



2006
ANNUAL REPORT



A HISTORY OF EXCELLENCE AND LEADERSHIP



MISSION STATEMENT:

**TO RAISE THE INTEREST
AND IMPROVE THE
KNOWLEDGE AND SKILLS
OF YOUTH IN THE AREAS
OF MATH, SCIENCE,
AND TECHNOLOGY.**

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In math and science, the problem is especially urgent. A recent study showed that American 15-year-olds ranked 27th out of 39 countries in math literacy. I don't know about you, but I want to be ranked first in the world, not 27th.

President George W. Bush

Speaking to high school students at Jeb Stuart High School, Falls Church, VA

February 16, 2006

President Bush's remarks highlight one of the most significant challenges facing our country: the need to increase not only student performance, but student interest in careers in science, technology, engineering and math – the STEM careers. Today, the United States is a world leader in science and technology. However, as we move towards a global economy, other countries, especially Asian countries, are substantially increasing the number of students who are pursuing undergraduate and graduate degrees in the STEM fields.¹ In 2001, only 2,589 U.S. citizens earned a natural science or engineering Ph.D., as compared to an estimated 20,000 students in Asia.² This figure is especially concerning to the Department of Defense, which depends on STEM leadership to develop the technology necessary to protect the United States.

Today, America's youth are poorly prepared to pursue STEM degrees. Gains in elementary and high school students' performance in math and science³ have not been impressive. The National Assessment of Educational Progress (NAEP), the nation's report card, has followed the progress of students since 1969. Although there have been positive gains between 1969 and 2003, they report that "most students do not demonstrate solid mathematics skills and knowledge for their grade...only about one-third of fourth and eighth graders and even fewer twelfth graders (16%) reached the proficient level." Almost identical results were recorded in science.

"We must build our students' skills at all levels, and to do so we must start at the elementary and secondary level," Dr. Arden Bement, Jr., the Director of the National Science Foundation stated in his testimony before the U.S. Senate. "Today's youngsters face a world of increasing global competition. We depend on the excellence of U.S. schools and universities to provide them with the wherewithal to meet this challenge and to make their own contributions to America's future. We need to build strong research foundations and foster innovation in K-12 science and mathematics education."⁴



President George W. Bush presents DOD STARBASE La Luz volunteer Mike Martin with the President's Volunteer Service Award.

¹ *Sustaining the Nation's Innovation Ecosystem: A Report on Maintaining the Strength of Our Science and Engineering Capabilities*, The President's Council on Science and Technology, Chapter 3, June 2004.

² *Ibid* (data from India and North Korea was not available.)

³ U.S. Department of Education, NCES, *The Nation's Report Card: Mathematics Highlights 2003*, NCES 2004-451 (2003).

⁴ Dr. Arden L. Bement, Jr., Director of the National Science Foundation, Testimony before the Senate Commerce Committee, Subcommittee on Science and Space, Hearing on the National Science Foundation and Science Priorities, May 2, 2006.



U.S. Senator Levin speaking at the DOD STARBASE Conference 2006 in Washington, DC.

An Issue of National Importance (continued)

A 2005 GAO report to Congress highlighted these concerns when it questioned whether the number of STEM graduates would be sufficient to meet future academic and employment needs that the United States requires to maintain its technological competitive advantage. The report emphasized that there is a need to reach out to younger minorities and females through programs that offer “opportunities to engage in science laboratories and hands-on activities that foster interest and excitement for students and can make these fields more relevant in their lives.” DOD STARBASE with its emphasis on at-risk students is reaching some of these students, today.

The Vision Statement of DOD STARBASE states, “the program will be recognized as one of America’s premier programs for youth in math, science and technology education and will provide every state and territory the opportunity to participate.”

Increasing America’s science and engineering workforce is an “issue of national security,” according to Dr. Ronald M. Sega, Under Secretary of the Air Force and former Director of Defense Research and Engineering.



