

Elementary Principals’ *Everyday Mathematics* Session

**Edwina Eberle
School City of Hammond**

Overview

In October of 2007, the School City of Hammond Select Cadre of the Indiana Mathematics Initiative hosted an after-school math workshop for elementary district and building administrators. The content of the session began with an overview of the newest revision of the *Everyday Mathematics* kindergarten curriculum that is being implemented in the district, followed by cadre members reviewing the basic components of the *Everyday Math* lesson format for all grade levels. Then the administrators watched a video, made by the cadre, of an *Everyday Mathematics* lesson in a second grade classroom. The video covered the three basic components of an *Everyday Mathematics* lesson and showed students playing a related *Everyday Mathematics* game. Administrators participated in classroom walkthroughs at several grade levels looking for elements found in a standards-based mathematics classroom. Participants were provided with grade-level checklists to use at each grade level and other resources to help support their efforts to obtain maximum effectiveness for math instruction. The session concluded with an opportunity for participants to play an *Everyday Mathematics* game and provide feedback of the session.

Background

The Indiana Mathematics Initiative (IMI) is a statewide collaboration of Indiana University and nine urban school districts in the state, funded by a grant from the National Science Foundation. The initiative is dedicated to providing professional development for teachers on the proper implementation of a standards-based math program and the building of mathematical content knowledge for classroom teachers. Hammond has been involved in IMI since 2002. As a part of the National Science Foundation’s grant, each of the districts involved created a “Select Cadre” of teachers that would provide leadership and sustainability within their districts. Hammond’s Select Cadre is made up of a group of eight teacher leaders selected by the district’s Chief Administrator for Academic Services. The cadre consists of representatives for each grade level K through 5, a special education teacher, and our district coordinator. The grade-level teachers were involved in the implementation of the *Everyday Mathematics* standards-based math program even before the official district adoption. The Select Cadre has also been involved in planning and hosting professional development meetings for district teachers. In the past we planned and facilitated meetings on topics including improving teachers’ knowledge of math content, understanding the spiral of the *Everyday Mathematics* program, and other topics equally as important. (See “Mathematical Professional Development for Elementary Teachers” by Sherri Prast. (<http://www.indiana.edu/~iucme/perspectives/15prast.pdf>)) These meetings were open to administrators as well, but they were mainly attended by elementary teachers.

The Plan

At our initial meeting for the 2007–2008 school year in September, the Select Cadre met to discuss what our vision of professional development for the district would be. This year it was decided that we needed to find a way to address the issue of individual teachers' delivery of a standards-based math curriculum. At an early Indiana Mathematics Initiative training meeting, all state cadre members received information about how students' math test scores are directly related to a teacher's understanding of math content and standards, in this case the standards-based *Everyday Mathematics* program, and how effectively she/he delivers those components of the program. As a team, we decided that it would be very difficult for us to find ways to measure teacher effectiveness. The logical approach would be to make sure that building administrators were involved in this process. In the district, principals are expected to be instructional leaders in their buildings and involved in academic initiatives. They should be equipped with the tools needed to evaluate teacher effectiveness and provide the support for the teachers who need it. Questions that we needed to address included, 1) what do the building principals already know? and 2) what further information do they need? 3) what tools do they need to provide support to teachers? 4) and how can the cadre be used to meet those needs?

It was decided that the first order of business would be for the Select Cadre to hold the first district meeting as a workshop for district administrators and, in particular, building administrators, principals and vice principals, because they are accountable for the math instruction in their buildings. The meeting would focus on reviewing the key elements of *Everyday Mathematics*, the text adopted for Hammond schools in 2004. In the past the Indiana Math Initiative had offered sessions for principals on the importance of a standards-based program for effective math instruction. This session would include a review of information they had received in the past as well as new, revised information about the kindergarten curriculum. We would also include any additional useful tools to observe and evaluate the level of effective math instruction occurring in any district elementary classroom.

Once we understood what the purpose and the mission would be, we hashed out the strategies we would use to get this mission accomplished. It was decided that we would hold the meeting in an elementary building in a classroom that supported evidence of a standards-based math program. We would create a video of a well-executed math lesson with all necessary components, so that principals could see what a typical lesson would look and sound like. We would provide classroom checklists of visible evidence of program implementation at each grade level. We also wanted to include additional activities and resource materials to help the principals. Wow! This was a tall order to fill, but we all agreed that the positive benefits for our math students would be tremendous. We then set about the business of planning the agenda and deciding on the role each of the cadre members would play in the final products.

