



Strategy Boosters

**Lessons Learned from
Department of Defense Education Activity
Educational Partnership Grants**



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Lessons Learned from the DoDEA Educational Partnership Grants

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Strategy Boosters: Lessons Learned from the DoDEA Educational Partnership Grants

To advance to new levels of excellence, DoDEA engaged in a comprehensive process to revise the Community Strategic Plan (CSP). The plan expands opportunities for ALL military-connected children, and sets a common understanding of our shared mission, vision, and core values, both internally and to our stakeholders. The CSP assists in aligning efforts to support both students in DoDEA schools and students who are in public military-connected school districts.

In alignment with the CSP Strategic Goal 5 (Outreach Excellence), the DoDEA Partnership Grant Program supports research-based programs to increase student achievement and ease the challenges that military children face due to their parents' military service. The grant program provides resources to military-connected local educational agencies (LEAs) to develop and implement projects that are designed to:

- » Promote student achievement in the core curricular areas.
- » Ease the challenges that military students face due to transitions and deployments.
- » Support the unique social and emotional needs of military students.
- » Promote distance learning opportunities.
- » Improve educator professional development.
- » Enhance and integrate technology.
- » Encourage parental involvement.

Since 2008, the program has awarded grants to more than 165 military-connected LEAs. These three-year projects impact nearly 280,000 military-connected students and improve academic instruction in nearly 900 schools. Many projects involve multiple strategies that incorporate state standards, local curriculum, and system-specific structures. These large-scale strategies include specific, self-contained activities developed and tested in real-world situations that would be useful across a wide-range of school systems and curricula.

All the profiles in this document provide superintendents, principals, teachers, and other school personnel a snapshot with relevant details about how the districts developed and implemented the activities. Each profile is categorized to help identify the activity or activities most relevant to the military student population. All Strategy Boosters are activities that have yielded increased student achievement or improved transitions for military-connected youth.

The profiled strategies are grouped into four main categories:

- » **Professional Development** – processes that move beyond traditional professional development delivery to effectively implement new programs quickly and with greater fidelity
- » **Technology in the Classroom** – hardware/software added to academic improvement initiatives and ideas to facilitate technology adoption and extend the utility of the equipment purchased
- » **Formative Assessments** – strategies to use and organize information that help schools integrate formative assessment data into everyday practice

- » **Transition Support** – structures that help meet the needs of families and schools in assisting military-connected students

At the conclusion of each profile, there is a series of reflective questions that can assist with professional development and/or implementation planning. The questions may help readers contextualize the Strategy Booster in their own situation, finding similarities and differences, and identifying next steps to implement the activity.

All Strategy Boosters can help schools meet the academic needs and/or social-emotional needs common to all military-connected students that result from frequent school changes. Each strategy is designed to be replicated and tailored to the needs of each district, school or classroom. Some activities may be integrated into existing school initiatives or highlighted during professional development sessions. Below is an overview of the districts highlighted under each category:

School District	Category			
	Professional Development	Technology in the Classroom	Formative Assessments	Transition Support
El Paso Independent School District, TX (2010 Cohort)	✓			
Huntsville City Schools, AL (2010 Cohort)	✓			
Northside Independent School District, TX (2009 Cohort)		✓		
Clover Park School District, WA (2010 Cohort)		✓		
USD383 Manhattan-Ogden, KS (2010 Cohort)			✓	
Hardin County Schools, KY (2009 Cohort)			✓	
Madison City Schools, AL (2010, 2011 Cohorts)				✓
Fallbrook, CA (2010 Cohort)				✓
San Diego USD, CA (2010 Cohort)				✓

More information about the DoDEA Educational Partnership Program can be found at <http://www.dodk12grants.org>. If you wish to receive additional information about the projects featured here, please contact the DoDEA Evaluation and Technical Assistance Center (ETAC) at dodk12grants@seiservices.com or (877) 630-DATA. For additional information about the DoDEA partnership grants, please contact Fatimah Dozier at fatimah.dozier@hq.dodea.edu or (571) 372-5871.

The background of the slide is a close-up photograph of several petri dishes containing agar. The agar is colored in various shades: red, blue, green, and yellow. The dishes are arranged in a cluster, with some in the foreground and others slightly out of focus in the background. A white horizontal band runs across the middle of the image, containing the title text.

**Professional Development:
Moving Beyond Traditional
Models of Delivery**

Coaching as Professional Development to Improve Practice

Project Overview

This project focuses on improving science achievement in two elementary schools. The main strategy is to increase teacher science content knowledge and pedagogical skills through professional development. It also incorporates a new, completely digital science curriculum, STEMScopes¹.

Challenges El Paso experienced when providing professional development (PD) in science included: teachers understanding a new curriculum, learning to use new technology (e.g. digital projectors, document cameras and interactive whiteboards), and delivering instruction based on a new pedagogical model². An additional challenge for El Paso was that class schedules and formats differed at the two schools participating in the project. One school has dedicated science faculty and 90-minute science class blocks. At the other school all teachers teach science during shorter instructional blocks. Thus, the instructional time, teacher knowledge, and science facilities must be considered when designing the professional development.