DOD STARBASE® A History of Excellence and Leadership

In 1989, Barbara Koscak was a recognized leader in education, having been invited to the White House by President Reagan and winning Federal Aviation Administration's National Educator of the Year Award. Koscak wanted her students to become excited about science, math, and technology and to develop their potential for challenging careers. Knowing that children all love airplanes, she created curriculum in her classroom built around space and the physics of flight – a curriculum that was “hands-on.”

Taking her dream to the next level, she contacted Brigadier General David Arendts, who was the 127th Wing Commander at Selfridge Air National Guard Base in Michigan. Together, they discussed the possibility of students learning the application of knowledge through observation and hands-on experiences from the Air National Guard members. They agreed that military personnel could explain how they use math, science, and technology in their jobs. The military personnel would be great role models. General Arendts embraced the idea and lent his full support for the creation of the project.

Rico Racosky, an accomplished F-16 pilot and author, was working on a project to inspire students to achieve their dreams through action. General Arendts recognized that his pilot's ideas would be a perfect match for STARBASE and Racosky's model of “*dreams plus action = Reality®*” or “ $d + a = R®$ ” became a critical component of the STARBASE curriculum.

Rick Simms, a local university student, and individuals at the Mount Clemens School District completed the team. Together they created an educational program that offered stimulating hands-on activities focusing on science, math, technology, personal development, drug awareness and prevention.

In order to make the dream a reality, the team needed funding. Koscak used her prestigious A. Scott Crossfield Teacher of the Year Award money to fund a one-week pilot program. The Award was created by aeronautic legend Scott Crossfield. Crossfield achieved fame when he was the first pilot to fly at twice the speed of sound. An aeronautical engineer, he worked on the team that designed cutting-edge aircraft such as the X-15 rocket plane at Edwards Air Force Base, California. Crossfield always attributed his accomplishments to his team. To him, test pilots were “all just people who incidentally do flight tests. It's a profession just like anything else. In my mind, we should divest ourselves of this idea of special people (being) heroes, if you please, because really they do not exist.”⁵ Crossfield believed that teachers had a greater influence because they worked with the future and he could name every teacher who taught him since kindergarten. Koscak described Crossfield using a quote by Albert Pines, “What we do for ourselves dies with us. What we do for others is immortal.” Crossfield's



⁵ 1988 interview with Aviation and Space Technology.



Scott Crossfield
1921 - 2006

Legendary test pilot Scott Crossfield died when his single engine plane crashed in Georgia on April 19, 2006. He was 84.

DOD STARBASE®

A History of Excellence and Leadership

(continued)

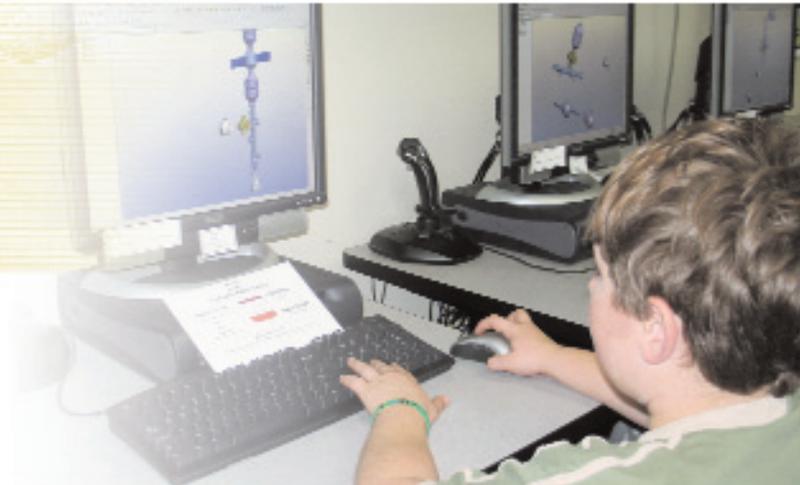
accomplishments were for his family, friends, and country - never for himself.

The A. Scott Crossfield Award bought supplies, rockets, and treats for the first students of the pilot program called "Project STARS." Teachers around the area donated their time and talents to the summer program in 1990.

