

**President's message** (from p. 2)

our conference in March. School psychologists should be part of the discussion on how we can better serve our Latino youth. I will continue to want to deal with this issue even after my term as president is completed, but what I would like, right now, is the names of two to ten more individuals (I have two already) who are interested in looking into the subject this year as an OSPA team. Send me a message (streight@teleport.com) or give me a call (503.246.8715).

**Legislative Concern** (from p. 6)

port for school-based mental health and other pupil services. Understanding that this type of language has been excluded from the current Republican leadership's ESEA proposals introduced in the House and Senate at this time, I hope you see the urgency to gaining greater majority support for this language. Despite outcry from the public, students and school personnel across the country, language to get more qualified professionals into the schools has yet to make it into Republican legislative proposals. Please help us change this.

Go to the NASP Advocacy Action Center at [www.naspweb.org/advocacy](http://www.naspweb.org/advocacy) and send your members a letter to support these bills. Better yet, contact them at their home offices while Congress is still in recess.

For further information contact:  
Libby Kuffner, NASP Director of Public Policy  
[lkuffner@naspweb.org](mailto:lkuffner@naspweb.org)



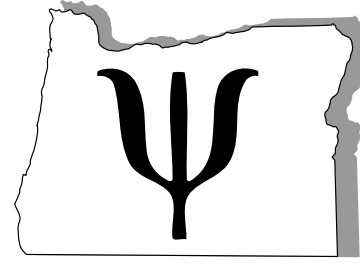
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Thanks again to Al Berreth, owner of UDevelop, and to Tamara Dawson, artist, for their support in development of the OSPA Historical Poster prepared for the NASP 1999 convention.



**OSPA Bulletin**  
Newsletter of the Oregon School Psychologists Association

Vol. XXII, No. 1 Fall 1999

## Fall Conference Addresses Violence Prevention, Work with Slow Learners

This issue of the *OSPA Bulletin* comes with an information insert for the OSPA fall conference, to be held at the Namasté Retreat and Conference Center in Wilsonville. A conference registration form is also included. The conference offers two strands: one on working with slow learners and the importance of reaching out more effectively to this population, and a second strand regarding work in schools to diminish the possibility of violence.

The topic of slow learners is addressed by Dr. Steven Shaw, lead school psychologist at Children's Hospital in Greenville, South Carolina. In Shaw's presentation, he will argue that school psychologists and others should make working with slow learners a high priority

in their practices. (See Shaw's article "Slow Learners," below.)

The second strand will be addressed by Dr. George Sugai and Dr. Peter Martola. Sugai is a professor of special education at the University of Oregon and has an extensive publication and presentation record on such topics as predicting violence at school, school-wide management of behavior support, and school-wide discipline. Schools in the United States have created positive school climates that prevent school violence. In the morning, he will describe what these schools have done, and outline how schools can institute behavior support systems that minimize the possibilities of violence.

In the afternoon, Dr. Peter Martola,

from the school psychology program at Lewis and Clark College, will discuss the issue of using non-interpreted projective techniques as a method of understanding and gaining rapport with children and identifying key issues in their lives.

Namasté Retreat and Conference Center is located at the Living Enrichment Center in Wilsonville, 30 minutes north of Salem and 20 minutes south of Portland. Further information is available on the OSPA web site at <http://users.aol.com/philip574/ospa.html>

These conference presentations are relevant to the work of school counselors and special education teachers, also. OSPA members are invited to inform colleagues of the offerings.

## Slow Learners: A Call for Educational Reform

The average intelligence test score of children in the juvenile justice system is 81.3. The average intelligence test score of high school dropouts is 86.5. The average intelligence test score of girls who leave school due to pregnancy is 80.2. The average intelligence test score of persons collecting unemployment is 89.0. The average intelligence test score of adults in state prisons is 85.0.

Children with borderline intelligence are more likely to address social conflict with aggression, are more likely to have mental health problems, are more likely to have inadequate coping mechanisms when faced with personal crises, and are more likely to become addicted to illicit drugs than persons with aver-

age intelligence.