The Select Cadre met on several occasions to plan our agenda for the workshop (see Appendix 1 for agenda) and distribute the responsibilities to achieve our goals. The easiest and least complicated task was for each of us to create a classroom checklist for our grade level. The idea for a checklist was based on a list found in the *Everyday Mathematics Consultant's Guide*. In the past, some principals had requested a checklist to use as a tool for classroom walkthroughs to help them quickly determine whether a teacher was implementing the components of the program without directly observing the teacher engaged in a math lesson. The Select Cadre members developed specific individual grade-level checklists to include key elements of the *Everyday Mathematics* program that would be visibly evident in a classroom at the particular

grade. The checklists included tools such as number lines and number grids, items that are needed to enforce the pedagogy of a standards-based program. (See Appendix 2 for an example of a checklist.)

Next we needed to choose *Everyday Mathematics* lessons that we would use to review the lesson format. The points we would concentrate on during this segment would be, 1) pacing a lesson, 2) strategies for executing the learning (whole group/partners/individual), 3) splitting up the lesson segments during the school day, 4) and how to use the Part 3, *Options for Individualizing*. Since we felt that this was a “one-time” opportunity to share this important information, we wanted the lessons we chose to be rich in all of these elements.

The biggest and most difficult task for the cadre was the planning and producing of an effective video of a complete math lesson. We approached a colleague, a nationally board certified second grade teacher and a very effective *Everyday Mathematics* instructor who graciously allowed us to tape her in the process of teaching all of the components of a typical math lesson. We obtained parental permission to tape the children in the classroom for educational purposes. Over the course of two days, a Select Cadre member taped the teacher and class participating in a lesson that highlighted the Part 1, (direct instruction of a math concept), Part 2 (review and practice of a math concept previously taught), as well as Part 3, (“Options for Individualizing”) for differentiated instruction. The video also included a segment of the students participating in centers with *Everyday Mathematics* games and “Exploration” activities. With the taping done, the next step was to begin the timely process of editing and revising the tape for use at the workshop. When the cadre met to edit the tape, we were very pleased with the contents of the lesson. Even though the video itself was rough as far a film quality goes, it really captured the most important elements of math instruction that we wanted to share with the administrators, so that they would be familiar with what good math instruction looks like and how a standards-based program is executed. We also had to choose the places in the video where we expected to pause for discussion and reflection of the tape contents. All of this took cadre members several hours to accomplish.

The tasks left for the cadre to complete for the session included planning the procedure for the administrators to practice classroom walkthroughs with the grade level checklists. We requested permission from specific teachers at each grade level in the building to use their rooms. Our plan was to distribute student white board slates to the principals so they could record components of *Everyday Mathematics* they found in each of the classrooms they visited. We would then facilitate a discussion of their findings and distribute and discuss the prepared checklists the participants could use for walkthroughs in their own buildings. We also decided on an *Everyday Mathematics* game that the administrators would play as a culminating activity. We would facilitate a discussion on the importance of modeling and playing the games, and any modifications that could be made to the game to accommodate learning.

The session would end with an overview of the resources available in the district. These included a list of the names of teachers who were active participants in the Indiana Mathematics Initiative and who could be called upon to support other teachers as needed. An “Exit Slip” was prepared as a feedback form for the session. Exit slips are informal assessment tools commonly used in *Everyday Mathematics* classrooms. The cadre prepared an exit slip asking administrators to reflect on what expectations they had of the workshop, what additional information they had learned from the session and could utilize, and their thoughts on what additional support they would need from the cadre. (See Appendix 3 for a sample Workshop Exit Slip). Our expectation was to get all of this accomplished in 2 hours and 15 minutes!

The Session

There were fifteen administrators in attendance at the October session. After introductions and a formal welcome by the IMI district math coordinator, the meeting proceeded as planned, with no technical difficulties! We began at 3:15 P.M. and ended the session shortly after 5:30 P.M. Even though we had the full agenda planned to the minute, there was a time crunch at the end. We proceeded through the early sections of the presentation on schedule, but viewing the video required more time than expected because of questions and comments about its contents and procedures. It proved to be of high interest and required time over and above what was planned. When it came time for the administrators to do a practice walkthrough, the participants took their time, asked questions, and took lots of notes. They used the typical tools of a math lesson, a white board slate and dry erase marker, to record their findings. We had gone past our allotted time and had to hurriedly return to the classroom to debrief, to pass out and review the prepared classroom checklists and additional resources. Finally they filled out an evaluation form. Even though we ran overtime, most participants stayed for our culminating activity, playing and discussing a math game, “Spoons,” from the fifth grade curriculum—and they had a great time!

