

Research Grant Proposal

Building a Bridge Between Home and School with Family Math Nights

**Submitted to the Faculty Development Committee
Elmhurst College**

By

**Dr. Diana Brannon
Assistant Professor of Elementary Education
Elmhurst College**

Project Title: Building a Bridge Between Home and School with Family Math Nights

I. Project Summary: Building a Bridge Between Home and School is designed to provide pre-service teachers with opportunities to work with low income parents and parents with limited English proficiency. These opportunities are designed to help pre-service teachers understand the importance of parent involvement, provide pre-service teachers opportunities to interact with families to help them feel comfortable working with high-need populations, and allow pre-service teachers an opportunity to plan and implement activities designed to help parents learn how to work with their children at home. These tasks are accomplished through family nights conducted by pre-service teachers hosted at the child's school.

Many pre-service teachers are inexperienced working with parents and families. Many parents are not sure how to work with their child or do not have the materials to do so at home. This program addresses both of these issues. The focus of the family nights is to provide pre-service teachers an opportunity to provide low income and English as a second language parents at a high need school with fun and easy activities that they can do with their child at home to encourage mathematical skill development. Each family night will last for 2 hours and include an opportunity for pre-service teachers to teach parents about a math related topic such as problem solving. Pre-service teachers and parents will then interact with their child applying what was learned and sharing ideas and experiences with other parents from the community. At the conclusion of each event children and parents will be provided with a math manipulative and an at home activity to help reinforce what was learned and encourage families to continue working together at home.

II. Narrative:

1. Current Situation: Parent involvement is essential to student achievement. However, new teachers are often unprepared to or intimidated by the idea of working with parents. Although pre-service teachers understand the importance of parents being involved with their child's education, they often lack the experience or confidence to do so as they begin their formal teaching careers. The thought of having to deal with parents on top of new curriculum, students, administration, and colleagues can be very overwhelming for new teachers if they have not had prior experience understanding how they can enlist parents to be vital partners in the education of their students.

“New teachers are often unsuccessful in high-needs schools because, despite the best intentions, teacher credential programs fail to prepare them for success in these complicated environments. While graduates of teacher credential programs may be categorized as ‘highly qualified,’ they still may not possess the kind of knowledge and experiences required for success in these more challenging schools” (Nelson, 2004, p. 475). Pre-service teachers need a variety of types of experiences with teachers, students, and families in high-needs schools to ensure that they are truly “highly qualified” to meet the needs of all students.

Parent involvement is essential to a teacher's success. However, students receive very limited interactions with parents before they graduate. Many students graduate education programs interacting with parents only at school parties and one or two school-wide events such as open

house or parent / teacher conferences. These opportunities for parent interactions are usually conducted by the classroom teacher, while the pre-service teacher observes or helps out with administrative tasks. Because of this, many new teachers are intimidated by or insecure about speaking with parents of their students. These limited interactions provide some benefit for pre-service teachers. However, they do not address the depth of interaction that pre-service teachers need to have with parents. They also do not usually occur in high-needs schools or include large populations of ESL parents. This project will do both.

When writing about and studying her own experiences as a new teacher in a high-needs school, Nelson (2004) found that teacher education programs are missing opportunities for pre-service teachers to: (1) understand the context of education on a larger scale including issues such as socio-cultural influences on teaching and learning, (2) work in a high-needs school in a supervised experience, (3) reflect on their experiences in high-needs schools to encourage a greater understanding of what they are encountering and experiencing, and (4) gain a deeper understanding of the role of teacher. The Connecting Home and School Math Project is designed to address all of these issues.

