core State Standards, content enhancements, thinking like a scientist/historian

Introduction

The Common Core State Standards (CCSS) are designed to challenge students to think critically as they tackle the types of complex text that promote college and career readiness (National Governors Association Center for Best Practices, Council of Chief State School Officers, 2010). In the literacy domain, the CCSS focus not only on English language arts but also on history/social studies, science, and various technical subjects (e.g., business). The International Reading Association cited content area/discipline-specific literacy as a hot topic of study for 2015 (Cassidy & Grote-Garcia, 2014). Shanahan and Shanahan (2008) argue that literacy strategies must be embedded within the content areas of science and social studies and should be addressed in middle and high school classrooms.

Unfortunately, students with learning disabilities often experience difficulties as they read content-area text (Therrien, Taylor, Hosp, Kaldenberg, & Gorsh, 2011); these difficulties include poor recall of textual ideas, problems identifying main ideas and supporting details and sifting through extraneous details, and failure to identify text structure as a means of pinpointing important textual information (Gajria, Jitendra, Sood, & Sacks, 2007). Content-area texts are typically information dense with unfamiliar content and technical vocabulary (Mason & Hedin, 2011) and require higher grade-level reading skills (both decoding and comprehension). Students must extract meaning from the text, moving from learning to read to reading to learn as they progress through school (Marchand-Martella, Martella, Modderman, Petersen, & Pan, 2013).

Students in grades 6 to 12 should “learn to approach different texts with different lenses” (Shanahan & Shanahan, 2008, p. 51). This recommendation is especially true in the areas of science and social studies where only 32% (National Center for Education Statistics, 2012) and 20% (National Center for Education Statistics, 2011), respectively, of U.S. eighth graders scored in the proficient range (i.e., demonstrated competency over challenging subject matter) on the National Assessment of Educational Progress.

Improved science education is part of a national priority aimed at increasing the numbers of college graduates who are prepared for careers in STEM fields (science, technology, engineering, and mathematics) (Chen, 2013). Scientific literacy allows students to differentiate science from pseudoscience and to develop an awareness of how science can help solve societal problems (Holbrook & Rannikmae, 2009). As Begley (2010) noted, “Science is not a collection of facts but a way of interrogating the world” (p. 28). The importance of scientific literacy has led some to discuss how students can be taught to “think like a scientist.” A fundamental skill in thinking like a scientist involves using precise reasoning skills to question phenomena students encounter to help make sense of their world

(for a more comprehensive discussion on how to think like a scientist about real-world problems see Williams, Papierno, Makel, & Ceci, 2004). These reasoning skills are fostered through a series of critical thinking questions that students can use as they weigh evidence about issues in daily life.

Further, Reisman (2012) called for teaching students to think or “read like a historian.” All students, including those who experience learning disabilities, are expected to possess a solid understanding of historical content to pass high stakes assessments and to become productive members of a democratic society (Bulgren, Deshler, & Lenz, 2007). Learning to think or read like a historian involves targeted instruction in historical inquiry within history/social studies text and primary source documents by building background knowledge, examining text with multiple purposes, and incorporating in-depth discussion.

Critical analysis and reasoning skills needed for these content areas can be developed through the use of content enhancements (National Institute for Literacy, 2007). Content enhancements may include visual and spatial displays (e.g., graphic organizers) that make relationships more apparent, promote learning, and facilitate better understanding and retention of material (Dexter & Hughes, 2011; Dexter, Park, & Hughes, 2011; Gajria et al., 2007; Swanson et al., 2014). Using content enhancements as part of daily classroom instruction has proven to be an effective strategy for students with learning disabilities (Deshler et al., 2001; Dexter et al., 2011; Gajria et al., 2007). Students use these enhancements when reading new and difficult content-area text to help guide them in their understanding. According to the National Governors Association Center for Best Practices, Council of Chief State School Officers (2010), teachers should assist students with disabilities to meet the high academic literacy standards for grades 6-12 promoted by the CCSS such as citing text evidence; distinguishing facts, opinions, and reasoned judgments; and evaluating claims and evidence. Instructional supports such as content enhancements may offer this type of valuable assistance.

Thinking Like a Scientist

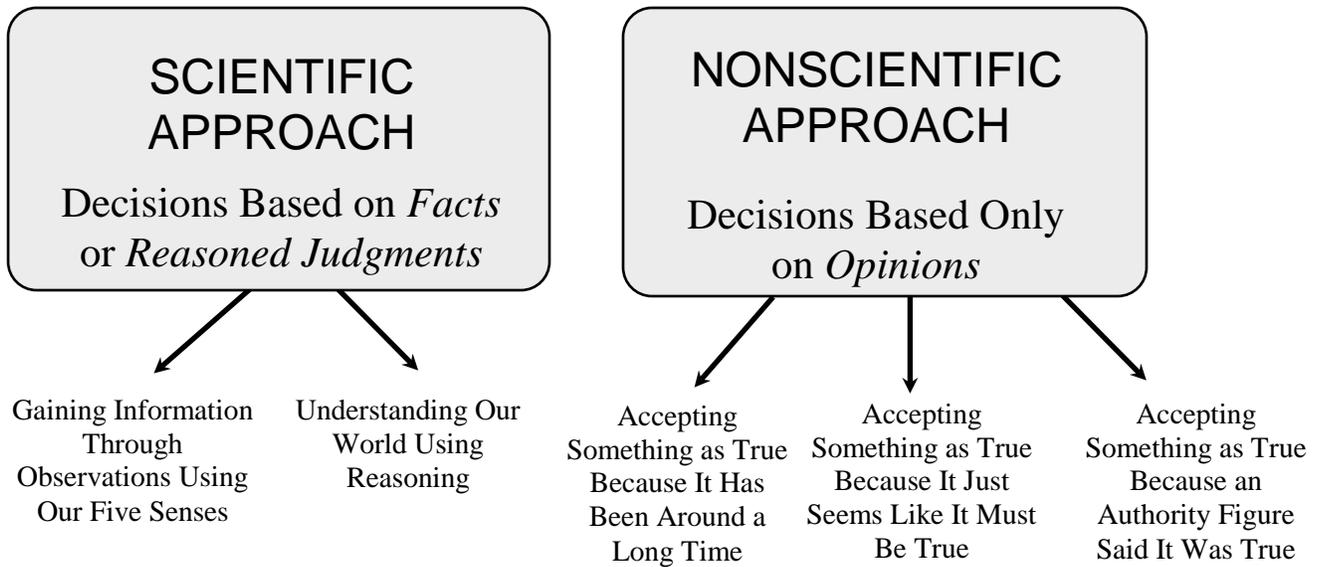
To promote scientific literacy and to help organize learning, teachers can use two content enhancements to teach students to think like a scientist. They include a scientific/nonscientific approach graphic display and a critical thinking graphic organizer.

Scientific/nonscientific approach. Teachers build background knowledge in three steps. First, teachers provide an interesting scientifically oriented quote to prompt discussion such as the following from Albert Einstein: “The important thing is not to stop questioning.” They discuss the quote’s meaning with students as a way to drive student interest.

Second, teachers define the terms *facts*, *opinions*, and *reasoned judgments*. Facts refer to information that can be checked for their accuracy by reference to evidence. Opinions are beliefs based on personal experiences, rationality, or tradition rather than on empirical evidence. Reasoned judgments are opinions supported by facts.

Third, teachers show and explain the graphic display that organizes information under scientific and nonscientific approaches (see Figure 1). Martella, Nelson, Morgan, and Marchand-Martella (2013) describe five ways of gaining information under these two approaches. They categorized two of these ways as scientific—information gained through (a) our five senses and (b) reasoning. They categorized three ways as nonscientific—accepting something as true because it (a) has been around a long time, (b) just seems like it must be true, and (c) is said to be true because an authority figure said it was. Teachers invite students to participate in the discussion of scientific and nonscientific approaches.

Figure 1: Scientific versus nonscientific approaches for making decisions about our world



Critical thinking. Once students have the requisite background knowledge that distinguishes scientific from nonscientific approaches, teachers display the critical thinking graphic organizer (see Figure 2). Teachers guide students through and discuss four critical thinking questions and a conclusion (adapted from Carnine, Silbert, Kame'enui, & Tarver, 2010). Following this guided discussion, teachers present an example of a completed critical thinking graphic organizer based on text that include(s) two viewpoints on the same topic (see Figures 3 and 4).