El Paso ISD, TX

Project Title: **21st Century Science Classrooms**

Cohort: **2010**

LEA/District: **El Paso ISD**

Military Installation Served: **Fort Bliss**

Number of Participating Schools/Sites: **2**

Project Focus: **K-5 STEM**



Implementation

Using DoDEA funds, the school hired a science teacher to serve as a Science Coach for both schools. The Coach received extensive training from the curriculum provider on all aspects of implementation and assessment, including becoming knowledgeable about materials, developing lesson plans using the materials, and establishing classroom procedures for using the materials and equipment. After teachers learned about the curriculum during traditional group PD sessions with the Coach, the Coach provided ongoing implementation support. The Coach assisted with

lesson planning, presented model lessons in the classroom, evaluated teachers' delivery of the materials in the classroom, provided individual feedback, and participated in PLC meetings to plan additional PD based on teacher feedback.

The PD is extremely flexible – the Coach spends alternate days at each school providing scheduled PD sessions, but can also be available on an as-needed basis. Since materials are all digital, teachers and the Coach can access them at any time from any location.

¹STEMScopes was developed by Rice University's Center for Technology in Teaching and Learning. This science curriculum is designed for K-8th grade and Biology and is primarily aligned with the Texas State Standards, but also has links to national science standards. All materials from preparation to lessons to homework and assessments are presented online, in a flexible, modular format so that schools can use some or all components. Go to <http://ctl.rice.edu/STEMscopes> for more information.

²The 5-E model for all lesson units: Engage – Explore – Explain – Elaborate – Evaluate.

The Coach was trained to use all the technology installed for the new curriculum platform: interactive whiteboards, computers for teachers, Infocus Projectors and ELMO document cameras. Teachers previously received PD to use the equipment. However, having curriculum delivered via technology increased the pace and extent of teachers' use of the technology. Thus, the Coach needed to supplement PD in those areas as well.

Monitoring and assessment activities include:

- » Informal process assessment - implementation is monitored from feedback that the Coach receives at PLC meetings, lesson plan reviews, and by the project evaluator during regular classroom walk-throughs.
- » A future formal process assessment - Rice University is developing an online usage report that will indicate the extent to which teachers and students access the modules. The information from these reports combined with classroom observations will be incorporated in Year 2 of the project.
- » Overall outcome assessment is accomplished through monitoring achievement on state science assessments in 5th grade.

Lessons Learned

To replicate the coaching model to boost professional development, the Project Director suggests a thorough understanding about all the aspects of PD, and that the Coach must be trained and understand how to deliver large group and individual PD. She noted that STEMScopes is a very comprehensive package developed by Rice University because it provides materials for both the Coach and teachers. The Project Director suggests that it may be more difficult to implement a train-the-trainer model if the Coach acquires training from different sources (for the equipment, instructional model, etc.) or if teacher familiarity with technology is low. In those cases, additional support might be needed to get teachers up-to-speed on all components before the coach can provide ongoing PD.

Project Impact

Teacher feedback about this strategy has been extremely positive. They were concerned that science scores would dip due to new state standards; however, they maintained their exemplary status (above 90) on the state science assessment for 5th grade.



REFLECTIVE QUESTIONS

1. Why did El Paso decide to use the coach model? What is similar or different about your school or district that would indicate if embedded coaching is appropriate for your school or district?
2. What is the benefit of hiring and training a Science Coach (trainer) in the El Paso project? Would your district and schools reap the same benefits?
3. What are the challenges in hiring a trainer with the knowledge and skills that El Paso recommends in their Lessons Learned? How could you overcome that challenge?
4. What preliminary preparation would your district and schools need to create a receptive environment for this professional development?

Using a Wiki Site to Support Professional Development for New Curriculum

Project Overview

Huntsville City Schools partnered with a local college to improve achievement in middle and high school math through the introduction of project-based learning. As college of education professors designed professional development to increase teachers' content knowledge and skills in using technology and hands-on materials for instruction, they identified challenges when teachers implemented the skills in the classroom. The challenge is a familiar one when using a new curriculum: providing time for teachers to write new lesson plans that align with the curriculum and state standards while simultaneously implementing the new strategies into the classroom. There is an added challenge with project-based learning in that teachers must develop instructional materials beyond traditional texts and worksheets. Because many resources for math (and other subjects) are available, assessing the value of the materials and aligning them to local standards and goals is very time consuming.

