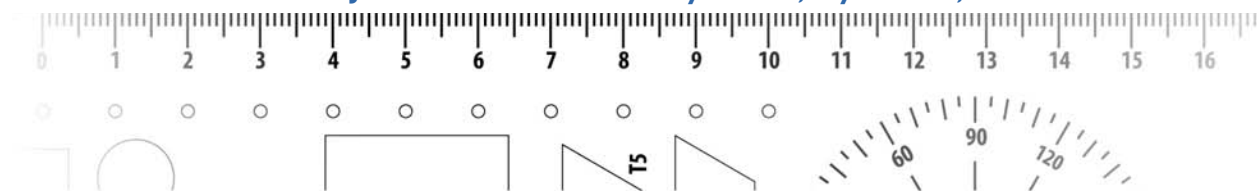


Parents Want To Know...

How Can We Help with Math?

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What is a ‘fact family’ and what happened to flashcards?”

“Why does my child have to learn an ‘algorithm’ to solve an addition problem? Why can’t he just ‘carry’ like I did? And what is an ‘algorithm’ anyway?”

“This ‘new math’ is too hard — it’s not like the math I had.”

“I can’t help my daughter with her math homework. I hated math. I wasn’t good at math.”

These were just some of the questions and comments shared with me daily by teachers and instructional aides. I heard these same things from the parents of students I worked with in the Title I program. Although our school district had used *Everyday Mathematics* since its early days as University of Chicago Math, parents still asked the same questions every year. As the lead Title I person in my school, one of my responsibilities was to help parents work with their children to support the learning process at home. As a member of the Math Committee for our NCA/School Improvement Team, I was responsible for helping to develop the Parent Component of our plan according to Title I guidelines. Although Parent Math Nights or Family Math Nights had always been a part of the school plan, they didn’t seem to answer all the questions.

As we discussed possible ways to change the Math Night content, I suggested we create a parent survey to get more accurate feedback on what the parents wanted to know about the math program. At the Title I Annual Meeting, which we called “Parents Want to Know,” we asked the parents to complete a survey about the reading and math programs in our school. The results of our survey showed us several areas in the math program to focus on:

- How did individual teachers communicate math information to parents?
- What kind of math homework could be expected at each grade level?
- How did math homework affect the student’s grade?
- What help was available during/after school for students; was the teacher available to students and/or parents?
- What was the most important help a parent could provide in math?

Once we had this information, we started planning the workshop. First, a question-and-answer sheet was put together to address teacher-specific questions asked by parents. These questions were:

1. **How often/when do you send home information about missing assignments and/or math progress?**
2. **How often are Home Links or Study Links sent home? When do you send the Parent Letters?**
3. **Do you assign math homework besides Home Links/Study Links?**
4. **How important is returned homework in a student’s math grade?**
5. **Are you available to students after school for help?**

6. What suggestions do you have for parents who want to help their child with math homework?

The teachers were asked to attach examples of each of the communication pieces they used in their class, as well as the most recent Home Link/Study Link and Parent Letter, to the completed question-and-answer sheets.

While the teachers worked on the question-and-answer sheets, the rest of the plan for Family Math Night came together. I suggested we use the time-tested strategies of providing babysitting and refreshments, and asking attendees for donations of door prizes. I also suggested we plan for the students to demonstrate the Everyday Mathematics games at the Math Night. These ideas are used successfully in all Title I activities in our building, and usually result in a very good turnout for the event. We asked the teachers at each grade level to select 4–6 students, not necessarily the best math students, to be “game demonstrators” at the workshop. The “game demonstrators” would have to be accompanied by parents, so considerable thought went into the selection, with the hope that some parents who avoided helping at home be “encouraged” to come. The teachers would choose a game that the children were very familiar with, and one that was usually sent home in a Home Link or Study Link. Extra time for playing this game would be provided in the days before the workshop so they would be comfortable playing it in front of parents. It was interesting that all the teachers chose a different Top-It game to play! They said the students all seemed to enjoy these games the most.

The Title I Instructional Aides assisted in all the Family Math Night preparations— working with the students, collecting game materials, and collecting door prize donations. Over the years, we accumulated a file of local businesses and organizations that were very willing to help us with these needs. We also put together a packet of materials for each parent who attended the workshop. The packet included a copy of a Math Glossary put together by the School District Math Consultant, and a booklet that we compiled with the teachers’ answers to the survey questions, samples of home communications, Parent Letters, Home Links/Study Links, and the focus algorithms. The booklet was divided by grade level, with each grade printed on a different color paper.