Children with borderline intelligence are more likely to receive government assistance as an adult, are more likely to finish school with under a 6th grade reading level than children labeled reading disabled, are more likely to be absent from school, and are more likely to get suspended or expelled from school than are children with at least average intelligence. They also bring down the average on group achievement test scores that are widely considered a yardstick of school and teacher quality.

The above laundry list mirrors every major educational problem and, thus, societal problem, we face today. When know-it-alls, pundits, politicians,

and parents refer to the failure of the educational system, they are usually referring to the plight of slow learners. This group is 14.1% of the population. This group is larger than mentally retarded, learning disabled, and emotionally handicapped populations combined. However, the current educational and social support systems ignore this large and important group.

Education's answer: increase testing and raising standards. This is like stopping global warming by adding more thermometers and commanding that temperatures return to normal, or else. What will school districts do? Fire teachers when their students' test scores

(continues on next page)

Oregon School Psychologists Association



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*The Oregon School Psychologists Association provides leadership in creating a brighter future for all Oregon children through professional affiliation, collaborative problem-solving, and promotion of practices that are both innovative and based on solid psychological and educational research.*

contains fall conference information  
and OSPA ballot

## presidential perspective

I have a friend who does the newsletter for the Oregon Council for Teachers of Mathematics. Although he's more artist than mathematician, he is one of those who is committed to the new millennium not beginning until the end of next year, since we never had a year zero. So I'll resist the urge to mention new beginnings in this, the last OSPA Bulletin to come off the press in 1999.

Nor will I succumb to the temptation after January 1, although my personal belief is that the guys (and I think it was guys) who botched the dates for the first thousand years shortchanged the denizens of that millennium, but that we have put in a solid ten centuries since then, and there's no reason for us to be at odds with one another just because of their errors.

But casting blame is not what I ran my campaign for president-elect on.

That was back in March of 1998. Two months before lives were shattered in Springfield—as well as around the state and the nation—and a group of our school psy-



chologist colleagues got a new perspective on what our profession could entail. My "platform" had three components.

I wanted us to see what we could do about stemming the tide of school violence. And, I wanted us to see what we could do about reaching out better to young people with sexual identity issues: the group in this country that is at the highest risk for suicide. And, I wanted us to look into the lives of the Latino youth in Oregon, in hopes that we could better serve that segment of the State's population that has the highest rate for dropping out of school.

NASP has done some great homework for us in *Early Warning, Timely Response: A Guide to Safe Schools*. And our colleagues at OPA have added to resources available, as we saw in Shannon Van Horn's article in the summer issue of this *Bulletin* ("Warning Signs, A Youth Anti-Violence Initiative"). It's now up to us to do the work of getting these initiatives into our schools. We'll hear more about this subject.

I am happy that both youth violence and issues relating to gay, lesbian, and bisexual youth are topics that will be offered in OSPA-sponsored conferences this year. The third issue, that of our ministry to the fasting growing segment of the population in Oregon, is one that I would like to send out a call for right now, even though it, too, will be addressed at

(continues on p. 8)

### Slow Learners (from p. 1)

are low? There is already a massive teacher shortage in nearly all areas. Given the commitment to lower student-to-teacher ratios, I doubt that there will be many firings. Retaining children and not allowing them to graduate causes far more problems than it solves. Every time a child repeats a grade it costs taxpayers between 5 and 9 thousand dollars (typical cost per pupil per year). This is an expensive intervention that may have more negative than positive results. Has anyone seen a child (legally) driving to 4th grade yet? You may soon.

Slow learners receive few services because they lack powerful political advocacy. The families of children who are slow learners tend to be poorly educated and politically disenfranchised. LD, CH, autism, severe and profound retardation, and TBI strike rich and powerful families as well as poor families. Therefore, these families have a great deal of political power in comparison to the families of slow learners. It is important to remember that IDEA and other programs are brought to you by the same people who brought you the tax code. Lobby-

ing, influence, and political expediency are critical in shaping the nature of educational programs receiving government funds. As such, there is little federal or state money directed to slow learners. Title I is a rare example of funds directed to poor schools. However, little is directly earmarked for the slow learner.