Figure 2: Critical thinking graphic organizer

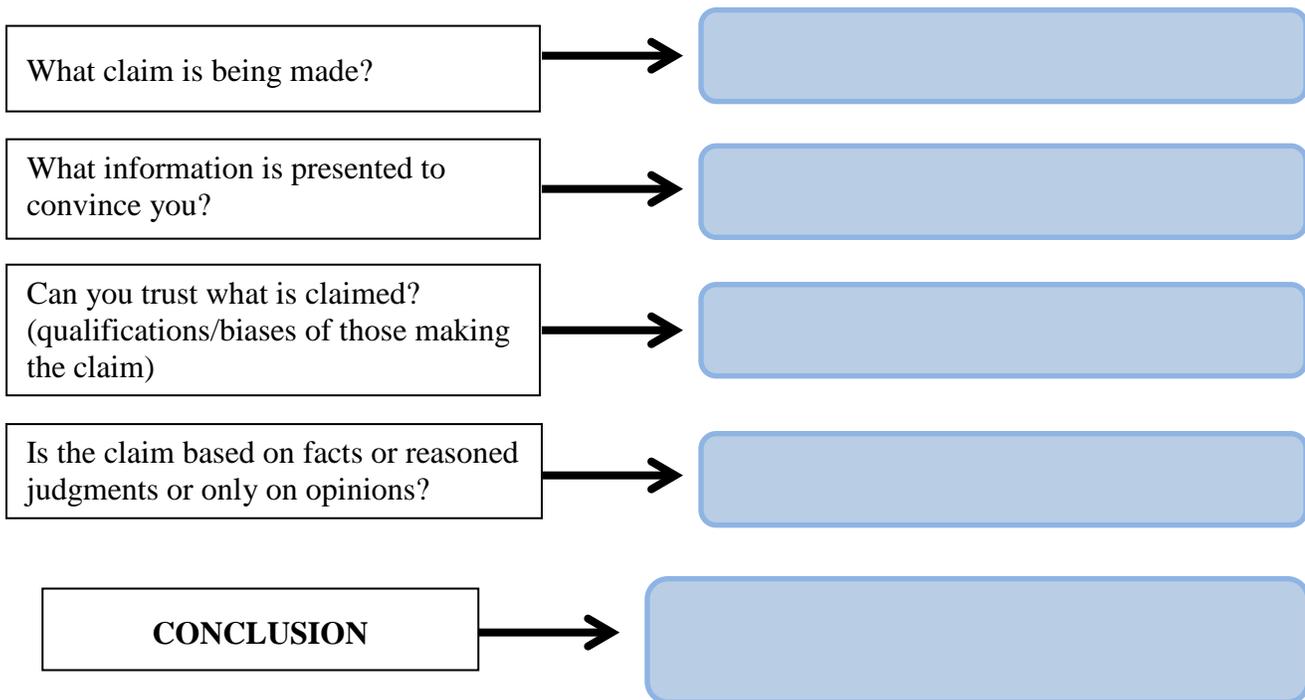
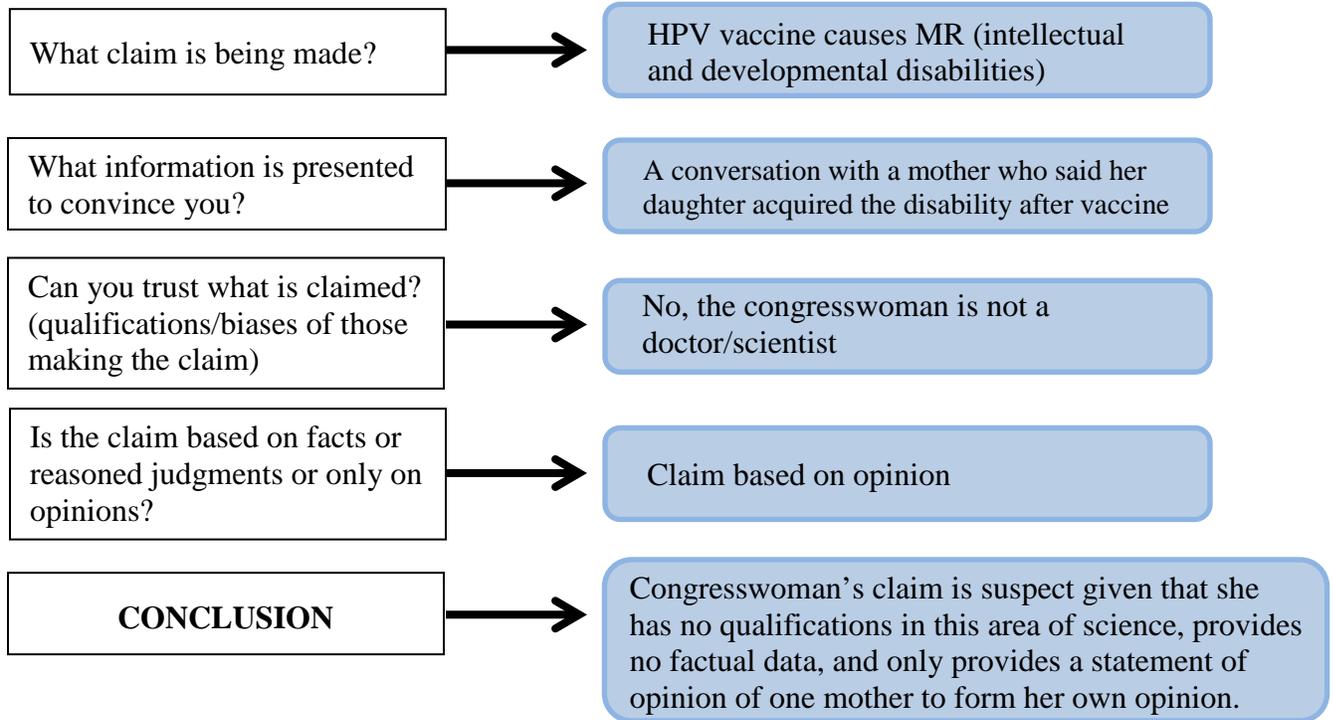
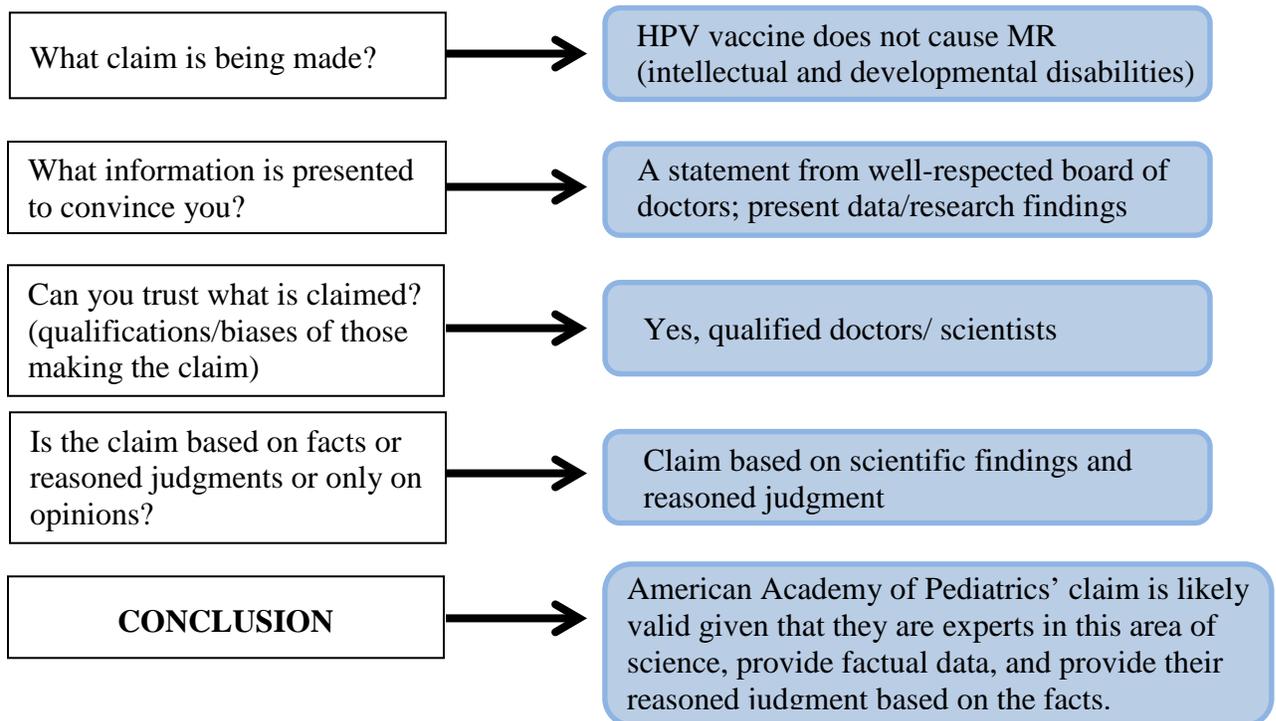


Figure 3. Example of completed critical thinking graphic organizer — Congresswoman¹



¹ Weiner, R. (2011, September 13). Bachmann claims HPV vaccine might cause 'mental retardation.' *The Washington Post*. Retrieved from <http://www.washingtonpost.com>.

Figure 4: Example of completed critical thinking graphic organizer — American Academy of Pediatrics²



² Burton, O. M. (2011, September 13). *AAP statement on HPV vaccine*. Retrieved from <http://www.aap.org>.