Huntsville City Schools, AL

Project Title: **Paving the Way to Success: Increasing Knowledge and Application of Mathematics**

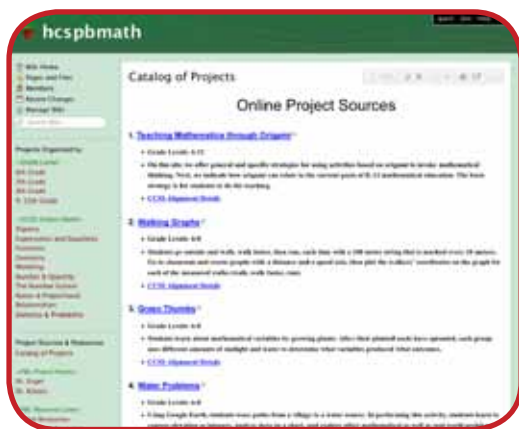
Cohort: **2010**

LEA/District: **Huntsville City Schools**

Military Installation Served: **Redstone Arsenal**

Number of Participating Schools/Sites: **7**

Project Focus: **6-12 STEM**



Implementation

To develop a library of appropriate hands-on lessons to supplement teacher lesson plans, the project team turned to an online solution: Wikispaces³. Wikispaces is easy to use and universally accessible and does not require as much training as other online models. Wikispaces provides free web space and tools for creating, sharing, and storing information that can include text, video and links. Discussion and training are conducted via the "Wiki" site, thus moving the Professional Learning Communities (PLC) model online. This PLC structure is available 24/7 and is not confined to a single school location or time.

One faculty member started populating the wiki library to create a critical mass of materials before it was open for teachers. This front-loading helped encourage the teachers to begin accessing and using the Wiki. The faculty member identified existing materials, evaluated their alignment with Huntsville's math curriculum, added additional information to address the local educational requirements, and uploaded them to the site. It was also important to organize the site to help teachers find information. The site curator worked with potential users to determine the best way to structure the database of materials. Among other information, the teachers needed to have grade-level state standards and math topics to effectively search for appropriate projects for their needs.

³ www.wikispaces.com

The project director noted, "It is a challenge to make people comfortable enough to try something new." To encourage teachers to use the site, site developers posted information about the Wiki on the site and sent teachers reminders via email to check on the Wiki for updated program plans. Teachers also were asked to post comments and feedback about the programs on the Wiki.

The professional development team recorded model classroom lessons and posted the videos on the site. Once teachers began to implement lessons and post their results, others could see how well the lessons worked. This encouraged more reluctant technology users to access the Wiki and to use the hands-on lessons. Teachers used the Wiki to share information about how to make both the Wiki and the lessons more useful. They provided feedback to the professional development team who then responded to general issues and specific requests for assistance.

Teacher feedback indicated that teachers became more receptive to the program over time as use became more widespread. They began submitting suggestions for additional materials, and the first teacher-designed project-based lesson is being piloted this semester. Teachers keep notes on the Wiki about the new lesson's implementation and jot down ideas and suggestions to improve the lesson.

The Wiki quickly became a tool for PD delivery, PLC facilitation, data collection, and accessing materials.

Lessons Learned

Huntsville strongly suggested that the Wiki be populated with materials before asking teachers to visit the Wiki. They also stressed the need for a site monitor to monitor usage, respond to questions, organize materials for easy searching and accessing, and assess the utility of materials. The monitor also would identify those lessons that teachers deemed less successful, remove them from the site, and add new materials.

Project Impact

Huntsville project staff believes that the Wiki helped teachers improve instruction which contributed to the percentage of military students scoring 'proficient' on the math portion of the Alabama Reading and Mathematics Test (ARMT) increasing by 5% in the first year.



REFLECTIVE QUESTIONS

1. Why did Huntsville City Schools decide to use Wikispaces as a professional development activity? How does your district or school compare to Huntsville's need for an online approach?
2. What background is needed by the person responsible for populating an online library with useful materials and resources for teachers? How would you identify that person?
3. What technological infrastructure and personnel does your district or school need to organize the materials database for searching, accessing, and using the materials? Who would monitor the database to determine utilization rates and frequency?
4. How could you encourage teachers to respond positively, over time, to using an online professional development approach? To what extent would your district/school maintain or modify the activities and materials used by Huntsville?

The background of the slide is a close-up photograph of several petri dishes containing agar. The agar is in various colors: red, blue, green, and yellow. The dishes are arranged in a cluster, with some overlapping. The lighting is bright, creating soft shadows and highlights on the edges of the dishes.

Technology in the Classroom: Integrating Technology into the Curriculum

Using Technology to Teach Math Problem-Solving Skills

Project Overview

Texas' new statewide assessment (STAAR), introduced in 2011-2012, emphasizes problem-solving skills in all areas of mathematics. This new emphasis on understanding and using math skills is mirrored in the Common Core curriculum. Northside is using Exemplars®, an online provider of standards-based material focused on teaching math problem solving skills, to supplement existing curriculum.⁴ Exemplars® is used at five elementary schools and one middle school. Based on the success of this project, plans are underway to expand it to other district schools following the model developed here.

