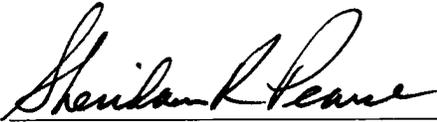


MEMORANDUM OF UNDERSTANDING BETWEEN
DEPARTMENT OF DEFENSE DEPENDENTS SCHOOLS AND
FEDERAL EDUCATION ASSOCIATION

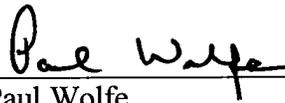
DoDEA K-12 Mathematics Curriculum Guide
and On-line Curriculum Mapping Tool

The Department of Defense Dependents Schools (DoDDS) and the Federal Education Association (FEA) hereby agree to the following in implementing the DoDEA K-12 Mathematics Curriculum Guide and On-line Curriculum Mapping Tool within DoDDS in accordance with the attached guidance beginning in school year 2006-2007:

1. Management-directed training for this implementation will normally be held during the duty day. If training cannot be accomplished during the duty day, the parties agree that management and the FEA representative at the appropriate level will consult about the time, place and length of the training. Educators will be compensated for the time spent outside of the duty day in accordance with established practice.
2. The method for providing management-directed follow-up training related to the implementation of the DoDEA K-12 Mathematics Curriculum Guide and On-line Curriculum Mapping Tool will be determined at the area level.
3. In attempting to resolve any disputes that arise, the parties agree to make every effort to resolve such disputes at the organizational level where they arise prior to forwarding them to the next level.
4. FEA will be given the opportunity to designate a representative on committees, task forces, work groups, etc. that involve bargaining unit members in accordance with currently established practice. It is understood that this representation does not constitute bargaining.



Sheridan R. Pearce
FEA President
March 16, 2007



Paul Wolfe
Human Resources Director, DoDEA
March 16, 2007

Union Issue Paper
Department of Defense Education Activity
Arlington, Virginia

Topic: K-12 Mathematics Curriculum Guide and On-line Curriculum Mapping Tool

Background:

- The purpose of the Mathematics Curriculum Guide is to provide teachers with focused, concept-based units that provide clarity and specificity to the DoDEA Mathematics and Science Content Standards.
- The curriculum guide serves as a planning tool and resource for DoDEA teachers, providing a coherent scope and sequence for a standards-based curriculum. The components of the guide are presented as *samples* for teachers to use and adapt in their classrooms.
- For each quarter, the curriculum guide includes the following components: quarterly essays, multiple unit overviews, essential understandings with examples of guiding questions, key concepts and skills, common misconceptions, representative assessments, and sample learning activities/resources.
- Content essays are provided that build teachers' content knowledge of mathematics and how students think about and learn mathematics for each grade-level curriculum guide. When other content-area curriculum guides are completed, teachers will be able to plan and integrate standards-based lessons that facilitate student learning across the curriculum.

Rationale:

- While the technical evaluation of teaching materials does examine the correlation to the DoDEA Mathematics Standards, the adopted textbooks may not provide all the lessons and materials needed to teach to all the DoDEA Standards. For example, no appropriate lessons are found in the adopted mathematics textbook for the 1st unit in 6th grade, *Representing Patterns*. Rather than searching for necessary and additional materials needed to teach at least three of the 6th grade Algebra M2 Standards, the curriculum guide serves as a time-saver for teachers as appropriate resources are readily available in the *Learning Resources* section. In addition, teachers may omit lessons in the adopted textbooks that do not correlate to the DoDEA Standards.
- For each quarter of instruction, flexibility in the pacing timelines is included to value the uniqueness and diversity of students in each classroom. For example, the 1st unit in 6th grade mathematics, *Representing Patterns*, is a 3-week unit, and the 2nd unit, *Angles*, is a 2-week unit. Dependent upon the prior background knowledge and needs of each teacher's students, the length of time spent teaching these units may be varied. As teachers view the entire curriculum pacing or map which includes each unit for one year of instruction, flexibility in planning for instruction will occur based on student learning needs.

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- Teachers have always planned differentiated instruction to meet the needs of all their students at different levels in their classrooms. Using the curriculum guides, teachers will not need to use their own time to search the Internet and other resources for differentiated resources as these are already linked to appropriate web sites in the *Learning Resources* section. The Mathematics Curriculum Guide is in draft form and recommended resources that are not available to DoDEA teachers are in the process of being deleted by the writers at Educational Development Center (EDC).

Rubicon Atlas Tool:

- The curriculum guide is available for teachers and administrators via an on-line curriculum-mapping tool entitled Rubicon Atlas. This tool is a dynamic web-based database that allows teachers to access and maneuver through the guides with multiple format options.
- All DoDEA teachers and administrators have password access to Rubicon Atlas. To access the curriculum guide on Rubicon Atlas, follow Module 2 Presenter's Notes. Web sites are listed by district and, as an example, a teacher in the Heidelberg district would use this URL: <http://heidelberg.dodea.rubiconatlas.org>. All links use the same initial password. The initial password is dodeaP@SS.
- Module 2 Presenter's Notes provide step-by-step technology training for K-12 teachers, educational technologists, and administrators who are learning to navigate the Rubicon Atlas Tool in order to access the curriculum guides. Clicking on user-friendly buttons and links built into the electronic tool are explained in the Module 2 Presenter's Notes.
- Due to budget constraints and the volume of paper that would be required to make a hard copy of each grade-level curriculum guide, using an on-line curriculum-mapping tool is a practical medium for planning instruction. Using the *Analyze* feature of Rubicon Atlas, teachers can view multiple map overviews on-line at the same time. This feature enables teachers to view only one computer screen and see what comes before and what comes after a particular topic across multiple grade levels.
- However, each area will need to provide teachers with resource support such as paper for lesson planning and delivery. For example, inquiry-based activities for students found in the *Learning Resources* section of the curriculum guides can be downloaded for instruction.
- Rubicon Atlas is a separate web-based database that does not use the DoDEA Blackboard site. No Blackboard training is needed to access the curriculum guides.

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Professional Development: Target Audience

Mathematics Curriculum Guide & On-line Tool.doc

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▪ **Mathematics Teachers**

- January through May 2007 is the pre-implementation rollout of the Mathematics Curriculum Guide with full implementation in SY07-08.
- Elementary, Middle, and Secondary Teachers: The teacher face-to-face PD training plan is divided into two 3-hour modules for 1 day of PD. Module 1 focuses on the development of conceptual and procedural knowledge embedded in the curriculum guide, along with providing the rationale, structure, and purpose of the curriculum guide. Teachers do not need access to a computer lab for module 1. In module 2, teachers interact and examine the grade-level curriculum guide components via Rubicon Atlas, the electronic tool.

▪ **Educational Technologists**

- K-12: In a weekly packet, K-12 educational technology teachers will receive guidance on how to support teachers' access to the Mathematics Curriculum Guide. This will include using module 2, where they may interact and examine the grade-level curriculum guide components via Rubicon Atlas, the electronic tool.

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