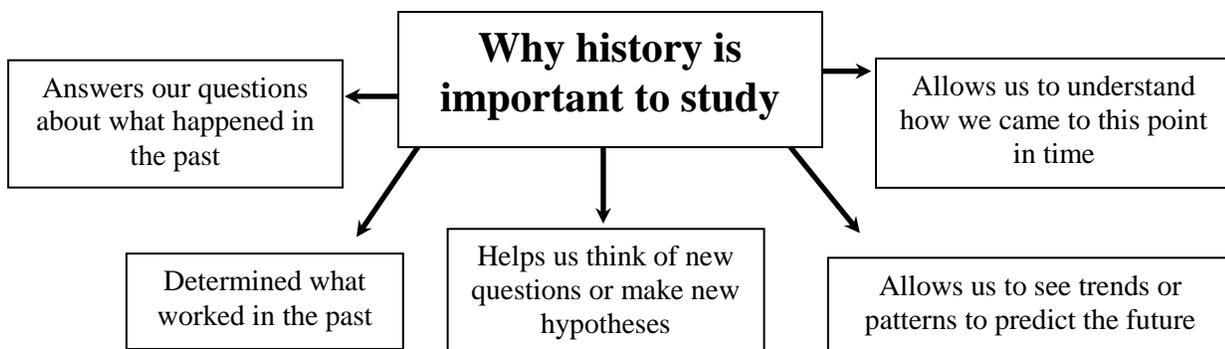
Thinking Like a Historian

To organize learning to promote historical literacy, teachers can use two content enhancements to teach students to think like a historian. These include a graphic display of why history is important as well as a problem-solution-effect graphic organizer.

Why history is important. Teachers help students develop foundational background knowledge by discussing what history is and why it is important. First, teachers provide an interesting historically based quote to prompt student discussion, such as the following from Alex Haley: “Unless we learn from history, we are destined to repeat it.” They discuss the quote’s meaning with students as a way to drive student interest.

Second, teachers show and explain the graphic display that illustrates five aspects of why history is important to study (see Figure 5 adapted from Martella et al., 2013). Understanding the importance of history assists in the development of more informed citizens who participate in a democratic society.

Figure 5: Why history is important to study graphic display



Problem-solution-effect. Once students have the background knowledge of why history is important to study, teachers provide instruction on the “big ideas of history” by displaying the problem-solution-effect graphic organizer (see Figure 6, adapted from Carnine, Steely, and Silbert, 1996). Generally, historical events fall into a three-step sequence. First, there is a problem. Problems are either economic in nature or involve people’s rights. Economic problems might include difficulty in getting and keeping things that people need such as food, shelter, clothing or what they want such as a TV or fancy clothes. People’s rights problems might include constitutionally protected rights such as freedom of religion and freedom of speech.

Second, there is a solution. There are five basic ways to solve a problem: (1) “Accommodate” (i.e., cooperation among groups that have equal power to solve a problem); (2) “Dominate” (i.e., forcing a solution on another group); (3) “Move” (i.e., relocation to another area to escape the problem); (4) “Invent” (i.e., innovation to overcome a problem such as through technological advances or new ways of thinking); and (5) “Tolerate” (i.e., acceptance of weaker groups’ perspectives by stronger groups as a solution to a problem).

Finally, there is an effect. This effect solves the problem, fails to solve the problem, or creates a new problem. Teachers guide students through and discuss the problem-solution-effect graphic organizer and its components. Following this guided discussion, teachers read a sample historical text describing a historical event and lead students through completion of the graphic organizer (see Figure 7).

Figure 6: Problem-solution-effect graphic organizer

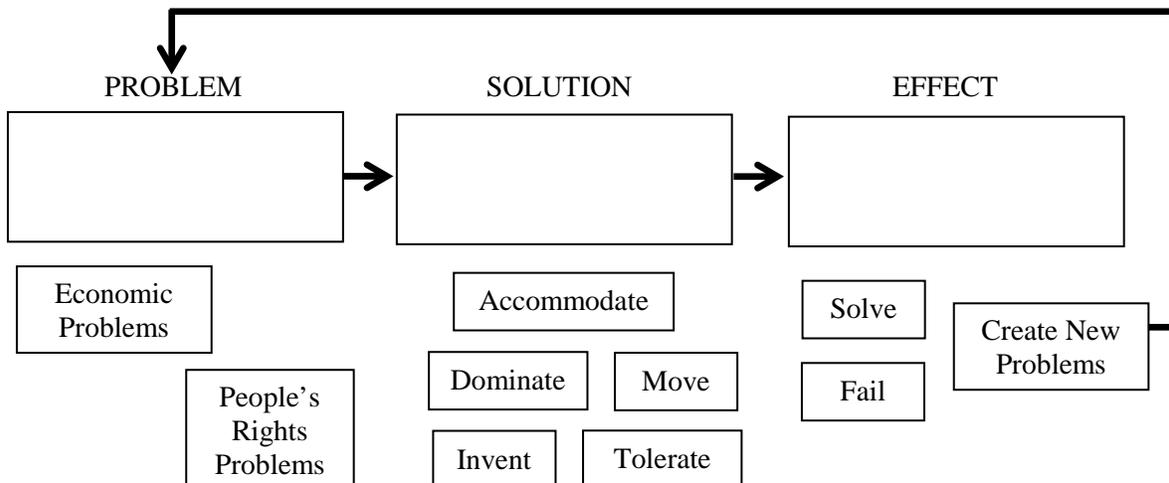
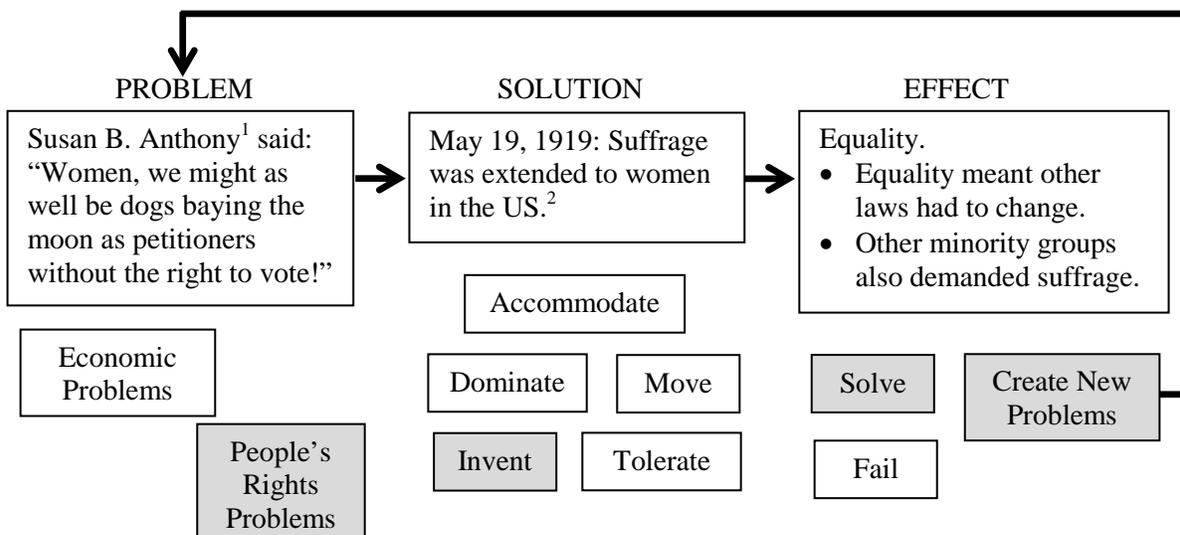


Figure 7: Example of completed problem-solution-effect graphic organizer



¹ Harper, I. H. (1898). *The life and work of Susan B. Anthony* (Vol. II, p. 801). Indianapolis, IN: The Hollenbeck Press.

² Public Broadcasting Service (no date). Battle for suffrage. *American experience*. Retrieved from <http://www.pbs.org/wgbh/americanexperience/features/general-article/eleanor-suffrage/>

Explicit Instruction

The “I do, we do, you do” strategy (see Archer & Hughes, 2011; Marchand-Martella, Martella, & Lambert, 2015; and Weiss, 2013 for details on explicit instruction) is an excellent model for providing effective and efficient instruction using science or history/social studies content enhancements. In the “I do,” teachers read the text aloud

to students, stopping to review critical vocabulary terms necessary for understanding the text. They may find it necessary to review glossary or dictionary use with the students as a means of defining these terms. Teachers then model and explain how to complete the graphic organizer based on what was read. During the “we do,” teachers select a new piece of text, reading it with students; students practice completing the graphic organizer. Teachers praise correct responding and remediate any errors. Finally, during the “you do,” students read a new piece of text independently and complete the graphic organizer. Teachers debrief with students by discussing various contributions as a class. Students will continue to use these graphic organizers when reading new and difficult content-area text to help organize learning and guide them in their understanding.

Summary

Teachers must do more to promote content-area literacy in the classroom (Lee & Spratley, 2010). Access to more complex, content-area text advocated in the Common Core State Standards can be promoted through the use of content enhancements. These content enhancements can be used to help navigate science and history/social studies text. They assist students in thinking like a scientist; students learn to think through and weigh evidence about issues in daily life. They also learn to think like a historian, analyzing problems and their solutions as well as what effects these solutions provide. Explicit instruction serves as the most effective and efficient approach for teaching students how to use these content enhancements.