Implementation

To implement Exemplars®, the district's math specialists developed a curriculum that aligns with the new state standards. In doing so, they found that the Exemplars® problem-solving tasks align with the standards, and provided information to help teachers use the material. The information included links from activities to specific math units and learning goals, differentiated versions of the tasks, and professional development support to implement the activities. The district specialists introduced the materials to the school principals and campus math specialists. The math specialists, in turn, introduced it to their teachers. The school-based personnel collaborated at a system level with the project director to implement the project.

Integrating the supplemental material into the existing curriculum occurred incrementally. In the first year, teachers attended PD sessions to learn about the program and the pedagogical model. At the start of the following school year, the math specialists held "Exemplar Days" with each grade level, modeling a lesson for the teachers. Foreseeing teacher concerns about integrating time-consuming problem-solving tasks into



their lesson plans, the campus math specialists selected a small number of activities from the materials for each grade level to use during the first quarter. The math specialists linked the activities to specific units and indicated what concepts would be covered so that teachers could understand how the new activities could replace existing lesson plans to teach the same material, and eliminate portions of the lesson. All teachers were required to present these pre-selected tasks at the same point in the math curriculum.

Based on their experiences with this first use of the activities, the math specialists provided additional PD to the classroom teachers. In each successive quarter, the math teachers had to complete a greater number of the tasks in the classroom. The math specialists

Northside Independent School District, TX

Project Title: **Achieving Academic Excellence for Military Students**

Cohort: **2009**

LEA/District: **Northside ISD**

Military Installation Served: **Brooks City-Base, Fort Sam Houston, Lackland Air Force Base, Randolph Air Force Base**

Number of Participating Schools/Sites: **6**

Project Focus: **K-8 STEM**

⁴Exemplars® consists of a library of activities and assessments in math, science and writing that are linked to grade-level standards from many states, and to the common core curriculum. For more information see www.exemplars.com.

continued to select the tasks and provide teachers the information needed to understand how tasks aligned with the curriculum units. As teachers gained experience using the program, they aligned the tasks easily, covering more of each unit with the material provided. Teachers are encouraged to present the activities via interactive-whiteboard technology; hard copies are available if needed.

Lessons Learned

The project directors noted that the key to Northside's successful implementation is ongoing collaboration – no one is “working in isolation” to integrate the supplemental materials and the problem-solving model into the curriculum. Each step includes sharing information and problem solving among all the project participants: project director, principals, math specialists and teachers. The common platform developed is expanding to meet challenges in other areas. During the 3rd year of the project, the participants are taking it to the next level. Teachers and students throughout the schools have a common math language that has developed from using the Exemplars® material. Classroom walkthrough protocols are being designed as part of the program and are gaining support with teachers.

Project Impact

In the first year of the project, Northside reported improved state math test scores for military and non-military students. Each participating school improved their state ranking by at least one increment. Now Texas ranks all participating schools as either “Exemplary” or “Recognized.”



REFLECTIVE QUESTIONS

1. Why did Northside Independent School District decide to implement a new math curriculum? To what extent does your district or school experience the same issues with curriculum?
2. How did Northside's implementation plan support teacher use of the new curriculum to improve student outcomes? What could your district do that would yield similar success?
3. What are the various professional development strategies that Northside used to help teachers understand and use the new curriculum? What strategies could your district implement to provide teachers a high comfort level with new curriculum?

Putting 21st Century Technology in Students' Hands

Project Overview

The Clover Park School District wanted to improve science and math achievement in one high school and two middle schools. Before receiving the DoDEA funds, Clover Park began revising the math and science curricula. Because both the SAT and ACT now allow calculators during the test, as does the state's standardized assessment program, the district wanted to integrate more calculator use into the curriculum. After being awarded the DoDEA grant the district developed an overall strategy to infuse 21st century technology such as the TI-Nspire Handheld[®] calculators into math and science classes.

Clover Park School District, WA

Project Title: **Technology and Student Support at Three Secondary Schools**

Cohort: **2010**

LEA/District: **Clover Park School District**

Military Installation Served: **Joint Base Lewis-McChord**

Number of Participating Schools/Sites: **3**

Project Focus: **6-12 STEM**

Implementation

The TI-Nspire Handheld[®] calculators include advanced math and data functions and graphing capabilities. The Navigator System[®] is an add-on that allows the calculators to be networked⁵. The networking allows teachers to monitor students' work and to work with an individual student or groups of students by transferring the display to an interactive whiteboard. Additionally, a partner company⁶ makes a range of compatible, plug-in science probes such as thermometers and CO₂ sensors that extend the utility of the calculators into other areas of the science curriculum.



Many school districts have added similar technology without experiencing a commensurate rise in student achievement. To avoid this, Clover Park first integrated technology into their curriculum. Then, they provided professional development to teachers and implemented the project incrementally.