The team debated whether to apply for a summer program or a year-round program from the W.K. Kellogg Foundation; the Foundation persuaded them to apply for a year-round program. The next decision was whether to focus on teachers or students and the team concluded that they would like to offer a program for students year-round, as well as one-week training for teachers. Project STARS was awarded a three-year grant on March 1, 1991. The response and results of the program were exceptionally impressive. In 1993, Congress allocated funds to expand the program to seven states. It was during this time the program changed its name to STARBASE.

After 15 years of success, DOD STARBASE has grown to operate in five regions of the country, in 32 states, on Indian Reservations and U.S. Territories. To date, the program has provided 20-25 hours of direct experiences at military bases for over 350,000 students. National Guard, Navy, Marine, Air Force Reserve and Air Force bases are home to the program.

DOD STARBASE continues to be a premier program in Science, Technology, Engineering, and Math. Today's students not only study flight but, using computer-assisted 3-D software that was donated by Parametric Technology Corporation (PTC), they design space stations, land rovers, submersibles and unmanned aerial vehicles. DOD STARBASE...making tomorrow happen today!





Program Design and National Science Goals

Scientific and math literacy is critically important to the future of our country. The rapid pace of technological change and the globalization of the economy simply demand that our workforce be literate in science and math. Furthermore, the skills and knowledge developed in understanding math and science improve abilities, such as critical thinking, which are used in daily life.

The National Committee on Science Education Standards and Assessment cautions that achieving scientific literacy will take time because dramatic changes are needed. The Committee urges that science be taught as an active process. “Hands-on activities, while essential, are not enough. Students must have a minds-on experience, as well.”⁶

DOD STARBASE uses a “hands-on, minds-on” approach to teaching. Students are actively involved in learning that results from curiosity. Instruction focuses on and supports inquiry, i.e., a process of exploring scientific questions that encourages students to ask questions and make discoveries that lead to new understanding. The 5E teaching method⁷ is used. In this method, students are *engaged* or motivated to learn; they then *explore* through individual or small group activities designed to develop a fundamental awareness of a concept



such as Bernoulli’s Principle; they *explain* and clarify their ideas through class discussion of the principle and how it applies to flight; they *elaborate* on the topic through conducting further experiments on air movement or problem solving activities; and finally their mastery of a concept is *evaluated* through a variety of activities including instructor observation, interactive games or tests.

In keeping with national science education standards, students are challenged to accept and share responsibility for their own learning. The program serves a diverse student population and stimulates all students to participate fully in science learning.⁸

⁶ Bruce Alberts, President of the National Academy of Sciences.

⁷ Learning Theory and the BSCS 5E Instructional Model presented at the NSTA Professional Development Institute, March 31, 2005 by BSCS.

⁸ Strategies recommended under Teaching Standard B. National Science Education Standards (1996) Center for Science, Mathematic, and Engineering Education.

DOD STARBASE®

Leading the Way

DOD STARBASE is a world leader in introducing elementary age children to cutting edge engineering technology. At the academies, students are taught to use computer assisted design to create innovative designs that integrate math and engineering. The “Wow” factor for the students is incredibly high as they apply technology that had previously been reserved for adults and older students.

The software that makes this experience possible was donated by Parametric Technology Corporation (PTC). The software is widely used in the business world and in high schools that have implemented a technology curriculum. However, it was regarded as too sophisticated for elementary students until DOD STARBASE leaders created a rigorous curriculum for their students.

Through the curriculum, students understand terms, such as circumference, symmetry, parameter, diameter, radius and chamfers. Their eyes light up when they apply the geometry to their three dimensional designs. After the children return to their classroom, their teachers may incorporate the students’ new knowledge in language arts. Stories are written about the exciting adventures that their newly designed submersible or space shuttle encounter.

The designs on this page represent what fifth grade “at-risk” children are able to accomplish in less than five hours. The children are enthusiastic about their new skills and ask to take the software home, as they want to expand their knowledge in this new realm of possibilities. One teacher commented that it is wonderful to see all the children consider new careers, but it’s especially rewarding to see girls that traditionally shy away from careers in engineering warm to its possibilities. Watching the children master this exciting and challenging program, teachers report that they see the children’s self-esteem blossom as their eyes “open to future possibilities.”