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An Evaluation of the SRA FLEX Literacy Program: A Pre-Publication Version Shows Promise

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Academic instructional programs that are designed to promote higher-level literacy skills should be field-tested during the product development stage to determine their effectiveness. The purpose of this evaluation was to examine the effects of a pre-publication version of a digital-, print-, and project-based literacy program. A second purpose was to determine teacher satisfaction with the program. Results showed a mean Lexile® growth of 166.30L across all sites; 48% of the students exceeded the expected Lexile® growth from fall to spring assessments. On average, 29% of the expected yearly lessons were completed; the correlation between Lexile® growth and percentage of yearly lessons completed for the program was statistically significant. Finally, teachers reported satisfaction with the program.

Background

Learning to read is the most important skill students can learn in school, serving as the very foundation for all other academic subjects (Marchand-Martella, Martella, Modderman, Petersen, & Pan, 2013). Yet the vast majority of upper elementary and middle school students struggle reading grade level text with ease and understanding. The 2013 National Assessment of Educational Progress findings in reading (National Center for Education Statistics [NCES], 2013) showed only 34% of fourth-grade students scored at or above the proficient level; for eighth graders, only 27% of students scored at or above the proficient level. Students scoring at the proficient level “demonstrate solid academic performance and competency over challenging subject matter” (NCES, 2013, p. 7).

To tackle the U.S. literacy challenge to enhance college and career readiness in a comprehensive and cohesive manner, the Common Core State Standards in English Language Arts (CCSS ELA Initiative, 2012) were developed. These Standards provide teachers and parents with a common understanding of what students are expected to learn in reading, writing, language, and speaking and listening to handle 21st century literacy demands. Programs developed to meet the CCSS should be field-tested to ensure their effectiveness with students. This field-testing should occur across multiple sites, teachers, and student populations. Information such as Lexile® growth, number of lessons completed, and teacher feedback can be gathered. This information may be used to make programmatic changes to ensure instructional effectiveness, efficiency, and satisfaction.

Lexile® growth is an important measure of student reading performance. Lexiles® are used to assess the difficulty of a text (i.e., semantic and syntactic elements) and the skill level of a student (MetaMetrics, 2013). They range from BR (Beginning Readers, or individuals who lack decoding strategies to read connected text fluently and who are reading below 0L on the Lexile® scale), to 1700. Lexiles® allow teachers to set goals for individual student growth (Archer, 2010/2011) and determine if students meet yearly growth expectations (Knutson, 2011). These growth expectations were determined using a representative sample of 373,880 students in grades 3 to 10 (Knutson, 2011) and are based in part on students’ initial Lexile® scores obtained during the fall benchmark period. Because students initially performing far below grade level find it difficult to catch up and make gains similar to their typically-performing peers, more rigorous yearly growth expectations are required. Based on these growth expectations, the lower the initial Lexile® students receive in the fall, the higher their expected growth scores; the higher the initial Lexile® scores in the fall, the lower their expected growth scores. Thus, it is important to ensure students do not fall behind as it is more difficult to catch up than to make typical, grade-level progress. Such a high stakes strategy argues in favor of interventions to prevent students from falling behind in the first place.

The program evaluation had two purposes. The first was to examine the association between Lexile® growth and instruction using a pre-publication literacy program during field-testing. The second purpose was to determine teacher satisfaction with the program.

Methodology

Participants and Settings

The sample of students in this study was one of convenience. Sixty-nine students in grades 3 to 8 across five states (Washington, Georgia, South Carolina, Tennessee, and Texas) were identified by their respective schools as performing at least 2 years below grade level in reading and thus were selected to receive strategic reading intervention support. Table 1 shows the demographic information for these students across state sites. The majority of these students were Caucasian (about 62%) and male (about 61%). Further, 43% of students were identified with special needs. Approximately, 78% of the students qualified for free and/or reduced price meals. All classroom teachers involved in the evaluation were female.

Table 1: Site Demographic Data

	Site					Total
	WA	GA	SC	TN	TX	
Number of students	9	20	13	16	11	69
Gender						
Male	7	10	8	11	6	42
Female	2	10	5	5	5	27
Grade						
3	0	6	0	0	0	6
4	2	4	0	0	0	6
5	1	10	13	3	0	27
6	6	0	0	2	11	19
7	0	0	0	2	0	2
8	0	0	0	9	0	9
Free or Reduced-Price Lunch	-	19	12	8	10	49
Unknown	9	-	-	-	1	10
Special Education	-	1	11	16	1	29
Unknown	9	-	2	-	1	12
Ethnicity						
Caucasian	-	14	11	16	2	43
African American	-	6	1	0	3	10
Hispanic	-	0	0	0	5	5
Unknown	9	0	1	0	1	11

Washington. The Washington (WA) site was one of 28 elementary schools located within an urban district. It served 610 students in grades K-6. Of the 69 students, 9 (13%) were from this site. Information on free or reduced price status, special education status, and ethnicity was not released by the school. Three teachers implemented the program; years of teaching experience were 1, 7, and 15 years. The program was implemented during an after-school program in the school.

Georgia. The Georgia (GA) site was one of 12 elementary schools contained within a large school district. It served 610 students in grades preschool–5. Of the 69 students, 20 (29%) were from this site. One teacher implemented the program. She had 30 years of teaching experience and taught in a general education classroom.

South Carolina. The South Carolina (SC) site was one of five elementary schools and was considered rural. It served 532 students in grades preschool-5. Of the 69 students, 13 (18.8%) were from this site. One teacher with 8 years of teaching experience implemented the program in a special education resource classroom.

Tennessee. The Tennessee (TN) site was one of four middle schools in a large district. It served 689 students in grades 5-8. Of the 69 students, 16 (23.2%) were from the TN site. Two teachers implemented the program with 11 and 21 years of experience, respectively. Both teachers implemented the program in a special education resource classroom.

Texas. The Texas (TX) site was one of 20 middle schools located within a large district. It served 910 students in grades 5 and 6. Of the 69 students, 11 (15.9%) were from the TX site. The teacher had 15 years of teaching experience. The program was implemented in a general education classroom.

Materials

The schools implemented a pre-publication version of *SRA FLEX Literacy* (Marchand-Martella et al., 2014). This program included three experiences (i.e., digital, print, and project) within each of two systems (elementary and secondary). Sample lessons and program specifics across systems and experiences can be found at <http://www.flexliteracy.com/sampler/register> and <http://flexliteracy.com/reading-intervention-program>.

The digital experience provides computer-based learning with vignettes and animated learning opportunities; in this 25-minute, individualized experience, students read and interact with text and earn points toward rewards.

The print experience provides teacher read aloud and shared reading experiences so that struggling students can access more complex, print-based text. For 25 minutes, teachers lead a group of students in discussion and individualized skill application, with in-depth focus on developing deeper comprehension strategies. Individualized teacher-led remediation based on the digital experience, extension activities to enhance critical thinking, and trade books are central to this learning experience.

The project experience helps students build college and career readiness skills in writing- and literacy-centered projects that include research, presentation collaboration, reflection, and evaluation. For 50 minutes, students apply the skills and strategies they learned in the digital and print experiences to science, social studies, and health projects to make cross-curricular connections.

Dependent Variables and Measures

Three primary dependent variables were used in this evaluation: program completion, reading improvement, and program satisfaction by teachers.

Program completion. Program completion was determined by dividing the number of lessons completed by the number of instructional days available for the program (180). To maintain program integrity, the completion of one lesson per instructional day was the goal. One lesson per day was selected to ensure adequate student progress in the program.

Reading improvement. Reading improvement was determined by subtracting each student's pre-program placement score on the Lexile® assessment from the highest benchmark score obtained during the program (as recommended by Archer, 2010/2011). Lexile® assessments are embedded at quarterly benchmark intervals within the digital experience. At the start of the program, students participated in a pre-program placement assessment, the result of which served as the pre-program Lexile® score. This score was subtracted from the highest benchmark score to obtain a Lexile® growth score. Growth scores were compared to the expected growth based on fall scores and needed growth to reach the 50th percentile in Lexile® performance.

Program satisfaction. Participating teachers completed a survey to determine teacher perceptions of the program's impact and to solicit feedback about the program (see Table 2) at the end of the academic year. The teacher survey

included 10 items related to program satisfaction. The survey was constructed solely for this study and was not used in previous studies. Survey items were rated on a Likert-like scale, with response categories ranging from 1 (Strongly Disagree) to 6 (Strongly Agree). Cronbach’s alpha for the 10 items was .617.

Table 2: Teacher Satisfaction Survey and Results

Item	Strongly Disagree	Moderately Disagree	Mildly Disagree	Mildly Agree	Moderately Agree	Strongly Agree
<i>SRA FLEX Literacy</i> addresses content standards.	0	0	0	0	5	3
I felt successful teaching <i>SRA FLEX Literacy</i> .	0	0	0	1	3	4
<i>SRA FLEX Literacy</i> made my students feel successful.	0	0	0	0	3	5
The students found the lessons engaging.	0	0	0	1	3	4
My students felt successful during the <i>Print Experience</i> .	0	0	1	0	2	5
The <i>Print Experience</i> was engaging for my students.	0	0	0	1	2	5
My students felt successful during the <i>Project Experience</i> .*	0	0	0	2	3	2
The projects were engaging for my students.**	0	0	0	1	3	3
My students felt successful during the <i>Digital Experience</i> .	1*	0	2	1	0	4
I would recommend <i>SRA FLEX Literacy</i> to others.	1*	0	0	1	2	4

* Note: Teacher indicated that her responses reflected frustration with technology at this particular site.