A mandate for parent involvement has become part of school reforms such as No Child Left Behind. This makes pre-service teachers' knowledge of and experience with parents essential. Research supports the importance of parent involvement. When synthesizing current research on parent involvement in their study *A New Wave of Evidence: The Impact of School, Family and Community Connections on Student Achievement*, Henderson and Mapp (2002) found that:

- Students whose parents are involved in their education are more likely to earn higher grades, have better school attendance, and graduate than students whose parents are not involved.
- Schools that encourage parent outreach report 40% higher test scores than schools with little outreach.
- Programs designed to encourage parent involvement at home encourage achievement.

Even though parent involvement in school is key to student success, many parents do not take advantage of the opportunity to work with their children on academics outside of school. A survey conducted by *The Parent Institute* found four major barriers to parent involvement: (1) lack of time, (2) lack of training, (3) lack of understanding, and (4) lack of English proficiency. Therefore, this program designed to provide low-income and ESL families with training, materials, and support, clearly benefits more than just the pre-service teachers participating in it. Parent involvement as addressed by this study results in better prepared pre-service teachers, increased student achievement, empowered and educated parents, and increased community involvement.

References:

Henderson, A. T., & Mapp, K. L. (2002). *A new wave of evidence: The impact of school, family, and community connections on student achievement*. Austin, TX: Southwest Educational Development Laboratory.

Nelson, C. (2004). Reclaiming teacher preparation for success in high-needs schools. *Education, 124*(3), 475-480.

2. The Project Plan: Each family night will last for 2 hours and include an opportunity for pre-service teachers to teach parents about a math related topic such as problem solving. Pre-service teachers and parents will then interact with their child applying what was learned and sharing ideas and experiences with other parents from the community. At the conclusion of each event children and parents will be provided with a math manipulative and an at home activity to help reinforce what was learned and encourage families to continue working together at home.

This program will have a positive impact on pre-service teachers, parents, teachers, students, and the community. The expected outcomes for this program include increases in:

- * pre-service teachers' exposure to the economic, social, family, and ethnic issues of high-need schools
- * pre-service teachers opportunities to work with students and families at high-need schools
- * professional development provided for pre-service teachers at high-need schools
- * pre-service teachers involvement in encouraging math at school and home
- * parents' knowledge of math strategies to use with their young children to help address the achievement gap often seen in high need schools
- * children's math interactions with their parents or primary caregivers

3. Faculty Expertise: Diana Brannon's research has focused on a variety of aspects of parent involvement. She has five current publications related to parent involvement and has presented at twenty-six local, state, and national conferences. In 2006, Dr. Brannon conducted a statewide study of parent involvement in Middle School that is featured in the Spring 2007 issue of *Illinois Schools Journal*. She is currently working on implementing a parent involvement reading program in the primary grades at Schafer School in Villa Park, Illinois.

4. Plans for Evaluation and Dissemination

Evaluation

Parents will be asked to provide feedback regarding the math nights, information about their educational practices with their child, and details about their thoughts and feelings about working with their child through the completion of monthly parent night surveys. They will also be asked to keep track of their monthly school related interactions with their child. This will provide me with valuable data about the effect of parent education on parent involvement and student achievement.

Pre-service teachers will be interviewed prior to and after their participation in this program to determine the effect working with parents on a monthly basis has on their feelings of efficacy, confidence, and desire to involve parents in their classrooms. They will also be asked about the effect the program had on their preparation to work with diverse populations and high-needs families. These interviews will provide me with valuable data to assess the importance of

providing pre-service teachers greater opportunities to work with families and high-needs populations before they graduate and begin their teaching careers.

Dissemination

The results from this project will be submitted for publication in a peer-reviewed education journal at the completion of this project. The project planning, implementation, and findings will be shared at a statewide or national conference. Also, data from this study will be made available to the College community through a Faculty Research Seminar if requested.