A Graduate's Story

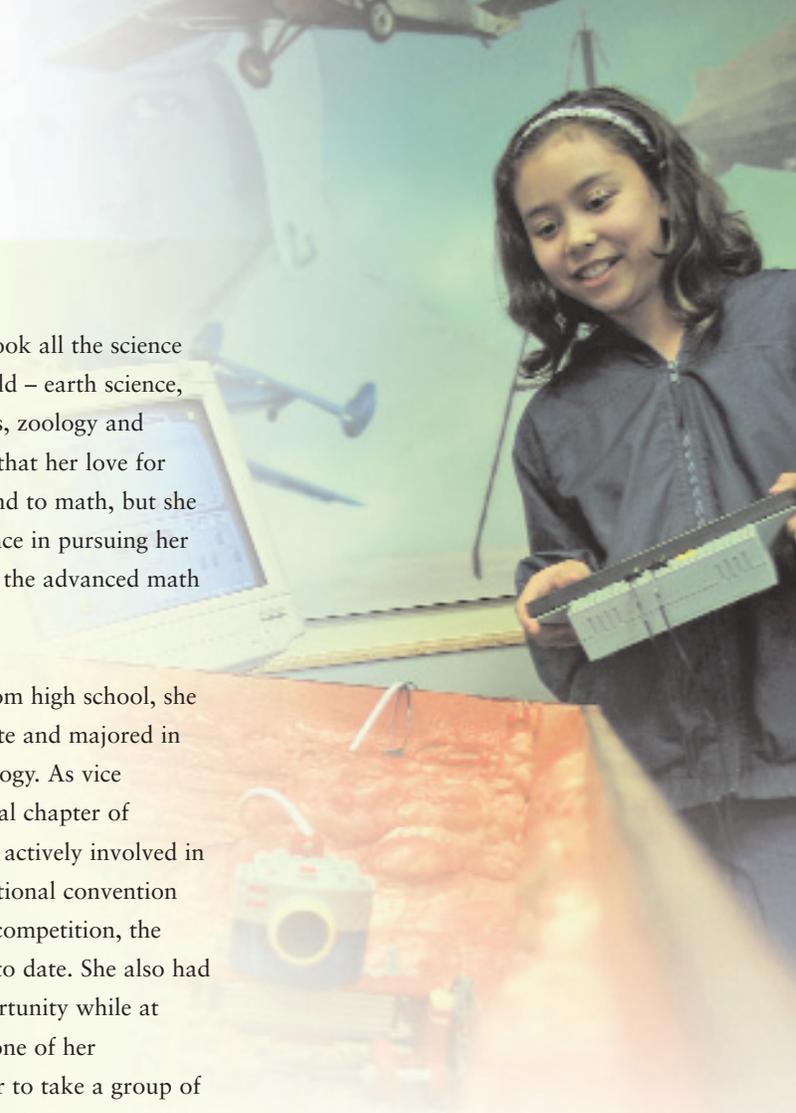
Evie Tompkins knew that she wanted to be a pilot from the time she was four years old. It was a dream that she often discussed with her father who also had a strong interest in aviation. When she was a fourth grade student, living in Winfield, Kansas, her father heard about the DOD STARBASE program located in nearby Topeka at Forbes Air National Guard Base. Unfortunately her school, Countryview Elementary, was simply too far from Topeka to participate in the program during the nine-month school year. However, her father was willing to make a commitment to get her to the DOD STARBASE summer program, which had student openings.

"It was my first exposure to physics," recalls Evie, "and I was impressed!" DOD STARBASE reinforced her career goal of being in aviation and opened her eyes to the importance of science and math in flight. She recalls how surprised she and her classmates were when they weighed balloons and learned that air had weight. She also has cherished memories of her class building and launching rockets...and she still has the one she launched.