As noted above, the curriculum review and adaptations started prior to purchasing the equipment and training. Part of the curriculum review involved updating standards and assessments. During the first year of the project, math teachers implemented the classroom activities and the science department reviewed their curriculum. In the second year of the project, the science department began classroom implementation. The project director selected one teacher from each high school to serve as the on-site coordinator and teacher-facilitator. This individual received nine additional days of training from Texas Instruments (TI) to become certified to facilitate implementation and lead professional development opportunities. The training included how to troubleshoot common problems and issues with the TI technology. The teacher-facilitators who are TI-certified instructors supplemented the TI training for teachers. Additionally, TI systems engineers, technicians, and software engineers provided additional support to address the technology challenges experienced by Clover Park teachers.

To help plan each successive year's PD, teachers completed a year-end survey about their comfort level with the technology and how they used the technology in the classroom. The project director reports that,

⁵ The TI-Nspire Handhelds, Navigator system, and software to use them are products of Texas Instruments, Incorporated.

⁶ Vernier Software & Technology.

as expected, the first year implementation proceeded slowly. As teachers felt more comfortable with the technology, they assisted the district's curriculum writing team with developing and sharing lesson plans. The sharing helped increase the rate of implementation exponentially in the second year.

Lessons Learned

Proof of the successful adoption of the technology is shown in the way calculator use is expanding both at the project schools and beyond. At one participating DoDEA middle school, four math teachers and a math consultant teacher are piloting the TI-MathForward program, where they are receiving personalized coaching from TI and working to develop and share more lesson plans and improve instructional delivery with the technology. The district's Assistant Superintendent heard about the enthusiasm and successes generated by the project and started a pilot at one of the most challenged middle schools in the district. Funds were provided by the district for the classroom technology for the non-DoDEA middle school, but to supplement PD, the teachers in the new pilot have joined with the TI-MathForward team to create an online PLC (using a Wiki and Google docs) to share knowledge and generate ideas for scaling up the program to the other secondary schools. Most important, for sustainability, a nine-day professional development opportunity for math and science teachers to be certified as TI instructors will be offered during the summer break.

Another lesson learned was that the teacher-as-facilitator model, not a district technology coordinator, helped school-based personnel invest in the project. Teacher buy-in was a key factor in the implementation success. The facilitators' enthusiasm led to further teacher engagement as many devoted out-of-school time to developing activities and sharing with other teachers. The project director believes that selecting the right people to start the project, giving them adequate training, and then "letting the teachers run with it" creates an atmosphere that encourages others to build on their success.

Project Impact

Prior to the project, 93% of teachers indicated that they never used supplemental materials in algebra or geometry in the classrooms. Since purchasing the TI-Nspire calculators for all students, daily classroom usage of the equipment increased to 77%. Sixty percent of teachers said their students use the calculators for in-class inquiry-based explorations using the calculator's scientific functions. Additionally, math benchmark test data show that the classes furthest along in implementation (utilizing the technology most consistently) demonstrate the greatest score gains.



REFLECTIVE QUESTIONS

1. How did Clover Park School District address the fact that many districts added technology to the curriculum but did not experience a commensurate rise in student outcomes?
2. How can Clover Park's ideas be adapted for your district? How can your district help ensure that the technology will impact student outcomes?
3. How did Clover Park's implementation plan for networking calculators support teachers' use and student outcomes? What could your district do to yield similar success?

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**Formative Assessments:
Linking Data to Specific
Student Needs**

Linking Data More Effectively to Interventions

Project Overview

The district designed the Data-Driven Success program to improve math and reading achievement among elementary and middle school students. Using Measures of Academic Progress (MAP) scores, Dynamic Indicators of Basic Early Literacy Skills (DIBELS), Qualitative Reading Inventory (QRI4), and curriculum-based assessments to identify at-risk students, the district offers varied, targeted interventions to supplement and enrich instruction.

USD383 Manhattan-Ogden, KS

Project Title: **Data-Driven Success**

Cohort: **2009**

LEA/District: **USD383 Manhattan-Ogden**

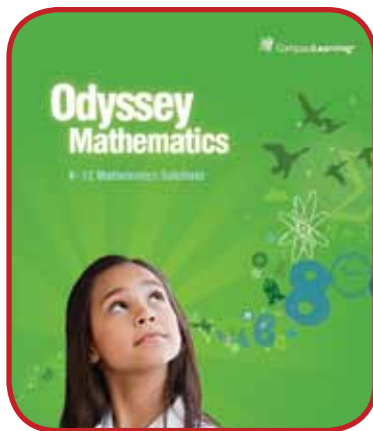
Military Installation Served: **Fort Riley**

Number of Participating Schools/Sites: **4**

Project Focus: **3-8 Reading & Math**

Implementation

Prior to receiving the DoDEA grants, the district used several interventions to improve instruction, such as differentiated materials (e.g., leveled readers) and math enrichment teachers. The DoDEA grant provided funds for the district to implement an Extended Learning Day (ELD) program for students identified as at-risk. A key program component is the Compass Learning Odyssey™ system, a web-based program that aligns with the MAP assessment and uses student performance data to individualize instruction for strengthening specific math and reading skills.