** One teacher did not respond to this question.

Procedures

The literacy program was implemented in the fall of the 2012-2013 school year. The approximate dates for program implementation were late September for the SC site, early to mid-October for the WA, GA, and TN sites, and early November for the TX site. Prior to implementation of the program, teachers were provided a half day of on-site training for the print and project experiences, and lessons in the digital experience were demonstrated to the teachers. Five consultants from the program publisher provided the training that included modeling lessons, guiding participants through lessons, and coaching and giving feedback on teacher performance. They served as the primary point of contact, conducted classroom visits, and collected all data. All consultants held a bachelor’s (TN) to doctoral (GA) degree in teaching with 7 (TN) to 10 (GA, SC, TX, WA) years of administrative and/or teaching experience.

The time allotted for instruction, degree of program implementation, and the setting in which the program was used varied by site. Two of three teachers at the WA site allotted between 45 to 60 minutes per day for instruction, and one teacher allotted 30 minutes per day for instruction. The GA, SC, TN, and TX sites allotted 90 to 120 minutes per day for instruction. The WA site utilized the print and digital experiences, and the GA, SC, TN, and TX sites implemented the print, digital, and project experiences. All classrooms contained an interactive whiteboard/ Smartboard and computers with two exceptions—the WA and SC students accessed computers in a computer lab rather than the classroom.

Procedural Fidelity

Consultants reported findings via narratives, along with a single final, summative rating on a scale of 1 (extremely low fidelity of program implementation) to 10 (highest degree of program implementation). The summative rating reflected the consultants’ holistic observations compiled throughout the study. The average ratings ranged from 5 (GA) to 9 (SC). At the GA site, concerns centered on failure to follow all program requirements and deviations from the program script. The SC site classroom was considered a model for implementation by the consultant.

Analysis and Results

Data analysis and interpretation was conducted by an independent evaluator (first author); the evaluator was permitted to publish findings without publisher oversight. Additionally, the program authors (second and third authors of this paper) were not involved in data analysis and interpretation of the results.

Program Completion

The percentage of yearly lessons completed varied significantly by site, $F(4, 64) = 72.83, p = .000$. The mean percentage of yearly lessons completed was 29.32% (see Table 3).

Table 3: Lexile® Growth Across Sites

Site	Number of Students	Mean Entry Lesson	Mean Ending Lesson	Mean Number of Lessons	Mean % Complete (1/day for 180 days)	Mean Placement Lexile	Mean Highest Lexile	Mean Lexile Growth
WA	9	139.33	147.44	9.11	5.06%	543.89	600.00	56.11
GA	20	111.25	159.30	49.05	27.25%	401.75	578.25	176.50
SC	13	10.23	130.08	120.85	67.14%	73.46	390.77	317.31
TN	16	74.75	120.50	46.75	25.97%	362.81	515.63	152.82
TX	11	156.45	179.09	23.64	13.13%	577.73	657.73	80.00
Combined (weighted)	69	94.62	146.41	52.78	29.32%	473.75	543.91	166.30

Lexile® Growth

The mean Lexile® growth was 166.30L across the five sites (see Table 3). As shown in Table 4, the mean Lexile® growth ranged from 92.11L (Grade 6) to 216.30L (grade 5). Students in grades 5, 7, and 8 exceeded the expected Lexile® growth. None of the grades overall met or exceeded the needed Lexile® growth to reach the 50th percentile for the spring Lexile® measures.

Table 4: Lexile® Growth Across Grade Levels

Grade	Number of Students	Mean Entry Lesson	Mean Ending Lesson	Mean Number of Lessons	Mean % Completed (1/day for 180 days)	Mean Placement Lexile	Mean Highest Lexile	Mean Lexile Growth	Mean Expected Growth ¹	Mean Needed Growth ^{1,2}
3	6	54.33	117.33	64.00	35.56%	305.00	466.67	161.67	189.00	285.00
4	6	77.67	124.50	47.83	26.57%	261.67	465.83	204.17	221.00	438.33
5	27	85.26	160.22	75.96	42.20%	315.74	532.04	216.30	196.00	494.26
6	19	131.26	152.79	22.52	12.51%	507.63	599.74	92.11	96.00	372.37
7	2	61.00	102.00	42.00	23.33%	347.50	527.50	180.00	151.00	607.50
8	9	91.00	135.33	45.33	25.18%	420.00	568.89	148.89	139.00	580.00

¹Based on Growth Expectations by Knutson (2011)

²50th Percentile Spring Target Measure

Overall, 33 of the 69 students (47.8%) exceeded the expected Lexile® growth from fall to spring. The numbers of students who exceeded the expected Lexile® growth by grade level were as follows: three of six for grade 3, two of six for grade 4, 14 of 27 for grade 5, nine of 19 for grade 6, one of two for grade 7, and four of nine for grade 8.

Relationship between Lexile® growth and program completion. The correlation between Lexile® growth and percentage of yearly lessons completed for the program was calculated and determined to be statistically significant, $r = .559$, $n = 69$, $p < .001$ (two-tailed). Multiple regression analysis was used to determine the association between Lexile® growth and instruction, after controlling for the number of lessons completed and the program experiences implemented (addition of the project experience). The results of the regression indicated that the number of lessons completed and the program components implemented explained 31% of the variance ($R^2 = .318$, $F [2, 66] = 15.381$, $p = .000$). It was determined that the number of lessons completed significantly accounted for Lexile® growth, ($b = 1.86$, $t[66] = 4.66$, $p = .000$). The addition of the project experience was not found to be statistically significant, ($b = 32.99$, $t[66] = .706$, $p = .483$).

Program Satisfaction

Overall, teachers generally found the program to meet the CCSS and to be a positive experience for their students (see Table 2). All or the majority of teachers selected either Strongly Agree or Moderately Agree to all questions with the exception of one—students feeling successful during the digital experience. The teachers reported the main issue with this category was frustration with technology issues (these issues were rectified in the published version of the program). Most importantly, six of the eight teachers reported they would recommend the program to others, with one teacher mildly agreeing and one strongly disagreeing. Again, the teacher strongly disagreeing had concerns over technology issues.

Discussion

This program evaluation had two purposes. The first purpose was to examine the Lexile® growth data of students who were exposed to a pre-publication literacy program during field testing. The second purpose was to determine the teacher's satisfaction with the program. Ultimately, the results of this evaluation were used to make programmatic revisions to enhance ease of implementation to better meet the needs and expectations of teachers.

Positive findings were evident in this investigation. First, although the majority of the yearly lessons were not conducted, the mean Lexile® growth across sites and grade levels was statistically significant. In fact, on average, students in grades 5, 7, and 8 exceeded the expected Lexile® growth. This is notable, because once behind it is very difficult for lower-performing students to make the necessary expected gains. Although the average Lexile® growth for students in grades 3, 4, and 6 was below the level expected for a year of instruction, their average gains were less than 28L of what would be expected. Also, almost 48% of students exceeded the expected Lexile® growth. Importantly, there was a statistically significant relationship between Lexile® growth and percentage of yearly lessons completed. Thus, the more lessons students completed, the greater gains they made. This result can be seen when comparing the SC site to the other sites. These results underscore the difficulty students at risk face when they fall behind in their reading skills.

Another positive finding of the evaluation was that the teacher perceptions of the program were positive. Six of the eight teachers reported they would recommend the program to others. The only concern voiced by teachers related to technology issues (e.g., web access, comfort with computers), underscoring the need for teacher training and support with regard to technology.

Limitations

Although positive findings were seen in this evaluation, there were limitations. First, because this was a program evaluation of the pre-publication program, an experimental design was not used to determine cause-and-effect relationships between the program and the outcome effects.

Second, there was a lack of program completion over the period of a year. Due to the nature of the evaluation—to provide ongoing feedback on the strengths and weaknesses of the program for further refinement—there were several “starts and stops” along the way. Therefore, it is not known what the effects of a year-long implementation would be.

Third, there was some variation in implementation across sites. This variation was likely due to the program evaluation aspect of the investigation where there was continual refinement in the program. Therefore, it is not known if, and how, this variation of instructional delivery affected student performance.

Conclusions

Although there were several limitations with this evaluation, results suggest that the targeted literacy program (now revised based on the gathered information) may be an effective one for students who are at risk for reading failure. These field-testing-based results were promising and lay the foundation for further research on the effects of the published version of this literacy program (Marchand-Martella et al., 2014).

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Improving Middle School Reading Comprehension

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Twenty middle school students received targeted reading instruction for 22 weeks using a reading-to-learn intervention program. Scores on the AIMSweb MAZE CBM served as the dependent measure. Seventeen students from the same middle school served as the comparison group. Results indicated that the intervention produced statistically and educationally significant effects.