In high school she took all the science courses that she could – earth science, meteorology, physics, zoology and biology. She admits that her love for science did not extend to math, but she realized its importance in pursuing her dreams and took all the advanced math classes.

Upon graduation from high school, she attended Kansas State and majored in aeronautical technology. As vice president for the local chapter of SAFECON, she was actively involved in hosting the 2005 national convention for collegiate flight competition, the largest competition to date. She also had an unexpected opportunity while at Kansas State when one of her instructors asked her to take a group of students on a tour. To her surprise and delight the students were from DOD STARBASE!

Today, Evie has a commercial pilot's license with instrument, multi-engine, and sea plane ratings. She is also a flight instructor for ground and flight and teaches a wide range of students, from those with no flight experience to those who are experienced pilots.



A Parent's Story

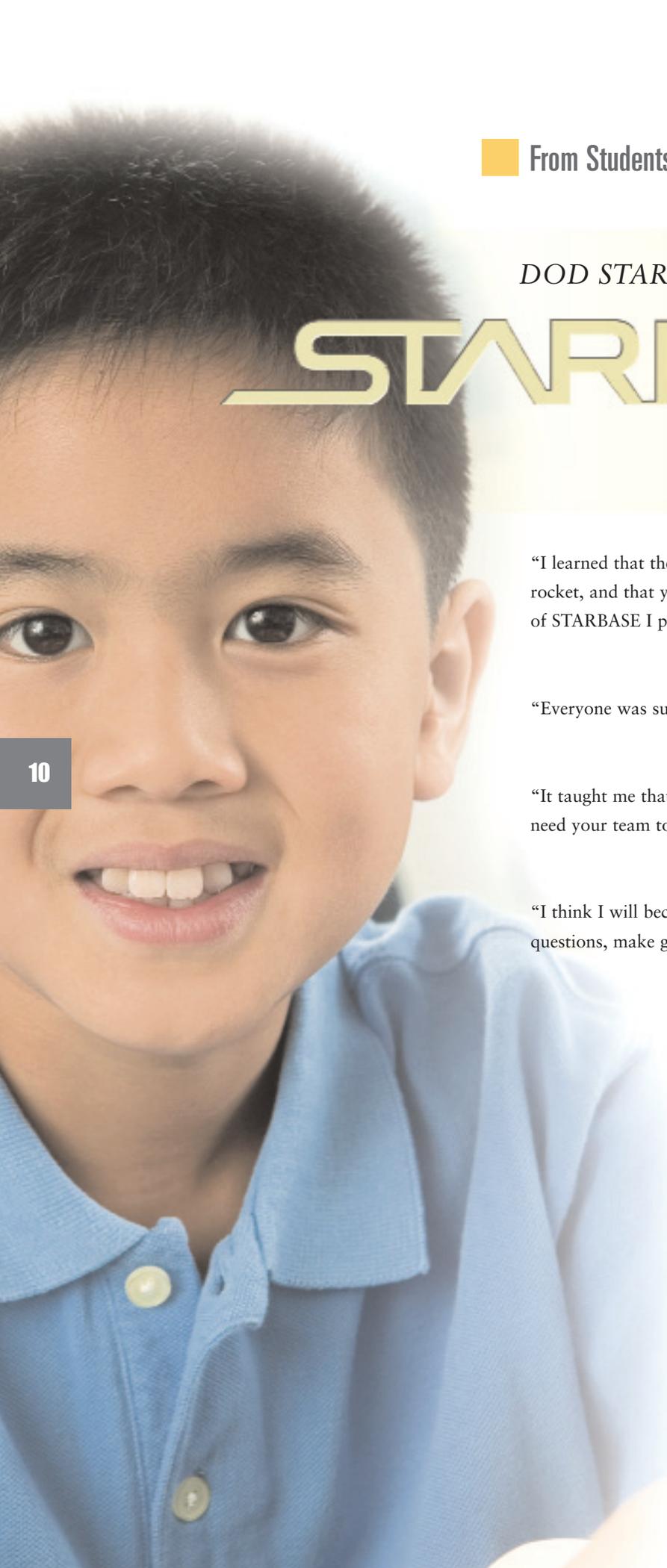
Mrs. Lisa Olson is the mother of a Wyoming student that was inspired by the DOD STARBASE Academy in Cheyenne. She describes the program as an awesome experience that has had a lasting effect on both her children. She states that the program took her son, Brian, to a "different level" by opening his eyes to opportunities that he had not considered and encouraged him to set goals to achieve his dreams.