III. Timeline:

Term 1: Program Planning: Program planning, recruitment of teachers and pre-service teachers to be involved, ordering materials, beginning publicity (July through September)

Term 2: Implementation

September: Staff and pre-service teacher two hour workshop to discuss parent involvement and high-need schools

October - December: Family Nights

January: Assessment

IV. Budget

- 1. **Personnel:** \$1,950
- 2. **Supplies:** \$1,150
- 3. **Evaluation:** \$400

Total: \$3,500

Personnel expenses:	
Program / Research Coordinator	\$ 500
Pre-service Teacher Facilitators	\$ 900
Childcare	\$ 150
Parent Night Coordinator	\$ 400
Evaluation	
Evaluations of Parents, Teachers, and Pre-Service Teachers	\$ 400
Supplies:	
Promotion	\$ 100
Math Supplies	\$ 450
Food	\$ 600

V. Current and Previous Grants:

- Connecting Home and School: A Parent / School Literacy Initiative, \$10,000 (Associated Colleges of Illinois Innovation Grant, 2007)

- Parent Involvement in Middle School: Current Practices and Principals' Perceptions of Directions for the Future, \$2,700 (Faculty Development Grant, 2006).

VI. Publications and Presentations

Publications

Brannon, D. (Winter, 2008). Character Education: It's a Joint Responsibility. *Kappa Delta Pi Record*, 44(2), 62-65.

Brannon, D. (November, 2007). Addressing the Decline of Parent Involvement in Middle School. *Principal*, 87(2), 62-63.

Brannon, D. (2007). Increasing Parent Involvement During the Middle School Years. *Illinois Schools Journal*, 86(1), 68-78.

Brannon, D. (2006). Parents' Perceptions of the Benefits of Full-Day and Half-Day Kindergarten. *International Journal of Arts and Sciences*, 2(2), 1-4.

Brannon, D. (2005). Full- and half-day kindergarten: What parents pick and why. *The Education Digest*, 70(8), 57-62.

Presentations

Brannon, D. (2007). Characteristics of Highly Effective Teachers. Raising Student Achievement Conference in St. Charles, Illinois.

Brannon, D. (2007). We Know Character Counts, But How Do We Teach It?. Kappa Delta Pi 46th Biennial Convocation in Louisville, Kentucky.

Brannon, D. (2007). Character Education Practices of Nationally Board Certified Teachers (Paper presented). 13th Annual Character Education Conference, St. Louis, Missouri.

Brannon, D. (2007). Research Says Differentiation Works, But How? No Child Left Behind Annual Statewide Conference in Chicago, Illinois.

Brannon, D. (2007). Reading and Writing Best Practices: Making It Fun For Us All! West Suburban Reading Council Conference in River Forest, Illinois.

Brannon, D. (2007). Dare to Be Different: Differentiation in the Primary Classroom. Illinois Reading Council Conference in Springfield, Illinois.

Brannon, D. (2006). Raising Student Achievement through Differentiation. Raising Student Achievement Conference in St. Charles, Illinois.

Brannon, D. (2006). Meeting the Needs of All Children: Differentiation in the Reading Classroom. Illinois Reading Council Conference in Springfield, Illinois.

Brannon, D. (2006). Is Differentiation Really Different? How to Apply Current Research and Theory to the Classroom. No Child Left Behind Annual Statewide Conference in Chicago, Illinois.

Brannon, D. (2006). Making Reading and Writing Exciting for the Struggling Reader: Centers in the Primary Classroom. West Suburban Reading Council Conference in River Forest, Illinois.

Brannon, D. (2005). Using Picture Books with Diverse Learners. Kappa Delta Pi 45th Biennial Convocation in Orlando, Florida.

Brannon, D. (2005). Parents' Perceptions of the Effects of Full and Half-Day Kindergarten Participation on Students' First Grade Achievement. (Poster presentation). National Association for the Education of Young Children (NAEYC) National Conference in Washington, DC.

Brannon, D. (2005). Differentiation Makes a Difference. No Child Left Behind Statewide Conference in Chicago, Illinois.

Brannon, D. (2005). Differentiation Isn't Difficult. Illinois Reading Conference in Springfield, Illinois.