

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

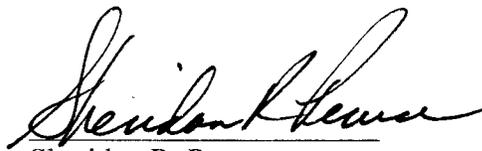
DoDEA K-12 Science Curriculum Guide and On-line Curriculum Mapping Tool

The Department of Defense Dependents Schools (DoDDS) and the Federation Education Association (FEA) hereby agree to the following in implementing the DoDEA K-12 Science Curriculum Guide and On-line Curriculum Mapping Tool within DoDDS in accordance with the attached guidance beginning in school year 2007-2008.

1. Management-directed training associated with the new guide will be held during the duty day. If training cannot be accomplished during the duty day, the parties agree that management and the FRS will consult about the time, place and length of the training at the local level. If conducted away from the duty site, educators will be compensated for the time spent at training in accordance with established practice.
2. The method for providing training related to the DoDEA K-12 Science Curriculum Guide and On-line Curriculum Mapping Tool will be determined at DoDEA headquarters. The FEA will be provided information about the training and other issues related to the implementation of the Science Curriculum Guide.
3. Upon completion of SY 07/08, the parties agree that, the FEA will be provided a summary of the feedback, including any problems identified, from the implementation of the DoDEA K-12 Science Curriculum Guide and On-line Curriculum Mapping Tool. After receiving the feedback, the parties will meet and review the results.
4. The parties agree that, if any changes are made to the process as agreed, FEA will be notified and may then request additional bargaining on modifications.
5. 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 the matter to the next level.
6. 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.



Lenoir Graham  
Human Resources Director, DoDEA  
July 3, 2007



Sheridan R. Pearce  
FEA President  
July 3, 2007

**Information Paper**  
**Department of Defense Education Activity**  
**Arlington, Virginia**

**Topic:** DoDEA K-12 Science Curriculum Guides and On-line Curriculum Mapping Tool

**Background:**

The purpose of the Science Curriculum Guides is to provide teachers with focused, concept-based units that provide clarity and specificity to the DoDEA 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 for teachers: 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.
- Suggested timelines for each unit are included for quarterly pacing purposes. However, flexibility in the use of the suggested pacing guides is necessary to value the uniqueness and diversity of students in each classroom. Dependent upon the prior background knowledge and needs of each teacher's students, the length of time-spent teaching these units may be varied.

**Rationale:**

- While the DoDEA technical evaluation of teaching materials does examine the correlation to the DoDEA Science Standards, the adopted textbooks do not provide all the lessons and materials needed to teach to all the DoDEA Standards.
- The curriculum guide serves as a time-saver for teachers as appropriate resources aligned to the DoDEA Standards are identified and readily available in the *Learning Resources* section of the unit plans.
- In addition to the alignment of lessons from the adopted textbooks, examples of lessons and links to on-line resources are included.
- Using the curriculum guides, teachers will minimize their own time spent searching the Internet and other resources for differentiated resources, as these will be already linked to appropriate web sites in the *Learning Resources*.



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**Rubicon Atlas Tool:**

The Science curriculum guides will be available for teachers and administrators via a web-based curriculum 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.

The Science Curriculum Guides will be added to the already existing Rubicon Atlas DoDEA district web sites. For example, a teacher in the Heidelberg district would use URL: <http://heidelberg.dodea.rubiconatlas.org> to access his/her guide whereas; a teacher in the North Carolina district would use URL: <http://nc.dodea.rubiconatlas.org>. Elementary teachers and administrators who were enrolled in Rubicon Atlas during the mathematics implementation will access the science guides with their same passwords. Middle & High School Science Teachers will be enrolled into their district sites and their initial password will be dodeaP@SS.

Using the electronic tool to access the curriculum guide 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.

**Professional Development:**

January through May 2008 is the pre-implementation rollout of the Science Curriculum Guides with full implementation in SY08-09. The guides are living documents and this implementation will initiate another review process of the content as teachers use the guides and make improvements in their schools & classrooms.

- **Elementary Teachers:** A three-hour professional development session will be necessary for elementary teachers. This session will be a face-to-face training, which will focus on understanding the science concepts and process skills embedded in the curriculum guides, along with providing the rationale, structure, and purpose of the curriculum guides. (The introduction to the navigation tool will not be necessary for the elementary school teachers as this was delivered during the SY 06-07 mathematics curriculum guide implementation training.)



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- **Middle and Secondary Science Teachers:** PD needs for these groups include an introduction to the navigation of the electronic tool, Rubicon/Atlas therefore; two 3-hour sessions of face-to-face training will be provided. The first 3-hour session will focus on understanding the science concepts and process skills embedded in the curriculum guides, along with providing the rationale, structure, and purpose of the curriculum guides. In the second 3-hour session, teachers will need access to a computer to interact and examine the grade-level/course specific curriculum guide components via Rubicon Atlas, the electronic tool.
  
- **Educational Technologists (K-12):** Following the module used in the MS/HS second session, educational technology teachers will interact and examine the grade-level curriculum guide components via Rubicon Atlas, the electronic tool. They will also receive guidance on how to support K-12 teachers' access to the Science Curriculum Guides via Rubicon Atlas.

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