Brian, now age 21, attended DOD STARBASE in 1996 and then took an advanced DOD STARBASE course the following summer. Mrs. Olson recalls that Brian was a typical kid who did not like to study and who was not particularly interested in science. However, once he attended the academy, and participated in the "hands-on, minds-on" instruction and experiences offered by the program, he began to see science as something that might be fun and interesting. He developed a special interest in missiles and how they were made. Subsequently, he sought out books on physics and quickly developed an affinity for math and science. He still has his first rocket that he built at the program – as well as a series of rockets that he has since built. Brian's family always looked forward to the weekends when his newest rocket would be launched in a nearby field, so he could test his latest hypothesis. A high school summer experience with the Youth Conservation Corps helped him focus his interest on environmental engineering, a degree that he is now pursuing at the University of Wyoming.

His older sister Dianne, now 23 years old, was not able to attend an academy, but was influenced by Brian's experience to study aeronautics. Dianne always knew that she wanted to "see the world," and as she watched and talked to her brother she began to consider becoming a pilot. After 9-11, she directed her interest towards a possible career as a pilot in the U.S. Air Force. She is now a graduate student at the University of Wyoming and is in her fourth year of ROTC. Her "dreams plus action" are also being realized through private pilot's lessons and she will soon become a licensed pilot.

Mrs. Olson concludes that DOD STARBASE with its excellent, enthusiastic teachers and exciting experiments was "out of the ordinary," a magical week filled with possibilities that had a profound impact on her children and their friends.





“We learned lift, thrust, drag and gravity and to stay away from a rocket when you launch it.”

 From Students

Student, Rapid City, SD

DOD STARBASE® All-Around Accolades

STARBASE

“I learned that the parachute is the recovery system, how to make a rocket, and that you need to buckle down and concentrate. Because of STARBASE I passed level 2 on math facts.”

Student, St. Paul, MN

“Everyone was successful. We are now official rocket scientists.”

Student, Project NOVA, SD

“It taught me that sometimes you can’t do everything by yourself, you need your team to work together to help you.”

Student, Burlington, VT

“I think I will become a scientist after I leave because I can ask questions, make graphs, and analyze my work.”

Student, Minneapolis, MN

“After STARBASE I decided I like science more than I thought I did! I didn’t know it would be so fun and I would learn so much. It was worth waking up early and eating peanut butter sandwiches for five days straight! I really like the way you made us think instead of just making us memorize a bunch of facts!”

Student, Houston, TX

“This is the best educational program that I have seen in my teaching career. It is a structured program that yields high results. It touches the lives of the students for their lifetime.”

5th grade teacher, Great Lakes, IL

From Teachers

“STARBASE is an amazing opportunity for students to be the best learners they can BE! Every lesson is well organized and planned. All students are suddenly on the same level because everything is new and accessible to them regardless of their language, math, science, or other “school” abilities.”

4th grade teacher, Minneapolis, MN

“The material presented appeals to the visual, kinesthetic and oral learner. Questions and situations posed address the many levels of Bloom’s Taxonomy and cause participants to experience higher order thinking skills. The correlation of the curriculum to state and national standards is invaluable.”

5th grade teacher, Montgomery, AL

“I truly believe that the STARBASE program is making a difference on the Rosebud Reservation.”

School Counselor, Todd County, SD

From Parents

“This program has helped my child become more structured and disciplined.”

Parent, Washington, DC

“My daughter always enjoyed school. Her only problem class has been math. Since STARBASE started she has had a better attitude about math and has been more willing to learn.”

Parent, Detroit, MI

“I hope this program continues for a long time. It opens windows for our children into the world of science, imagination, and dreams.”