At each school, the ELD program was tailored for the unique student population. Some schools offered the program before school and provided breakfast while others provided after-school instruction with a snack and bus transportation home. The ELD program typically offers a combination of activities that may include homework help, one-on-one assistance by teachers, sustained silent reading time, a brief recess or “walkabout,” and school clubs. All ELD programs use the Compass Learning Odyssey™ program to provide individualized instruction to students.

The district designed creative ways to provide the PD for data-driven instructional planning and use of the Compass Learning Odyssey™ system to target academic intervention. The district trained teacher-leader cohorts each year, who in turn shared information with their peers in collaborative planning and school-based professional development sessions. Additionally, a summer institute provided intense support that was supplemented by webinars and online training modules that teachers and principals accessed as needed.

Lessons Learned

Manhattan-Ogden stressed the importance of obtaining continuous feedback from all stakeholders to ensure that the program is meeting all students’ needs. Formal feedback opportunities include grant oversight committees and ELD teacher committees. Informal feedback opportunities such as stakeholder drop-in sessions at the district offices allow teachers and district staff to have informal conversations. Regardless of the method, ongoing reflection and refinement of project strategies are keys to the program’s success.

Project Impact

Manhattan-Ogden reports that parents, teachers and administrators offer positive feedback about the ELD program. Military-connected students benefit because they have an opportunity to close instructional gaps, extend learning, and work with their peers in a small, less formal setting. Families like Compass Learning Odyssey™ because they can use the web-based programs with their children at home. The Data-Driven Success program is widely successful – approximately 90% of students at participating elementary schools scored ‘proficient’ or above on the 2010-2011 state assessment, a 30% increase over a two year period.



REFLECTIVE QUESTIONS

1. Why would an extended learning day (ELD) be a viable approach for your district and schools?
2. What challenges must be considered when establishing an ELD in your district or schools? How could you overcome those challenges?
3. How did Manhattan-Ogden support teachers' professional development in understanding and using data-driven instructional planning? What strategies could be used to implement Manhattan-Ogden's approach work in your district or schools?
4. Manhattan-Ogden recommends a continuous feedback loop. What challenges could this create and how could you meet those challenges?

Sharing Data to Help Identify At-Risk Students

Project Overview

Hardin County's DoDEA grant was designed to improve math and reading achievement among the approximately 14,000 students in their district. Central to achieving this goal is Hardin's data dashboard system that streamlines and consolidates multiple forms of student data. This data system allows users to identify students considered at-risk and to identify the services appropriate for meeting the students' needs quickly and precisely.

Implementation

Like many districts, Hardin considered itself "data rich" but found that the data were not organized to allow teachers and administrators to analyze the data quickly and efficiently. To address this issue, Hardin hired a full-time data coordinator to manage the data and to design a system to present data in a more timely and meaningful way.



The data "dashboard" displays diagnostic testing data (Hardin uses MAP), state assessment data, classroom-based assessment data, behavioral data, and demographic data. Teachers and administrators can generate different types of reports to understand what is working and not working for an individual student or entire class. For example, if a military-connected student performs poorly on the Fall MAP assessment, teachers and administrators can (1) analyze the student's assessment scores from previous years, (2) compare the student's performance to other students in his/her grade, and (3) review documented behavioral or social-emotional information. This data portrait is reviewed by school-based Professional Learning Communities (PLCs) and the teachers can design an intervention to help the student.

Timely collection and reporting of data also contribute to the program's success. Because web- and software-based systems continuously collect data, any issues or red flags can be identified in real time and at-risk students receive intervention swiftly and effectively.

Lessons Learned

A key to the success of this system is providing teachers the data in a timely manner. Moreover, gathering multiple types of data throughout the year presents a full and accurate snapshot of the whole child. To provide time for teachers to analyze the data and develop instructional strategies and assessments, Hardin developed school-based PLCs. The district also found it helpful to include a behavior specialist in the PLCs for an added perspective in designing the students' interventions. Finally, because the district will use the Common Core standards in the future, staff would like to implement PLCs that are aligned vertically and

Hardin County Schools, KY

Project Title: **The Hardin County School District Reading and Math Intervention Focus**

Cohort: **2009**

LEA/District: **Hardin County Schools**

Military Installation Served: **Fort Knox**

Number of Participating Schools/Sites: **12**

Project Focus: **P-12 Reading & Math**

horizontally across schools in the district.

Project Impact

Hardin reports multi-dimensional success in their program. PLCs are operational and effective and teachers report satisfaction with the data management system. More important, student achievement is improving. Military-connected student test scores on the math and reading state assessments increased by 5% and 6%, respectively, since the program's inception.



