

MADISON CITY SCHOOLS GRANTS

September 2017



Total amount awarded for currently active DoDEA district grants:

\$7,922,500



Madison City Schools DoDEA Grants Total \$6,922,500

Grant Years	2010-2013	2011-2014	2014-2019	2015-2020	2016-2021	2017-2022
Title of Grant	SOS Strategies of Success: "The Madison Math Initiative" (Secondary Math)	SOS Strategies of Success: "The Madison Math Initiative" K-6 Academic Program and "The Caring Community" Support Program (Elementary Math and Community)	SOS Strategies of Success: Mathematics: College and Career Ready (Secondary Math)	SOAR Supporting Opportunities for Achievement and Relationships (Elementary Reading)	CORDS Connection Opportunities and Reading Development for Students (Secondary Reading)	SAIL Science Achievement and Investigative Learning (Science, Grades 4-10)
Amount of Grant	\$1,317,500	\$1,350,000	\$1,755,000	\$1,000,000	\$1,500,000	\$1,000,000

- Timeline: 2017-2022
- Funding: \$1,000,000
- SAIL Science Achievement and Investigative Learning (SAIL) Project concentrates on improving the College and Career Readiness outcomes of military dependent students in science. Instruction in science classes will be strengthened and the classroom experience will focus on scientific investigations that align with College and Career Readiness Standards in 4th through 10th grade. Improving students' science readiness levels will occur through increasing teacher content knowledge and use of best practice instructional strategies, providing instructional science coaches and increasing the effective integration of technology. Professional development will reinforce desired changes in the classroom.

Elementary School Science Teachers' Needs Survey 2017

Why is it important to allow students chances to investigate and discover in all of our science classes?

"It is important to allow students chances to investigate and discover in science classes, because this is how teachers can tell if the students are grasping the concepts. It is also important, because students are allowed the chance to learn at their own pace and through trial and error. Hands-on learning through investigations is critical to science mastery."

"Scientific investigations allow for self-discovery and give more ownership of knowledge to the students."

"Students are able to develop deeper understanding of concepts when they conduct their own investigations. Also, investigations generate questions that might not otherwise arise, thereby leading to richer class discussion."

"Hands-on, student-led investigations/projects spark student interest in science and feeds their natural curiosity to find out how/why things work. Using the engineering design process as the basis for projects that are focused on solving real life problems will give students a chance to develop their critical/analytical thinking skills."

"Investigating and discovering are the founding principles of how all great ideas are born!"

Secondary School Science Teachers' Needs Survey 2017

Why is it important to allow students chances to investigate and discover in all of our science classes?

"Investigating allows for active learning which promotes higher-level thinking. It promotes a growth mindset in that hypothesis often need to be restated many times in order to learn something from a designed activity. When students investigate and make their own meaning, they then make connections in their brain which allows them to apply the information to new problems. (They own it because they discovered it). Lastly, investigation allows students to have an experience with which to use in further learning."

"Having time to explore and investigate allows students to build understanding and make connections to prior content. It is amazing the difference inquiry and exploration can make. Unfortunately, due to time constraints in our class schedule and the extensive nature of our COS, opportunities for true inquiry and investigation are not as prevalent as I would otherwise wish to provide."

"Science is about "doing" not just "listening" to other people do it. When students are involved in doing science they take more ownership of the learning and enjoy the process. They think they are having fun, and we know they are actually learning something. I call it accidental learning."

"Exploring, investigating, and discovering are essential in helping students really understand the scientific method and the reason for science. They must begin this early - which I believe they do! We are all curious investigators as young children, so why shouldn't this curiosity continue as we transition into adulthood? If we train our students to be good investigators and problem solvers through student-directed scientific inquiry, then we will help them become better consumers, better thinkers, and maybe even better scientists!"

College and Career Readiness/Academic Goal

G	oal 1	Improve Science CCRS outcomes of military dependent students in grades 4 and 5.	
0	utcome	The percent correct on the ACT Aspire Science (Scientific Investigation) assessment will increase by 8 percentage points over the baseline year by 2022 for military dependent students in grades 4 and 5.	

Goal 2	Improve College and Career Ready outcomes in science for military dependent students in grades 6, 7 and 8.
Outcome	The percent correct on the ACT Aspire Science (Scientific Investigation) assessment will increase by 8 percentage points over the baseline year by 2022 for military dependent students in grades 6, 7, and 8.

Goal 3	Improve College and Career Ready outcomes in science for military dependent students in grades 9 and 10.
Outcome	The percent correct on the ACT Aspire Science (Scientific Investigation) assessment will increase by 8 percentage points over the baseline year by 2022 for military dependent students in grades 9 and 10.

GOAL 1:

- <u>Strategy 1:</u> Improve delivery of science instruction by increasing teacher content knowledge and use of best practice instructional strategies; includes professional development (STEMscopes 5E Implementation, Conducting Authentic Scientific Investigations training, AMSTI training, Classworks, and PLCs)
- <u>Strategy 2:</u> Provide academic support through the integration of science coaches in elementary schools; includes professional development
- **<u>Strategy 3</u>**: Enhance technology integration in science classes which will provide remediation (RTI) and acceleration (enrichment) for students; includes professional development and purchasing of software and equipment GOAL 2:
 - <u>Strategy 1:</u> Improve delivery of science instruction by increasing teacher content knowledge and use of best practice instructional strategies; includes professional development (Project Lead the Way, AMSTI, and PLCs)
 - <u>Strategy 2:</u> Provide academic support through the integration of science coaches in middle schools; includes professional development
- <u>Strategy 3:</u> Enhance technology integration in science classes which will provide remediation (RTI) and acceleration (enrichment) for students; includes professional development and purchasing of software and equipment GOAL 3:
 - <u>Strategy 1:</u> Improve delivery of science instruction by increasing teacher content knowledge and use of best practice instructional strategies; includes professional development (Science in Motion training and PLCs)
 - <u>Strategy 2:</u> Provide academic support through the integration of science coaches in high schools; includes professional development

Timeline:

- Year 1 baseline year, planning
- Year 2, 3, 4, 5 implementation

Grant will provide:

- District science specialist/grant administrator (required by DoDEA), start date around November 6, 2017
- 2 secondary and 2 elementary science coaches (\$25 per hour, 19 hours per week), start 2018-2019
- STEMScope kits for 4-6
- MS PLTW devices and ES iPads
- PLTW supplies for PLTW classes
- STEMScopes and Classworks PD for 4-6 teachers
- Data dashboard School Status or new platform
- Classworks assessment, remediation, acceleration