The booklet itself became the second part of the Family Math Night, which I presented. During this second session, I gave a brief explanation of some key parts of the Everyday Mathematics program, especially the spiral and the reasoning for algorithms. I explained the booklet, and then did an interactive demonstration of the focus algorithms in each grade. Questions, door prizes, and refreshments would then follow.

The evening of the Family Math Night, we were anxious and excited. Parents had registered in advance to attend so we were prepared with materials, refreshments, and babysitters. Student demonstrators and their parents arrived half an hour early for final instructions. The students were told they could answer questions if they were comfortable doing so, or if necessary, one of the staff members circulating among the tables could answer for them. They were to begin playing their games as the other parents arrived. As parents checked in at the registration table, they were given their packet and directed to the game tables to observe the students.

There were several incidents during this part of the evening that surprised us. One of the first-grade demonstrators was a non-verbal student who volunteered to be part of the activity along with her friend, who was quite verbal. If a parent asked a question of this pair, the verbal partner would stop playing, stand, and give a detailed explanation of the game and its purpose, while her partner would just smile! We had a difficult time keeping a straight face, but we were also very proud of the team. All of the student demonstrators were very comfortable explaining what they were doing, and the parents were amazed at the amount of mental math the students were doing. We also suggested the parents count how many problems were solved in a few minutes of playing the game. Most of them were quite surprised at the number of problems solved in one session of a game. Parents began to understand why the games were so important, and why teachers wanted students to play the games at home. After half an hour had passed, the students were dismissed for refreshments, and went to the childcare room for the rest of the workshop.

The parents then moved to the tables containing samples of the math materials for each of the grades. This was my one-hour portion of the evening to cover the material in the booklet that the parents had received. I began with a brief

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explanation of the Everyday Mathematics program, focusing on the spiral. I explained how concepts and skills were introduced and then revisited many times in that year, as well as up to two years following that before they were expected to be “secure”. This resulted in a lively discussion about how individual children responded to this, as well as how individual parents responded to this. We did come to an agreement that more children seemed to be successful with this than with the “teach to mastery” math programs the parents had experienced as students.

Then I moved on to the focus algorithms. We had placed several copies of the Student Reference Books for third through sixth grades on the tables for the parents to use. They were amazed at the amount of information in them. Each of the focus algorithms was also in their booklet with space to try them and problems to practice at home. I demonstrated each algorithm on a white board as they followed the same problem in the booklet. Then I had the parents volunteer problems that I worked through using the algorithm.

The discussion that developed during the demonstration centered on why the students needed so many ways to solve a problem. The parents had only one option when they were in school, so they didn't see the need for so many options now. There were also parents in the group who finally came to an understanding of a math concept they had found

difficult for many years. The most revealing part of the evening was the debate between using the partial products algorithm and the lattice algorithm for solving multiplication problems. A student's mother and grandmother got into a discussion about which was better and easier. Each was equally surprised to hear the opinion of the other, and they very strongly demonstrated my point that not every child learns the same, and that understanding and success in solving problems is the key issue, not the method used to accomplish this. Some parents still had trouble understanding how the algorithms worked, but they did agree that their children seemed to understand math better than they did. Once all the booklet information was covered, we had door prize drawings and refreshments. The discussions continued until the last parents left, but they all left feeling better about the math program their children were using.

As he was leaving, one father commented that it was the first time in the six years his son had been in school that he understood what the math program was doing. He was a strong advocate of teaching to mastery and everybody doing it the same way, but he now understood that not every child was successful that way — including his son. He was now willing to accept that more options made it possible for more students to be successful. “I wish this workshop had been offered six years ago. Maybe we wouldn't have had such a struggle in math,” was his final comment. We all hoped that this workshop had come soon enough for the other parents who attended.

Math Nights have always been a part of our program, but this one was the first time parents went home with a positive attitude about the way their children were learning math. We had finally found the right combination of information to satisfy their needs. The things they appreciated the most were the booklets of grade-specific information and the interactive presentation on algorithms. Our plan for this Math Night was based on the feedback from parents at the first parent meeting of the year. The next time the topics may change depending on the feedback from the parents. The focus must be on the information needs of the parents when determining the content of the workshop. I think we will do a much better job of understanding their needs in the future.