Slow learners tend to be shunned by the educational system. When lobbying for the establishment of criteria for special education, the parents of children with LD frequently try to ensure that a minimum intelligence test score (usually 85) is one criterion. Although there may be no differences in academic performance, such a minimum intelligence test score ensures that the LD and slow learners can be differentiated. There are no academic journals devoted to the slow learner. It is rare to find published papers on slow learners. There are few agencies that grant research funds for the study of the slow learner. There are few recognized experts in the area of slow learners. Few professionals specialize in the instruction or assessment of the slow learner. Few people are ad-

ressing this population in research or practice, and most are running quickly away from the slow learner.

Slow learners are born of special education bureaucracy. Slow learners are only important because they fall through the cracks of IDEA and other service delivery initiatives. Special education law is set up to miss more needy children than it catches. Many special educators and school psychologists have lost their way. Many are defenders of the current bureaucracy, and not teachers of children. Whether special education is effective in improving academic and social skills compared to the general education system is debatable. By not providing any support to slow learners, there is no debate: this population will fail our society. Just as our society has failed them.

(Portions of this article have appeared in *School Psych Scene*, the publication of the South Carolina Association of School Psychologists. References available upon request. Email Srshaw6000@aol.com.)

## Children Too Early, Too Small: Facts and Implications

by Dr. Lola Heverly

(Reprinted from the *Florida School Psychologist*, September, 1998)

Low birth weight is the term used to describe infants who are born too small, and preterm birth is used to describe infants who are born too soon.

Low Birth Weight (LBW): under 2500 grams or five pounds, eight ounces.

Very Low Birth Weight (VLBW): under 1500 grams or three pounds, five ounces.

Extremely Low Birth Weight (ELBW): under 1000 grams or two pounds, three ounces.

Preterm Birth: birth after fewer than 37 weeks of gestation.

Very Preterm Birth: birth after fewer than 32 weeks of gestation.

Because of advances in neonatal care, many infants who weigh only 750 grams (one pound, ten ounces) at birth can now survive; however, they may experience significant long term health and developmental problems. Also, infants born at 24 or more weeks gestational age survive and almost none of the infants born at 22 weeks gestation survive (Allen, Donohue, & Dusman, 1993). More than three quarters of infant deaths are caused by babies being born too small or too early (Paneth, 1995).

### Low Birth Weight/Preterm Facts:

In 1991, seven percent of all infants in the United States were born too small and 11% were born too soon (Wegman, 1993). In 1993, the U.S. ranked 22nd in the world in infant mortality (Wegman, 1993).

One family in 100 will suffer the loss of their child soon after birth.

Low birth weight is considered an index of biological risk because infants born with low birth weight are more likely to have brain damage and/or lung and liver disease.

Low birth weight infants have higher rates of subnormal growth, adverse health conditions, and developmental problems.

Rates of brain injury total ap-

proximately seven percent for moderately low birth weight infants and increase to 20% among the smaller infants (Hack, Klein, & Taylor, 1994).

Some of the less severe but more common developmental and physical delays reflect the fact that low birth weight children are disproportionately more likely to come from disadvantaged environments.

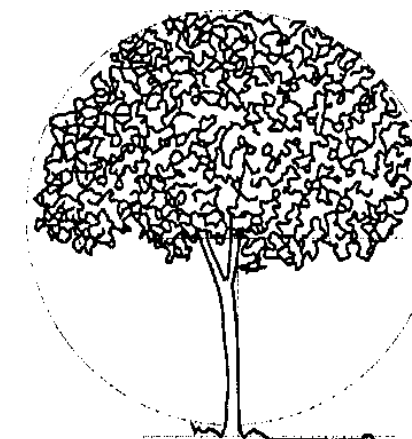
Only 17% of all births are to African-American families, yet 33% of all low birth weight babies are born to African-American families.

African-American babies are twice as likely as Caucasian infants to be born with low birth weight, to be born preterm, and to die at birth.

Of the \$11 billion spent on health care for infants, approximately 35% (\$4 billion) is spent on the incremental costs of low birth weight infants, with nearly half (\$1.8 billion) going to rescue the very tiniest babies.

Charges for initial hospitalization for surviving infants weighing 500 to 600 grams at birth may average \$1 million (Pomerance & Gottlieb, 1993) and almost 70% die even with intensive care hospitalization.