“Comprehension is the reason for reading. If readers can read the words but do not understand what they are reading, they are not really reading” (Armbruster, Lehr, & Osborn, 2006, p. 41). Unfortunately, the vast majority of middle school students struggle reading grade level text with ease and understanding. Reading difficulties are associated with school dropouts, unemployment, and failure in college (Marchand-Martella, Martella, Modderman, Petersen, & Pan, 2013). To tackle U.S. literacy difficulties and to enhance college and career readiness, the Common Core State Standards in English Language Arts (CCSS ELA) were implemented. The key emphasis in the CCSS ELA involves reading to gather meaning to enhance 21st century learning requirements.

Marchand-Martella et al. (2013) discuss the importance of the CCSS ELA and academic literacy for adolescent learners. Academic literacy means students can draw meaning from informational and advanced literary text, the kind of reading necessary to enhance college and career readiness.

This investigation targeted adolescent students in one middle school in eastern Washington with the purpose of improving reading comprehension. Thirty-seven students participated (see Table 1 for demographic information) over 22 weeks. Of these, 20 students (experimental group) who were at risk for school failure and attended a reading remediation class participated in *Read to Achieve* (Marchand-Martella & Martella, 2010), a reading intervention program designed to teach reading-to-learn strategies (comprehension and vocabulary) along with fluency building within more complex science and social studies text for students in grades 6 and above. The other 17 students served as a comparison group.

Table 1: Demographic Data

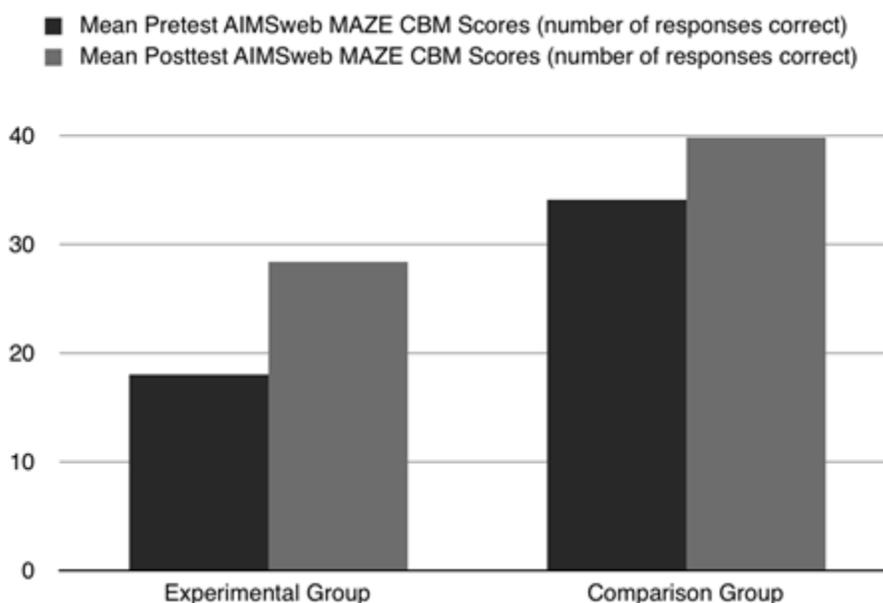
	Experimental Group (N=20)	Comparison Group (N=17)
Male / Female	75% / 25%	53% / 47%
7 th Grade	40%	47%
8 th Grade	60%	53%
Special Education	35%	0%
Free and Reduced Price Lunch	55%	0%

AIMSweb MAZE CBM (Shinn & Shinn, 2002) was used to measure the participants’ reading comprehension. This assessment is technically adequate and is a widely used measure of student growth in reading comprehension. The first sentence of a grade-level MAZE passage was left intact, and then every subsequent seventh word was replaced with three words inside parentheses (e.g., His teacher [know/said/past] to bring two dollars), one of which was from the original passage and the other two being near and far distractors. In accordance with standardized administration procedures, students were given 3 minutes to complete the task. The number of words correctly circled was recorded and served as the metric to evaluate the reading comprehension of participants.

Results and Discussion

As shown in Figure 1, students in the experimental group improved from 18.0 (SD = 3.9) responses correct (RC) in the fall to 28.4 (SD = 7.1) in the spring; whereas comparison students improved from 34.1 (SD = 9.1) to 39.8 (SD = 7.7). From fall to spring, students in the experimental group improved an average of 10.4 (SD = 7.7) RC, whereas comparison students improved an average of 5.7 (SD = 6.0). An independent samples t-test was conducted on the change scores of experimental and comparison groups. The improvement in the reading comprehension of students in the experimental group compared to comparison students was statistically significant ($p < .05$).

Figure 1: Mean improvements from pretest to posttest assessments on the AIMSweb MAZE CBM across experimental and comparison groups



An effect size estimate was used to determine if differences in the change scores of experimental and comparison students were educationally significant. Interpretations of the magnitude of effect sizes were made using Cohen (1988)—an effect size of 0.2 is considered small, an effect size of 0.5 is medium, and effect sizes of 0.8 or greater are large. A moderate effect size difference of .70 was found. Thus, the reading intervention appeared to have produced educationally significant improvements in the students' reading comprehension.

Overall, students in the experimental group (*Read to Achieve*) had statistically significantly greater gains on the AIMSweb MAZE CBM than did the comparison group. Those students in the experimental group who received *Read to Achieve* had a much greater rate of improvement per week on the AIMSweb MAZE CBM than did the comparison students. More focus should be placed on strategies that target reading comprehension for middle school students; *Read to Achieve* may offer promise as a reading intervention for this student population.

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Highly Capable for All: A Study of the Implementation of Expanded Highly Capable Services in Washington State

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Washington State recently established new state requirements for highly capable (HiCap) programs. This paper provides a brief summary of how districts are responding to these new demands. Specifically, we report on how districts are identifying students for HiCap services and how these students are being served. Based on responses to a statewide survey, we find wide variability in the identification processes and service models used.

In 2013 the Washington State Legislature determined that “for highly capable students, access to accelerated learning and enhanced instruction is access to a basic education” (OSPI Bulletin No. 016-13, July 1, 2013). The Washington Office of Superintendent of Public Instruction (OSPI) then advised all school districts that each district’s annual plan had to include a plan to identify and serve highly capable¹ students in all grades K–12 (op. cit.). School year 2013-14 was a transition year with full implementation required in 2014-15. For many school districts, the biggest change triggered by this ruling was the need to expand their services to include all eligible students in kindergarten through grade 12. Previously many districts started highly capable services around second grade and did not identify students at secondary grade levels.

To determine how school districts are implementing the new highly capable (HiCap) requirements, Seattle Public Schools created an online survey in March 2015 and sent it to all 264 designated district HiCap program managers in the state. A total of 80 responses were received (30% response rate). This report is a brief summary of the key findings of that survey that relate to identification processes and service models.

Findings

Identification

The survey contained several questions relating to the need to evaluate a broader range of students.

- Figure 1 shows the assessments used to identify **Kindergarten** students. The Cognitive Abilities Test (CogAT) was used most frequently, followed by observational tools. Respondents indicating that “other” assessments were used cited WaKIDS, classroom-based assessments, teacher information and parent comments, and other available assessments.
- Table 1 shows the extent to which districts require test results for **referred students** every year. About 30% indicated that this was not required.
- Table 2 shows how districts assess **new students**. OSPI requires that new students who were not enrolled the previous year must be identified in the first three months and be provided services that year if identified. Less than half the districts responding were accommodating all or most of the new students within the 3-month time period. One in four districts responded that they were not aware of this requirement.
- Figure 2 shows the various ways districts identified students in **secondary grades** (8-12). Most districts used an application, grades, and test scores. Comments provided by districts indicated that students self-select for advanced courses and those meeting prerequisites are enrolled in those courses, and previously identified students continue to be identified as HiCap students. Test scores, rating scales, and nominations are also sometimes used to identify these students.

¹These services are provided in districts under a wide variety of names including gifted, and gifted and talented. We use “highly capable” in this report because it is the term used by OSPI.

Figure 1: What kind of testing/data is required for identification in Kindergarten? (Check all that apply)

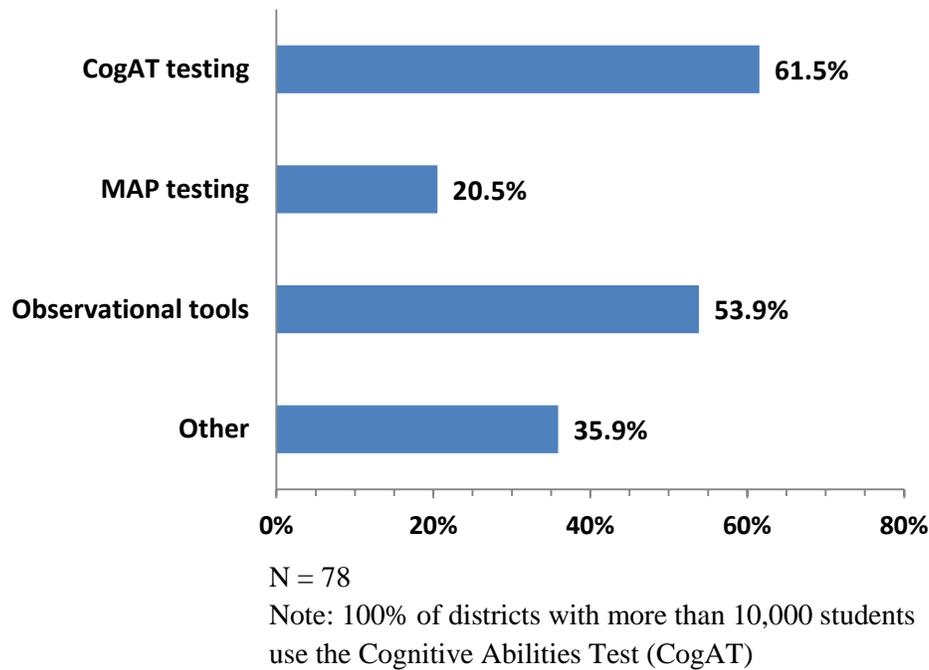


Table 1: Do you require current test scores for all referred students in grades K-12 every year?

