

Reversing the Trend: Latino Families in Real Partnerships with Schools

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Reversing the Trend: Latino Families in Real Partnerships with Schools

Senor Lopez walked up to the project director after the last mathematics class and said, “De todos los años que he tenido hijos en estas escuelas, esta es la primera vez que me han tratado con tanta dignidad” (In all the years I have had children attend these schools, this is the first time that I have been treated with so much dignity).

Involving parents in their children’s learning has been recognized as necessary and important by scholars who contributed to several reports on the nation’s schools (De La Cruz, in press; Epstein and Becker 1982; Epstein 1983). The recommendation reflects the consistent findings in social science research that children have an added advantage in school when their parents encourage and support schooling.

Latino families are growing in numbers; currently they compose the largest minority group in the Southwest and have been visibly transforming culture and society (Takaki 1996). These families are seeking ways to improve

their status in the United States and look to the educational process as a way of achieving this goal (Khisty and Becker 1990; Secada and De La Cruz 1996). By including them in real partnerships with schools, we can help them reach these goals.

This article outlines a research-based model for greater family involvement among Latino families in the area of mathematics. The Children’s Math Worlds Family Connection (CMWFC),

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is a component of a reform-mathematics curriculum called Children's Math Worlds (CMW), which was developed for first through third grades under the leadership of Karen C. Fuson at Northwestern University. The curriculum was developed over the past seven years, initially in urban Latino classrooms, but more recently in a range of other classrooms. The CMWFC component was directed by Yolanda De La Cruz at Arizona State University West and has been under development for three years.

Formal assessments were conducted of the mathematical understandings of various classes of urban children learning from our pedagogy (Fuson, Smith, and Lo Cicero 1997; Fuson 1996; Fuson 1998). Although more than 90 percent of our urban CMW children met federal guidelines for the free-lunch program, they considerably outperformed heterogeneous and middle-class samples of United States children who received traditional mathematics instruction. On many items, they outperformed children from Taiwan and United States children using the reform curriculum *Everyday Mathematics* (UCSMP 1998); and on some tasks, they equaled or exceeded the performance of Japanese children. On standardized tests, 90 percent of the urban children scored at grade level on computation and 65 percent on problem solving. Class means on overall mathematics scores were above grade level, some children scored three years above grade level, and no child scored more than one year below grade level. The results for suburban children were even stronger. The usual suburban-urban gap still existed but was smaller on some items.

Factors Affecting Latino Children's School Achievement

Several factors affect Latino children's school achievement (fig. 1). Often, traditional curricula do not offer enough steps to help students with limited-English-speaking ability build better conceptual understanding. These students, therefore, fall farther and farther behind, leaving many of them with large knowledge gaps.

As more school districts require teachers to implement reform mathematics curricula, little support is offered in helping them develop strategies for new demands placed on their teaching. For example, teachers are finding that reform-based mathematics instruction places more demands on facility with oral and written English. They do not have the strategies, however, that enable them to work more effectively with their limited-English-language students.

Many parents of Latino students either speak no English or are limited-English speakers; thus, com-

FIGURE 1

Four areas affect the mathematics learning of Latino students and prevent many of them from gaining access to this knowledge.

- Traditional curricula often leave gaps in conceptual understanding.
- Reform-based-mathematics instruction requires facility with oral and written English.
- Communication with limited-English-speaking parents is difficult.
- School programs often fail to include families in a teaching partnership.

munication between parents and teachers is not simple. Teachers express deep concern that not enough family participation occurs among Latino families, but they do not know how to develop partnerships with these families. More support is needed to help teachers overcome barriers that prevent them from building partnerships with the families of their students.

True partnerships with Latino families will result when more emphasis is placed on ascertaining their needs and convenient times for them to attend programs to acquire resources to help their children. Communication and language barriers must be overcome before any true partnership can result. Families must be treated with the dignity that they deserve, and both teachers and parents must make an effort to develop and nurture partnerships that can reverse the trend of Latino underachievement in our schools.

CMWFC Approaches to These Issues

School reform programs are often developed without sufficient attention to how to attain the academic goals required for success among Latino and other linguistic-minority and ethnic-minority students. Several approaches helped to make the CMWFC successful in meeting the needs of Latino families. In the CMWFC, we asked parents what they needed to be able to help their children in mathematics. Print communication was always done in both Spanish and English. We sent surveys home with children and made follow-up calls to parents who had not responded to the survey. We found that parents wanted to learn to help their children at home but did not think that they had enough mathematics knowledge to help their children in grades 1 through 3.

We sent activity booklets home to families for each grade level, first through third, containing activities and games that reinforce school learning.

The booklets were available to families throughout the school year. **Figure 2** and **figure 3** are examples of some of the information contained in these booklets. These games and activities reinforced the mathematics curriculum being taught in the school.