Premature babies given daily massage



### A Blueprint for the Future

NASP 2000 New Orleans  
March 28-April 2

gain 47 percent more weight and are discharged from hospitals six days earlier saving \$10,000 in medical costs for each child (University of Miami's Touch Research Institute).

Cigarette smoking during pregnancy, low maternal weight gain and low pre-pregnancy weight account for nearly two-thirds of all growth-retarded infants (Kramer, 1987).

Cigarette smoking is the single largest modifiable risk factor for low birth weight and infant mortality. Up to 20% of all low birth weight births could be prevented if no pregnant women smoked cigarettes (Chomitz, Cheung & Lieberman, 1995).

Low birth weight children score significantly lower on intelligence tests than do children of normal birth weight. These differences increase with decreasing birth weight (Breslau, DeLotto & Brown, 1994).

At school age, children who were born low birth weight are more likely than children of normal birth weight to have mild learning disabilities, attention disorders, developmental impairments, and breathing problems, such as asthma (Hack, Taylor & Klien, 1994).

Approximately one half of all very low birth weight children enroll in special education programs. Cerebral palsy, deafness, blindness, epilepsy, chronic lung disease, learning disabilities, and attention deficit disorder are all found more commonly in low birth weight infants (McCormick, 1993).

Levels of achievement in reading, spelling and math are lower for very low birth weight children than for full term children (Saigal, Szatmari & Rosenbaum, 1991).

Researchers concluded that children with birth weights of less than 1000 grams have specific biologically based problems in attention (Klien, 1988).

About 31% of low birth weight children will repeat a grade by grade ten compared with about 26% of normal birth weight children (Corman & Chaikind, 1993). ■

## legislative corner

### School-Based Mental Health Bills Need OSPA Support

OSPA Members are asked to call senators and representatives to express concern about H.R. 2567 and S. 1443

(Editor's Note: Some form of the Elementary and Secondary Education Act will undoubtedly be passed in the coming legislative session. The bills referred to here speak specifically to the participation of school psychologists. Thus, the importance of a simple phone call: school psychologists making their voices heard in Washington.)

by Libby Kuffner, NASP

When Congress returns from recess on September 8th, they will attempt to resolve the appropriations battle of Health and Human Services & Education funding vs. maintaining strict budget spending caps. If and when that conflict is resolved, the pending reauthorization of the Elementary and Secondary Education Act (ESEA) will resume. NASP is working with other mental health and pupil services advocates to include language in this reauthorization calling for increased support and funding for mental health and other pupil services. Thus far, two bills have been introduced which can help accomplish this support. NASP needs your help in getting senators and representatives to cosponsor these measures.

On July 20, 1999, Representative Barbara Lee (D-CA) introduced H.R. 2567, a bill to recruit, hire, and train additional school-based mental health personnel. H.R. 2567 is the House version of the Senator Wellstone's (D-MN) "100,000 New School Counselors" Act. This bill would provide matching grants to schools to recruit, train, and hire 100,000 new school counselors, school psychologists, and school social workers.

The bill currently has 26 cosponsors, all Democrats. It must get Republican cosponsorship if this language is to be incorporated into ESEA. NASP requests that you to contact your members: urge them to cosponsor H.R. 2567.

In the Senate, Tom Harkin (D-IA) introduced the "Elementary and Sec-

ondary Counseling Improvement Act," S. 1443, on July 27, 1999. This bill would reauthorize the Elementary School Counseling Demonstration Act, and extend counseling services and programs to secondary schools. The bill would authorize \$100 million to hire and train school counselors, school psychologists and social workers. Further, the bill would mandate that at least 85% of this professional's time must be spent in counseling related activities – thus eliminating time-consuming paperwork and administrative tasks.

#### provide...for 100,000 new counselors, school psychologists, and school social workers...

Senators Lincoln (D-AK), Murray (D-WA), Wellstone (D-MN) and Kennedy (D-MA) have joined Harkin as co-sponsors of the bill. Again, we must get Republican support. Please contact your members: urge them to do so.