Yes	53.8%
No	29.5%
Yes, with exceptions	16.7%

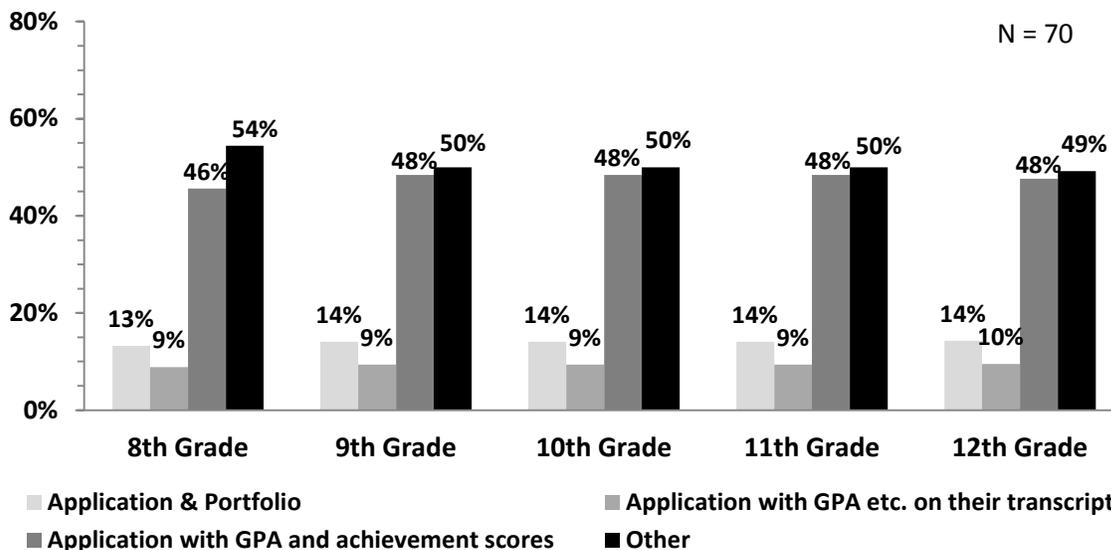
N = 78

Table 2: According to the OSPI website, districts must "include a process to identify students — not enrolled in the district during the previous year's identification cycle. Districts must identify these students within the first three months of their enrollment and deliver services during this new or transfer year." How does your district respond to this requirement?

We accommodate all of these students who transfer into our district within the 3-month time frame.	38.5%
We accommodate most of these students who transfer into our district within the 3-month time frame.	9.0%
We accommodate some of these students who transfer into our district within the 3-month time frame.	7.7%
We cannot accommodate these students who transfer into our district within the 3-month time frame.	3.9%
We were unaware of this requirement.	25.6%
Other (please specify below)	15.4%

N=78

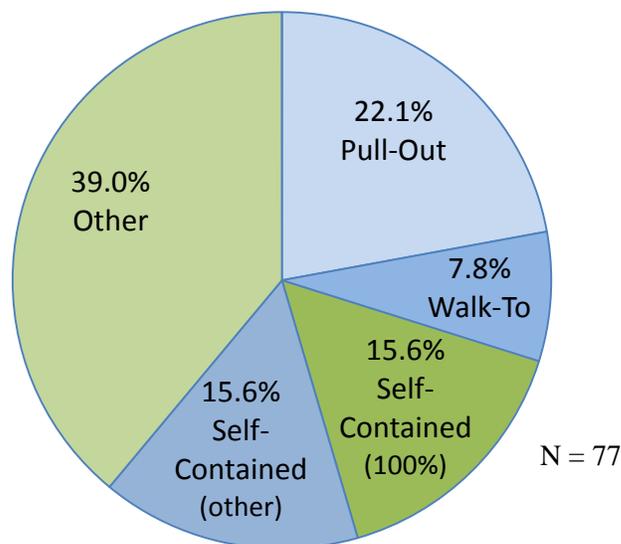
Figure 2: What is your identification process for students currently in 8th, 9th, 10th, 11th, and 12th grade?



Service Model

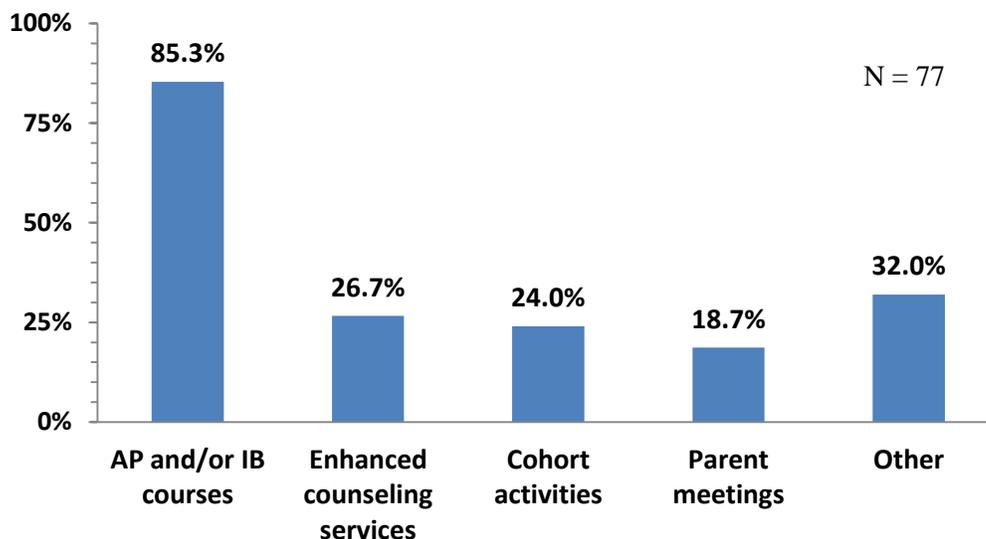
The survey also explored how HiCap services are provided. Figure 3 shows that many models are being used. Pull-out and different types of self-contained models were used in about half the districts. Many districts commented that they used a combination of service models, depending on the grade and subject. For example, one district said that students in grades K-6 are pulled out once a week for 45 minutes but students in grades 7-12 are in self-contained models. Another district reporting having its HiCap students meet after school or at lunch to explore various activities and also take a field trip during the year. Differentiated instruction within the regular classroom was also mentioned.

Figure 3: What is your model for providing services for Highly Capable Students?



High school students mainly are served by taking Advanced Placement or other types of challenging courses (see Figure 4). Other types of courses mentioned included honors classes, Running Start, and online classes.

Figure 4. Which specific services do you offer High School students designated as HC?



Discussion

Although many different approaches to HiCap identification are being implemented among the 80 school districts that replied to the survey, there is a great deal of commonality as well. Most districts are using test scores or other quantitative data as the predominant means of identifying students, with the exception of kindergarten where observation plays a significant role. A quarter of the responding districts were unaware of the requirement to assess new students within three months of entry. This implies a need for further training or guidance from OSPI on this issue.

There is greater variability in the service models offered, ranging from traditional self-contained and pull-out programs to activity-based services. Clearly the districts that participated in this survey are experimenting with a variety of ways to meet the needs of this diverse population. Given that there is no single way to define HiCap learners and no mandated criteria for identifying them, it is not surprising there is a wide-range of service models.

About the Authors

Stephen B. Martin is Supervisor of Highly Capable Services and Advanced Learning Programs for Seattle Public Schools. Michael A. Power is Director of Assessment and Student Learning for Shoreline Public Schools.

How Children Succeed: Grit, Curiosity and the Hidden Power of Character, by Paul Tough

Reviewed by Vera Risdon

Excellent teachers know “by heart” what Paul Tough describes in his synthesis of research on learning, interspersed with illustrative stories and interviews with experts. Such teachers know that, while cognitive skills are important, without sustaining character traits such as grit (persevering in adversity), optimism, resilience and social agility, success is not assured. Every such teacher can point to bright students who do not persevere, do not work well with others, or cannot delay gratification. Tough describes the current emphasis on cognitive skills as “misguided” and builds a case for looking at other aspects of education that need our focused attention.

Research has revealed much about brain development and educators’ ability to change what, until now, have seemed irreversible developmental patterns. Tough cites the Adverse Childhood Experiences study that demonstrated powerful correlations between adverse childhood experiences and negative adult outcomes and problems at school. A further conclusion drawn from the data is that it is the stress of early adversity that causes damage to developing brains and bodies, particularly the development of self-regulatory activities, not simply the condition of living in poverty. Neuroscientists have demonstrated that the effects of early stress are biochemical in nature and can be counteracted.