Families were invited to attend two workshops during the school year to help them improve their mathematics knowledge. These sessions were scheduled for parents with or without their children in attendance. In Illinois, we found that families preferred to bring their children to these workshops. The classes were given for parents first while children attended a separate program. After the first

hour, the children joined their parents for the remainder of the workshop. These parents remarked that they felt more confident once they had successfully done the activities without their children. We gave the mathematics workshops at times that were best for parents, as determined by the survey responses. We found that in both Illinois and Arizona, families preferred late-afternoon and weekend mathematics workshops. In Illinois, one hundred families attended the mathematics classes with their children, even in -43 -degree-wind-chill weather.

FIGURE 2

How Many Pennies Did I Hide?

Materials:
1 penny strip

Players:
2 players

Purpose/mathematics skills practiced:
To learn which pairs of numbers make 10

Rules of the game:
A penny strip is laid penny side up in front of the two players. One player covers a number of pennies in the penny strip with a hand or a piece of cardboard and asks his or her partner, "How many pennies did I hide?" The partner has to figure out how many were covered and then checks the answer by uncovering the hidden pennies. If the partner gets it right, she or he gets a point.

Children take turns being the one to hide the pennies in the penny strip.



How many pennies did I hide?

Harder variation: When your child is good at this game, she or he can figure out how many pennies are covered. In this version, your child cannot see the penny strip. She or he has to do it with eyes closed! Ask, "I have four pennies left. How many did I hide?" or "I hid six pennies. How many did I have left?"

This game will help your child learn combinations of 10.

FIGURE 3

¿Cuántos Centavos Escondí?

Materiales:
1 tira de centavos

Jugadores:
2 jugadores

Objetivo/Habilidades de matemáticas que se necesitan:
Aprender cuáles pares de números hacen 10

Reglas del juego:
Una tira de centavos se coloca con los centavos boca arriba frente a dos jugadores. Un jugador cubre un número de centavos en la tira de centavos (con la mano o una hoja de cartón), y le pregunta a su compañero "¿Cuántos centavos escondí?" El compañero tiene que comprender cuántos estaban escondidos y luego comprueba la respuesta descubriendo los centavos cubiertos. Si tiene razón, recibe un punto.

Los niños se turnan para ser el que cubre los centavos en la tira de centavos.



¿Cuántos centavos escondí?

Variación más difícil: Cuando su niño hace bien este juego, puede comprender cuántos centavos están cubiertos. No puede ver la tira de centavos. ¡Tiene que hacerlo con los ojos cerrados! Pregunte Ud, "Me quedan 4 centavos. ¿Cuántos cubrí?" o "Cubrí 6 centavos. ¿Cuántos me quedaron?"

Esto ayudará a su niño a aprender las combinaciones de 10.

Families viewed pilot videotapes, available in both English and Spanish, showing them how to do the mathematics activities. Families who attended the workshops checked out the videotapes from the school library whenever they wanted to review how to do the activities.

CMWFC offered workshops for teachers interested in gaining more family support. Teachers were given information on how to respect the needs of parents and how to treat them with the dignity they deserve. Eleven teachers attended the classes because their prior efforts had failed to produce family involvement. They found that sending letters home in both Spanish and English and making follow-up telephone calls made a great difference in gaining family support. When classes were scheduled at times that parents had requested, teachers were pleasantly surprised by the overwhelming parental response. Parents remarked that they had never been given a choice of times for school-related activities. They felt like real partners in the learning and teaching of their children.

Participants' Responses

Parents were asked to give written or oral evaluations after the workshops. The following outcomes are indicative of their responses.

- One father worked at night, and he was accustomed to sleeping in the late afternoon. But he decided instead to attend with his wife the mathematics classes offered through CMWFC so that they could both help their children with homework.
- One mother said that in Mexico, teaching was customarily left for the teacher. Here in the United States, she learned that teachers expect parents' help with homework.
- Another couple attended because they liked the games that their child was bringing home and wanted to learn how to play them.
- Many parents appreciated that only inexpensive materials were needed to play the games and activities.

Teachers were asked whether they noticed any differences due to the CMWFC workshops. Teachers replied that some of the parents approached them for various reasons related to mathematics homework, something that had not happened in the past. Typically, many Latino parents would not think of contacting their children's teachers, but because these parents participated in CMWFC, they felt comfortable enough to do so.

Future Directions

We are in the process of developing a series of home videotapes showing parents how to play various activities and games with their children. More games and activities are being developed to reinforce school mathematics learning in the home. Teachers are making their own videotapes to address particular needs of their Latino students' parents. They tape students as they explain a method or procedure so that parents gain more effective ways of helping their children. These videotapes explain to parents how to focus on the process instead of just on getting the correct answer. They give guidelines and sample questions that parents can use for this process.

Various community organizations have expressed an interest in expanding the program. Parents will be trained to help facilitate workshops for families. Teachers who are currently involved will train parents for future CMWFC workshops. Parent and teacher manuals for conducting workshops are under development. These manuals will describe how to meet teachers' and parents' expectations.

We are confident that these efforts to expand the program will help more schools and Latino families develop true partnerships.

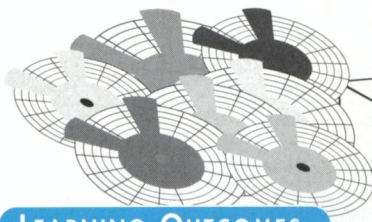
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