Keep in mind, that while these bills use the term "counselors," the language specifically defines "counselor" as a licensed or certified school counselor, school psychologist or school social worker. Other examples of this clarification are in the program requirements section. The following is an excerpt from the bill's language:

(2) PROGRAM REQUIREMENTS— Each program assisted under this section shall—

(A) be comprehensive in addressing the personal, social, emotional, and educational needs of all students;

(B) use a developmental, preventive approach to counseling;

(C) increase the range, availability, quantity, and quality of counseling services in the schools of the local educational agency;

(D) expand counseling services only through qualified school counselors, school psychologists, and school social workers;

(E) use innovative approaches to in-

crease children's understanding of peer and family relationships, work and self, decision making, or academic and career planning, or to improve social functioning;

(F) provide counseling services that are well-balanced among classroom group and small group counseling, individual counseling, and consultation with parents, teachers, administrators, and other pupil services personnel;

(G) include inservice training for school counselors, school social workers, school psychologists, other pupil services personnel, teachers, and instructional staff;

(H) involve parents of participating students in the design, implementation, and evaluation of a counseling program;

(I) involve collaborative efforts with institutions of higher education, businesses, labor organizations, community groups, social service agencies, or other public or private entities to enhance the program and promote school-linked services integration;

(J) evaluate annually the effectiveness and outcomes of the counseling services and activities assisted under this section;

(K) ensure a team approach to school counseling by maintaining a ratio in the elementary schools and secondary schools ... that does not exceed 1 school counselor to 250 students, 1 school social worker to 800 students, and 1 school psychologist to 1,000 students; and

(L) ensure that school counselors, school psychologists, or school social workers paid from funds made available under this section spend at least 85 percent of their total worktime at the school in activities directly related to the counseling process and not more than 15 percent of such time on administrative tasks that are associated with the counseling program.

This is precisely the language that can help schools find the statutory sup

(continues on p. 7)

## OSPA News

### OSPA Executive Board 1999-2000

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Treasurer*	Kileen Birmingham	503.697.3604	
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\*pending election

### Government announces grant opportunities

*Special Education: State Program Improvement Grants Program (Federal Register: August 18, 1999 [CFDA#84.323A])*

Purpose of Program: This program, authorized under IDEA Amendments of 1997, is to assist State educational agencies to establish a partnership with local educational agencies & other State agencies involved in, or concerned with, reforming & improving systems for providing educational, early intervention, & transitional services, including systems for professional development, technical assistance, & dissemination of knowledge about best practices, to improve results for children with disabilities. Eligible Applicants: A State educational agency of one of the 50 States, the District of Columbia, or the Commonwealth of Puerto Rico or an outlying area (United States Virgin Islands, Guam, American Samoa, & the Commonwealth of the Northern Mariana Islands). General requirements: (a) Projects funded under this notice must make positive efforts to employ & advance in employment qualified individuals with disabilities in project activities (see Section 606 of IDEA); & (b) Projects funded under these priorities must budget for a two-day Project Directors' meeting in Washington, D.C. during each year of the project.

Deadline for Transmittal of Applications: December 15, 1999. Available Funds: \$7 million.

Range of awards: Awards will be not less than \$500,000, nor more than \$2,000,000, in the case of the 50 States, D.C., & Puerto Rico; & not less than \$80,000, in the case of an outlying area. This means that the Department will reject any application proposing a budget that exceeds the maximum award amount or is less than the minimum award amount for any single budget period of 12 months. The Secretary sets the amount of each grant after considering: (1) funds available for the grants; (2) the relative population of the State or outlying area; (3) the activities proposed by the State or outlying area.

Estimated Average Size of Awards: \$1,000,000. Estimated Number of Awards: 7. Additional Information: see Federal Register notice. Additional information is available online at: [www.ed.gov/legislation/FedRegister/announcements/1999-3/081899b.html](http://www.ed.gov/legislation/FedRegister/announcements/1999-3/081899b.html)

The complete application is available online at:

[www.ed.gov/legislation/FedRegister/announcements/1999-3/081899b.pdf](http://www.ed.gov/legislation/FedRegister/announcements/1999-3/081899b.pdf) 



The *OSPA Bulletin*, the official publication of the Oregon School Psychologists Association, is published four times a year and distributed to members as a membership benefit. OSPA is a nonprofit, non-partisan, educational association of professional school psychologists. It is dedicated to providing for the educational and mental health needs of all children and to advocating for their achievement of independence, dignity, and purpose of life.