The brain’s “executive function” regulates emotions and thoughts (i.e., one’s ability to concentrate and to rebound from disappointment). Improving executive function, Tough points out, can improve school success, particularly because these skills are more malleable than other cognitive skills. Tough also discusses the adolescent brain and its particular challenges. One of the most promising facts about programs that target these neurological pathways is that efforts to improve executive function can be effective later on in childhood, too—more so than cognitive interventions. (Pure IQ is stubbornly resistant to improvement after age eight.)

In the chapter How to Build Character, Tough discusses studies designed to answer this question, with varying results, and describes current programs intended to produce improved “character”. Working particularly with middle school students and focusing on metacognition has the demonstrated potential to improve the character traits connected to success. Tough discusses at length the impact of teaching students chess, with emphasis on developing character traits that separate the merely talented from the highly successful through focus on metacognitive skills related to executive function.

Research on college completion provides a final point of support for Tough’s focus on character trait development. While IQ scores predict SAT/ACT outcomes, it is measures of self-control that predict high school GPA, which best predicts college completion. Tough describes various reform efforts in the US and suggests that, instead of focusing solely on improving teacher quality, the bigger question is how to significantly improve the success of children who have faced a high level of early adversity. He recommends a system that promotes development of executive function skills and might include a pediatric wellness center, parenting interventions, pre-school programs, and other character-building interventions both inside and outside the classroom--interventions rooted in knowledge of brain chemistry.

Reference

Tough, Paul (2012). *How Children Succeed: Grit, Curiosity and the Hidden Power of Character*. Boston, New York: Mariner Books, Houghton Mifflin Harcourt, 231 pages, \$15.95. ISBN: 978-0-544-10440-2

Reviewer: Vera Risdon retired in 2013 as the Interim Superintendent for the Renton School District. She also served there as Assistant Superintendent for Learning and Teaching among other roles. She consulted extensively on school improvement efforts and administrative coaching in Washington State. Contact her at vrison@msn.com.

Top 14 List: Recommended Summer Reading

Reviewed by Andrea Meld

These books are on my list for summer reading. I was trying to create a Top Ten List, but since there are some common themes and connections between books, I found that I couldn't reduce the list to 10. All books (except the one by Yong Zao) are available at King County Library.

1. [The Teacher Wars](#): A History of America's Most Embattled Profession by [Goldstein, Dana](#) (**Book** - 2014). Dana Goldstein traces the history of trends and controversies in American education to uncover a lot of surprising connections, highly relevant to current debates regarding teacher evaluation and classroom practice.
2. [Inside the Black Box of Classroom Practice](#): Change Without Reform in American Education by [Cuban, Larry](#) (**Book** - 2013). Cuban starts with the observation that "With so many major structural changes in U.S. public schools over the past century, why have classroom practices been largely stable, with a modest blending of new and old teaching practices, leaving contemporary classroom lessons familiar to earlier generations of school-goers?" Cuban has been a WERA conference speaker.
3. [Excellent Sheep](#): The Miseducation of the American Elite and the Way to A Meaningful Life by [Deresiewicz, William](#) (**Book** - 2014). This is a controversial book which sparked commentary in the *New York Times* recently. Exactly what are colleges educating students for and should this be changed? Have American educational values become too corporate and left little time for other values?
4. [The Heathen School](#): A Story of Hope and Betrayal in the Age of the Early Republic by [Demos, John](#) (**Book** - 2014). The education (or miseducation) of Native American children is still newsworthy. Did the attempts at their education and inclusion in Early America by well-meaning missionaries lead to the eradication of their language and culture, and to present social injustices?
5. Newest Book by Yong Zhao: [Who's Afraid of the Big Bad Dragon: Why China has the Best \(and Worst\) Education System in the World](#) (November 2014). Zhao explores the success and failures of the Chinese educational system, arguing that in advancing educational "excellence" the Chinese system also leads to a stifling degree of conformity and lack of creativity in students – a cautionary tale.
6. [Deeper Learning](#): How Eight Innovative Public Schools Are Transforming Education in the Twenty-first Century by [Martinez, Monica](#) (**Book** - 2014). The authors take us inside eight schools that have transformed the learning experience, present examples of what "Deeper Learning" looks like, and offer suggestions for policy makers and teachers.
7. [How We Learn](#): The Surprising Truth About When, Where, and Why It Happens by [Carey, Benedict](#) (**Book** - 2014). What you thought you knew about the way people learn is all wrong, and why. How are these "truths" related to the way we go about educating students and the assumptions that we have invested in our educational system and classroom practice?
8. [The Teaching Brain](#): An Evolutionary Trait at the Heart of Education by [Rodriguez, Vanessa](#) (**Book** - 2014). For some people, this book may be a "game changer," showing through scientific research and example that teaching is more than simply a transfer of knowledge from teacher to student. Harvard researcher Vanessa Rodriguez explores evolutionary cognitive skills and learning that develop from birth to adulthood.

9. [1001 Ideas That Changed the Way We Think](#) (**Book** - 2013). This is a good reference book which might also change the way that you think about ideas; explores “the most interesting and imaginative thoughts from the finest minds in history...from Confucius and Plato to today's cutting-edge thinkers.” Recommend “for everyone with a curious mind.”--Front jacket flap.
10. [A Mind for Numbers: How to Excel at Math and Science \(even If You Flunked Algebra\)](#) by [Oakley, Barbara A., 1955-](#) (**Book** - 2014). Even statisticians can experience math phobia and get the blues. Barbara Oakley leads the way in showing that excellence in math is not beyond our reach, that math can be a creative process with multiple solutions to problems and “not as painful as some might think!”
11. [Brain Rules: 12 Principles for Surviving and Thriving at Work, Home, and School](#) by [Medina, John](#) (**Book** - 2014). Medina has made at least one presentation to WERA audiences. Some rules he explores: everyone’s brain is wired differently, sleep and exercise improve cognition, but stress changes our learning patterns, we learn and explore continuously, and that vision overpowers all other senses.
12. [The Language Hoax: Why the World Looks the Same in Any Language](#) by [McWhorter, John H.](#) (**Book** - 2014). McWhorter, who writes engagingly about linguistics, debunks the Sapir-Whorf Hypothesis, that language determines or influences thought, and explores why some people find this belief difficult to let go.
13. [The Sense of Style: The Thinking Person's Guide to Writing in the 21st Century](#) by [Pinker, Steven](#) (**Book** - 2014). Pinker, a best-selling author, linguist, and cognitive scientist revamps the style manual, posing the question, “Why is so much writing so bad, and how can we make it better?”
14. [Knowledge Is Beautiful](#) by [McCandless, David](#) (**Book** - 2014). This book will expand your horizons on the visual display of information, on beyond Edward Tufte. Caution: don’t try to attempt some of these confections using Excel.

Reviewer: Andrea Meld, Ph.D., is an Assessment Applications Analyst for the Kent School District. She is a former WERA Board Member and Editor of WERA’s newsletter, *The Standard Deviation* Contact her at Andrea.Meld@kent.k12.wa.us.

Call for Papers for the WERA Educational Journal (WEJ)

We are currently seeking papers and other submissions for the November 2015 issue of the *WERA Educational Journal*. The WEJ is a collection of peer-reviewed academic papers, professional reports, research reviews, book reviews, essays, and commentaries of general significance and interest to the Northwest education research and practitioner community. The WEJ is issued twice a year (November and May). Papers for the November 2015 issue are due July 15.

Topics in the WEJ cover a wide range of areas of educational research and related disciplines. These include but are not limited to issues related to the topics below.

- Early childhood education
- Curriculum and instruction
- State and national standards
- Professional development
- Special populations (e.g., highly capable, students with disabilities, ELLs)
- Assessment results covering various content areas
- Early warning indicators
- Social and emotional issues
- School and district effectiveness
- Teacher and principal evaluation
- Education finance and policy
- Educational technology
- Educational leadership

Papers should be of interest to a wide range of educators in the Northwest. Condensed versions of dissertations and theses that are reader-friendly are encouraged. For more information about the WEJ and its submissions, see the [Submission Guidelines](#) posted on the WERA website. If you have questions about the process or about possible submissions, please email Pete Bylsma, the WEJ editor, at WEJeditor@gmail.com.



The WERA Educational Journal is published twice a year as a peer-reviewed online journal. Submissions are welcomed from WERA members and others. Submission deadlines are July 15 and January 15 for publication in November and May. For information about the submissions process, see the [Publications](#) section of the [WERA web site](#).

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The Washington Educational Research Association (WERA) is the state affiliate of AERA. It was established in 1973 as a non-profit organization, is governed by members of an Executive Board who serve a 3-year term, and has approximately 700 members.

WERA's mission is to support professionals working at all levels of education in order to:

- Promote, maintain, and improve the quality and effectiveness of educational research, evaluation, assessment, and related services;
- Identify and define educational issues and provide a forum for their discussion;
- Assist in the dissemination of research and evaluation findings; and
- Promote in-service experiences for those who engage in educational research, evaluation, assessment, instruction, and related activities.

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