Following the session, the cadre eagerly poured over the feedback forms. After reading the responses on the exit slips submitted by the participants, it was obvious that the session had been a success. Principals’ responses indicated that they learned in more detail about the *Everyday Mathematics* curriculum, that they had appreciated the session and expected to use the cadre and other resources in the future. (See Appendix 4 for examples of feedback.)

The Future

Lots of time and hard work went into the planning and execution of the principals’ session and we had high expectations of meeting our goal: to continue working with individual principals throughout the school year to support them, their staff, and/or individual teachers to improve individual teachers’ delivery of the standards-based math program. One of the positive outcomes of the session was the decision made by one of the principals to have the cadre included in his school’s 2008–2009 Public Law 221 plan to provide support and staff development over the school year. Two other principals requested using the video and perhaps parts of the presentation for future staff meetings in their buildings. We hoped that continued dialog between cadre and the other participants would progress over the school year. However, as the school year progressed the cadre was not contacted and, other than the principal’s plan to include the Select Cadre in the school’s PL 221 plan, nothing else was in place that followed up on the session. At one of our meetings near the end of the school year, the cadre reflected on the very positive responses from administrators. We knew from their feedback that they appreciated the session and had planned to use our resources. But time, or lack of it, was a deterrent. Now we see that it is necessary to take a more active, assertive approach in the future in order to meet our goal of improving math instruction district wide.

Cadre members brainstormed ways to initially approach principals and decided on this plan of action for the coming school year. We would send the administrators reminders of the resources that the cadre has available, the resources they received at the October session. We are going to post the classroom checklists on the school city’s website for easy access for administrators as well as for teachers. We also want to remind them that we have cadre members who can model lessons, mentor individual teachers, or do whole group presentations for staff and/or grade-level team meetings. We plan to approach all new administrators to see what their

needs are and how we can assist them. We discussed how individual cadre members could partner with individual administrators, to help in identifying their needs and/or the needs of their staff as a whole, or work with individual teachers in the building who may need assistance.

To sustain what was begun with the IMI project and to continue to provide leadership and professional development when and where it is needed, the Select Cadre of School City of Hammond realizes that it is crucial that the achievements and future promise of our standards-based program remain in the forefront of administrator plans. The years of leadership training provided by the Indiana Mathematics Initiative have prepared us to remain focused on reaching our goals.

Contact info: Edwina Eberle
School City of Hammond
Morton Elementary School
7006 Marshall Avenue
Hammond, IN 46323
egeberle@hammond.k12.in.us

**Elementary Principals
Everyday Math Session**

October 15, 2007

Agenda

- I. Welcome & Introductions**
- II. Overview of Session**
- III. Everyday Math Lesson Format**
- IV. “What it looks like”**
- V. Classroom “Walk-Throughs”**
- VI. Checklists for Everyday Math**
- VII. Everyday Math Games**
- VIII. Overview of Available Resources**
- IX. Feedback Form**

Everyday Math Visible Evidence Fourth Grade

Routine	Evident in Classroom	Notes or Observations
Number Line		
Multiplication/ Division Grid		
EM Posters <small>(varies depending on unit of study)</small>		
Number Grid		
Math Vocabulary		
Math Tool Kits		
Math Games		
Problem Solving Steps		
Fact Triangles		
Timed Tests and Graph of Scores		

Teacher's Name _____

Date of Monitoring _____

Workshop Exit Slip
Elementary Principals - Everyday Math Session
October 15, 2007

<p>I came expecting...</p> 	<p>I learned...</p>
---	--

Something I'll be able to use...

I need more in the area of...

Overall comments...

Workshop Exit Slip

Elementary Principals - Everyday Math Session
October 15, 2007

I came expecting...

To see a full EDM lesson.

To learn about all of the components of a lesson.

I learned...

What a complete lesson looks like and what components should be taught.

Something I'll be able to use...

The checklist with the lesson components for each grade level. Thank you.

I need more in the area of...

Lesson modeling at both the primary and intermediate levels

Overall comments...

Nice job by all! Very informative, professional and fun!