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The *OSPA Bulletin* invites contributions. Professional issues and news, articles, questions, reviews, letters and graphic works should be sent to David Streight, 7735 SW 87th, Portland OR, 97223, or <streight@teleport.com>. Changes of address should be sent to OSPA #419, 25 NW 23rd Place, Suite 6 Portland, Oregon 97210-5599.

**Bulletin deadlines for future issues:**  
Winter, December 1, 1999  
Spring, March 1, 2000  
Summer, June 1, 2000

## Intervention in Elementary Mathematics: Why Not Consider Tutoring?

by Marika Ginsburg-Block

As a psychologist in training in Philadelphia, the formidable task of enhancing student educational outcomes lay before me. Typical of large urban centers, the statistics for Philadelphia's students are gloomy. Over 40% of elementary students consistently fail the basic tests administered by the school district in both reading and mathematics. Over 85% of students live in poverty, qualifying for the free lunch program. Many schools have breakfast programs as well, to increase the likelihood that students would enter their classrooms "ready to learn." Needless to say, schools are limited in fiscal resources. Interventions have to maximize the resources at hand, drawing on the strengths of the school and community, while proving to be effective. ...

It was under these circumstances that I was introduced to the practice of "school, community and clinical-child psychology," through a combined program in child-centered psychology at the University of Pennsylvania. It is to school psychology that most of my program's graduates have logically been attracted (n= 4 of 6). School psychology recognizes that the role of its practitioners and researchers extends beyond the school door into the community and other settings in which our students must successfully negotiate, consistent with the philosophy of our training at Penn.

In Philadelphia, my major emphasis was on developing peer-tutoring interventions in the context of elementary mathematics. A secondary emphasis of mine was on developing interventions that engaged parents and community members in home- and school-based support for learning. Over the years, peer-facilitated interventions have proven to be economical methods of enhancing student learning. Both of these qualities were essential to the acceptability of interventions in Philadelphia's public schools—economical and effective. Schools were excited to work with me, because they saw a real need for academic improvement in the area of elementary mathematics. In mathematics, there was a particular concern for preparing students to succeed in performance assessments (e.g. Stanford 9) emphasizing the new shift of the mathematics curriculum toward the National Council of Teachers of Mathematics Standards (1989). Briefly, the Standards, currently under revision (NCIM, 1998), call for a shift in emphasis from factual to conceptual understanding. Based on a constructivist philosophy of learning, this shift is to be achieved through the implementation of strategies to promote active learning, such as hands-on problem solving and peer interaction.

Peer tutoring is, in fact, one of the recommendations of the Standards. How to harness it to be most effective with the new emphasis of the mathematics curriculum is the challenge. I had worked on the implementation of a

peer-tutoring program in which the emphasis was on building computation skills. The model we chose to accomplish this task was Reciprocal Peer Tutoring (RPT), developed by John Fantuzzo and others specifically for low-achieving urban youth (Fantuzzo & Ginsburg-Block, 1998). In this model, students of the same age and ability work in pairs alternating between the role of teacher and student, with the primary objective of keeping each other engaged in academic activity. Materials were easy to come by, simply flash cards with the problem on one side and the solution on the other. We were even able to employ students in the preparation of these materials.

Using this model, I worked with my school partners to enhance the old RPT content and process with applied problems and hands-on materials from the new curriculum and opportunities to share problem solving strategies with a small group as well as a peer partner. The result was Reciprocal Peer Problem Solving (RPPS). RPPS consists of reciprocal peer tutoring (i.e. a structured peer tutoring format and a student-managed group reward contingency) and problem solving (i.e. sharing problem solving methods as a small group, solving problem cards requiring multiple strategies and solutions, use of manipulatives). The procedure looks like this:

### Reciprocal Peer Problem Solving

5 min Pairs of students work together on a warm-up exercise. Each pair shares their strategies with the larger group.

15 min Pairs work on problem cards, alternating between "teacher" and "student" roles.

Problems require students to develop multiple strategies and solutions and make use of manipulatives (e.g. base-ten blocks, counters, containers, etc.). They are selected to reflect a ratio of 8 known to 2 unknown problems, based on student performance at pretesting.