REFLECTIVE QUESTIONS

1. How is Hardin's "data-rich" problem similar to your own? What personnel decision did Hardin make about this problem? How could your district address the data issues using a similar approach?
2. What are some challenges in obtaining and maintaining a data "dashboard" system in your district? How could you address those challenges?
3. What technology personnel in your district would be helpful in moving this idea forward?
4. What kind of teacher professional development is needed to access and analyze the student data? What professional development is needed to help teachers develop lessons that include specific instructional strategies and assessments aligned to the data?

The background of the slide features a close-up, slightly blurred view of several petri dishes. Each dish contains a different colored agar medium, including shades of red, blue, green, and yellow. The dishes are arranged in a cluster, with some overlapping, creating a vibrant and scientific aesthetic.

**Military-Connected Student
Transition Support:
How to Help Students Now and
Prepare for Future Changes**

Making Student Information Portable

Project Overview

Madison City Schools' Math Initiative is designed to improve student performance in STEM subjects and raise math scores on state assessments across all grades. The 2011 grant included implementing a Caring Schools Communities support program to address the social-emotional needs of military-connected students.

Implementation

One strategy that Madison City uses to help military-connected students transition is the Student Profile Card. At the elementary level, this card is an instructional tool and is populated with diagnostic testing data, formative assessment data, and demographic data. Schools continuously update the cards which serve as a centralized location to present student growth. At the high school level, counselors use the cards to identify gaps or missing credits, track progress on college planning, and document SAT and ACT information.

The cards streamline transitions for military-connected students. As students leave one school they transfer the card to the next school to provide the new school a current profile. This minimizes the possibility of lost instructional time and decreases the likelihood of instructional needs or college planning falling through the cracks.

Madison City Schools, AL

Project Title: **SOS - Strategies of Success for the Madison Math Initiative**

Cohort: **2010 and 2011**

LEA/District: **Madison City Schools**

Military Installation Served: **Redstone Arsenal**

Number of Participating Schools/Sites:
2010: 3; 2011: 7

Project Focus: **2010: 7-12 Transition;**
2011: P-6 STEM



Lessons Learned

Madison City believes that having teacher buy-in and adequate professional development are crucial to this strategy's success. Teachers and administrators provided feedback about the card's format and contents to ensure that the information would be useful as an instructional and transition tool. Thus, teachers have ownership of the cards and, combined with ongoing PD, they work to ensure that the cards are an effective tool.

Project Impact

Madison City reports that teachers respond positively to the cards because the cards are a central organization mechanism and provide a quick overview of student performance and current needs. Teachers use these cards at parent/teacher conferences; parents enjoy receiving the 'big picture' snapshot view of their child's progress.



REFLECTIVE QUESTIONS

1. How could student profile cards work in your district? What obstacles would you foresee in creating and using a centralized tool for instruction? How could you address those obstacles?
2. What information on the cards would you maintain and what would you change?
3. How could you set up a continuous feedback loop to capture input from parents, students, and/or teachers about the cards' format and content?

Measuring School Climate to Help Foster Resilience in Students

Project Overview

The Fallbrook project is a partnership between the University of Southern California and a consortium of eight military-connected school districts serving more than 120,000 students in southern California. The project is designed to encourage a sustainable systemic change in public schools with military-connected students by:

- » Raising regional and national awareness of military student needs.
- » Developing a Military Social Work (MSW) program with a unique school component that focuses on military-connected students and schools.
- » Placing interns in Consortium schools to enhance capacity to provide services to military students.
- » Enhancing professional development of educators and pupil personnel.
- » Identifying and disseminating best practices developed in the region's schools, bases, and communities.
- » Modifying, implementing and evaluating promising and evidence-based programs.
- » Developing a conceptual and empirical scientific knowledge base on military-connected students, schools and districts.

Implementation

A key component of Fallbrook's project involves implementing a data-driven monitoring system in all Consortium schools. In partnership with the CDE and WestEd, an interdisciplinary team of researchers at USC created a supplement to the California Healthy Kids survey⁷ for military-connected students to gain greater understanding of military-connected students attending public schools. In addition to the student survey, parents and staff are surveyed. All the data from the surveys are used to continuously monitor school climate and military-connected students' social-emotional and academic outcomes.

⁷ <http://chks.wested.org/administer/supplemental2#mil>

Fallbrook, CA

Project Title: **Building Capacity to Create Highly Supportive Military-Connected School Districts: The Integration of Local School Data, Community Supports, Evidence-Based Programs, and Empowerment Strategies to Promote Positive Social and Academic Climates**

Cohort: 2010

LEA/District: Consortium of eight LEAs

Military Installation Served: Camp Pendleton

Number of Participating Schools/Sites: 149

Project Focus: 3-8 Reading & Math



Lessons Learned

Using the survey data, the project team and USC partners assemble reports for each district and participating school. During meetings with the schools and districts, project staff reviews the survey data, explores the unique issues facing military-connected students, and provides a context for the data. Schools use this information to gain further insight into the challenges of being a military-connected student. The data also help schools compare military-connected and non-military connected students' perceptions of school climate. In turn, schools make data-driven decisions to meet both the common and unique needs of military-connected and non-military-connected students.