10 min Students take a 10-item quiz individually (again, based on their level of performance). Scores are combined for each pair and used to determine student success. Success is achieved when pairs meet their self-determined goal. Three "successes" result in a reward that is previously selected by each student pair (i.e. helper).

We conducted an empirical study to evaluate the effectiveness of the RPPS intervention for 3rd and 4th grade students at a public elementary school in Philadelphia (Ginsburg-Block & Fantuzzo, 1998). One hundred and four low-achieving students (roughly half of the 3rd and 4th graders in my school) were assigned randomly to one of 4 groups: control, problem solving, peer collaboration (i.e. RPT), and problem solving + peer collaboration (i.e. RPPS). Over a 7-week period, these students met twice weekly for 30-minute mathematics sessions. The findings indicated that RPPS students significantly outperformed their peers in mathematics word

problems and computation, academic motivation, and perceived academic and social competence. In word problems alone, RPPS students increased the number of correct digits they were able to compute from roughly 12 to 18 in a 20-minute time period. Students in the other groups gained much less (peer collaboration students moved from 13 to 14), remained the same (control students held steady at 12), or decreased their scores (problem solving students moved from 19 to 15).

These results are exciting for several reasons: 1) we were able to bring together peer tutoring with the new mathematics curriculum; 2) the procedures were effective in promoting not only student achievement, but also motivation and self-concept, reflecting a holistic perspective of student accomplishment; 3) the study was conducted in a rigorous manner; and 4) the procedures were specifically designed for low-achieving urban elementary students.

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..nearly 4 times as many articles  
have been published on reading  
as mathematics interventions

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I am very interested in disseminating this information. Although the results of the empirical study have been published, I'd like for practitioners to hear more about this important area of intervention. Casually reviewing the last 10 years of the 3 main journals in school psychology (i.e. *School Psychology Review*, *School Psychology Quarterly*, and *Journal of School Psychology*), Melissa Coolong Chaffin (a graduate student at the University of Minnesota) and I found that nearly 4 times as many articles have been published on reading as mathematics interventions. [Similar figures for presentations on mathematics are seen in the 1998 NASP Convention Program.] Don't we recognize the need to upgrade our understanding of the Standards in mathematics and implications for intervention and consultation? In 1994, as an intern at Children's Seashore House in Philadelphia, I found that my curriculum-based assessments of students in mathematics (i.e. reflecting their ability to compute problems with speed and accuracy) had little to do with their actual performance in school. On many occasions, I would tell parents that based on our norms, their 4th grade child was computing like a 2nd grader. And they would reply, "that's odd because my child is getting an A in mathematics." It was odd in 1994, and it's odd now, that in many of our assessments and interventions we continue to view elementary mathematics as computation, when the focus has shifted.

As school psychologists, we need to keep abreast of curricular changes in order to inform the approaches we take in consultation and intervention. In mathematics, this means familiarizing ourselves with the new content and process emphases and adjusting the procedures we use for enhancing student learning. I have found that peer-tutoring strategies, such as RPPS, are 1) consistent with the emphasis on conceptual learning we are seeing in mathematics, and 2) an effective means of promoting positive outcomes for students.

Certainly standards-based education is big, driven by new graduation testing requirements. Concern over poor educational results is evident in talking with educators and reading the paper (working down the hall from the Minnesota Assessment Project has also helped me with this realization). Family involvement, volunteerism, and peer tutoring efforts seem to be in use. In fact, I have met several school psychologists who have class-wide and cross-age peer tutoring programs running in their schools. I have even participated in training middle school students to be reading tutors for elementary students in Minneapolis. Of course reading, as in most places, takes center stage. In a recent conversation with a school psychologist, I mentioned my work in peer tutoring in the context of elementary mathematics. She said that her district has shied away from using peer tutoring in this area, because of the new thrust of the mathematics curriculum and the perceived difficulty in preparing materials (I agree, it is a lot easier when you are dealing with multiplication cards). Things are basically the same in Minnesota! I eagerly look forward to having the opportunity to continue to work on developing peer-tutoring interventions in the context of elementary mathematics as a means of assisting our students to meet the standards.

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