Project Impact

The school district gathered baseline assessment data during the 2010–2011 school year. An added advantage was that by creating a distinct California Healthy Kids Survey module for military-connected students, the baseline data identified specific needs to address the following school year. For example, almost 66% of military-connected students reported moving at least once in the past year, and 46% reported moving twice. Almost 40% stated that they have a hard time making friends because they move so much and some report not feeling heard by staff. All of the data helped to inform school programming from scheduling to extracurricular offerings to curriculum development to staffing decisions, all designed to meet the unique needs of military-connected students.



REFLECTIVE QUESTIONS

1. What aspects of your district are similar to Fallbrook?
2. What aspects of your district's educational programming could be informed by a school climate survey data? Who would analyze and report the data, and who would receive the reports?
3. How would the data inform the programs offered in the district or schools? What type of professional development might the new or modified programs require?
4. Once the data report is released, how would your district implement professional development to help teachers and administrators understand and appropriately use the data?

Providing Family Math and Science Nights to Engage Parents in Their Children's Learning

Project Overview

The San Diego Unified School District's Operation Student Achievement program is designed to improve student achievement and teacher quality and effectiveness in STEM subjects across nine elementary schools. As part of this program, San Diego USD used DoDEA funds to implement several family involvement initiatives. These fun, well-organized, and instructional events resulted in family, student, teacher, and administrator collaboration to promote student achievement and growth.

Implementation

San Diego is meeting the challenge of engaging military-connected families through activities such as Family Math and Science Nights that occur several times per year. During these events, families participate in hands-on math and science activities with their children, have fun and experience what their children experience in school, speak with teachers, and learn how to support their children's learning at home. These events have high turnout numbers, and are now a staple of the schools' event calendars.

San Diego Unified School District, CA

Project Title: **Operation Student Achievement**

Cohort: **2010**

LEA/District: **San Diego Unified School District**

Military Installation Served: **Naval Station San Diego, Naval Base Point Loma, Naval Amphibious Base Coronado, SPAWAR Campus, Naval Air Station North Island, MCAS Miramar, MCRD San Diego**

Number of Participating Schools/Sites: **9**

Project Focus: **K-5 STEM**

Do you have pride in your child's school?

Do you want it to be the best it can be?

Do you want to support your child's learning?

Then...**be there or be square***

*a four sided shape with four equal sides and four 90° angles

Family Math Night

Gage School Auditorium

• **Wednesday, October 13, 2010**

• **6:00 pm - 7:30 pm Math Night**

Come and play games, have fun, and learn ways to deepen mathematical understanding for your child / children.

"Make it—take it" educational activities to take home.

To register your family for Family Math Night, fill in the form below and return your child's teacher by Friday, October 8. Hurry! Space is limited!

Family Math and Science Nights are successful due to San Diego USD's work to establish a school culture that welcomes military-connected students and their families. When the family learns that they will transition to San Diego USD, they can visit the district's website that contains tabs designated for military families. The website contains useful resources and contact information for a designated military liaison, which helps parents who are overseas and who must rely on virtual communication. When families arrive, schools provide "Connection Rooms" that provide a welcoming space for military-connected families to meet with one another and school personnel as well as receive and share information. Military appreciation days throughout the school year and PD for teachers and administrators about military-connected families help build awareness and a culture of understanding and respect.

Lessons Learned

San Diego advises that districts wanting to replicate the program start with small initiatives and build momentum based on incremental success. The district also found that teachers and administrators were enthusiastic about the events but lacked the time or personnel to make them regular occurrences. A solution

was to work closely with military liaisons and provide the schools with logistic support to plan and conduct the events. This centralized communication eliminated the burden for the teachers and administrators to plan and organize the events. This helped obtain buy-in from school personnel, teachers and administrators.

At each event, families complete a brief satisfaction survey that asks about the extent to which they are likely to work on math and science with their children at home. These surveys help program organizers to continually improve the events and ensure that they are efficient and effective. Information about previous events and details about upcoming events are promoted on websites, by email and phone, and in school and military family newsletters.

Project Impact

In the first year of the project, San Diego USD's attendance at Math and Science Family Nights grew from 1-9 parents to more than 200. Survey data showed that in the first year the majority of the parents believed that family nights were useful, helped them understand what their child was learning in school, and helped facilitate conversations about math, play math games, and complete math homework.



REFLECTIVE QUESTIONS

1. Why is it important to engage families in students' educational activities for your project?
2. How has San Diego attracted family engagement, over time, in its math and science nights? How could San Diego's approach work in your district? What other approaches would work in your district or schools?
3. What would be included in your strategic implementation plan to build family engagement? How could you offer logistics support and centralized communication for extracurricular activities?
4. How would you set up a feedback loop for parents, students, and teachers to keep informed about satisfaction and engagement levels?