Parent, Great Lakes, IL

From Military Volunteers

“The military is aiding the STARBASE program by providing positive role models for the area’s youth as well as providing an alternate learning environment on an Air Force Base. This gives the students a great visual aid to reinforce the lessons taught in the classroom as well as practical uses and examples they can take with them for their future.”

Air Force Volunteer, Tucson, AZ

“I was very humbled to be able to speak to the children during their lunch hours about how math, science, having a positive attitude, staying in school, and setting goals will help them become productive members of society. I learned more from the kids’ questions than I taught them.”

Air Force Reserve, Barksdale, LA

The 2006 DOD STARBASE® Report



DOD STARBASE is authorized under Section 2193b, Title 10, United States Code. The authorizing legislation requires the Secretary of Defense to submit an annual report to Congress on the conduct of the program and on an evaluation of its effectiveness.

For the FY'06 program report, the assessment process focused on obtaining information via structured interviews, questionnaires, testing, attitude assessments, program visits, and conversations with program participants. This year 20 academy visits were made and assessments were obtained from 2,669 students, 374 teachers, 95 military and civilian volunteers, and all DOD STARBASE directors.

This report is structured so that each section provides an assessment of the program's progress in the designated area and also describes the unanticipated and unresolved issues that emerge in program operations. The report is organized as follows:

- **Program Overview:** Partners, program elements, academy staffing, not-for-profit organizations and steering committees;
- **Program Assessment Overview:** Student and teacher composite results and military and civilian volunteer assessments;
- **Program Growth:** Growth history, current growth data, and growth issues;
- **Critical Events:** Events affecting the program's operation in FY06;
- **Program Compliance:** Background information, compliance procedures and adherence;
- **Fiscal Information:** Program costs and supplemental funds;
- **Observations and Considerations:** Program operations, curriculum and instruction, data collection and analysis, and compliance issues;
- **Student Assessment Comprehensive Analysis:** Student knowledge and attitude assessment, and teacher assessment of the program;
- **Appendices:** Additional assessment charts, research instruments, and general information such as an academy directory, a listing of schools/school districts served, and an academy time line;
- **Glossary:** Alphabetical listing of research and other terms used in this study.



PROGRAM OVERVIEW

DOD STARBASE® is authorized under Section 2193b, Title 10 United States Code. The requirements for its implementation are contained in Department of Defense Instruction (DODI) 1025.7. The goal of the DOD STARBASE program is to raise the interest and improve the knowledge and skills of at-risk youth in math, science, and technology by exposing them to the technological environment and positive role models found on military bases and installations. The program is unique in that it provides students with a “hands-on, minds-on” approach to learning with the guidance of certified teachers and experienced military personnel.

The DOD STARBASE program is based on partnerships between military installations, school districts, and the community. In FY'06, the program served 53,145 students at 964 schools and 268 school districts for an average cost per student of \$293. The total cost of the program was \$15,559,931, or an average cost per academy of \$293,584.

The Partners

The DOD STARBASE program operates under the auspices of the Department of Defense through the Office of the Assistant Secretary of Defense for Reserve Affairs (OASD/RA), but it is through the relationships between the local military installations, school districts, and communities that the program becomes a reality. The roles and participation of each partner are described in this section.

The Military Installation

DOD STARBASE programs are housed and supported by the military.⁹ From the initial installation to full operation, the base commander's sponsorship and ongoing participation are essential. The commander provides access to the resources and services needed for a successful academy. Classroom space, utilities, and security are the primary services provided. Computer accessibility, administrative support, and reproduction services are optional. Occasionally, physical renovations are provided. The Commanders also encourage their personnel to volunteer time to the program as expert speakers, tour guides, mentors and other support activities. In FY'06, more than 2,487 members of the military volunteered 22,758 hours to DOD STARBASE.



⁹ Most of the academies operate within the confines of a military base. A few operate in an affiliate site contiguous to the military installation but under the property management of the base or in a military unit tenant.



**Interview with
Minneapolis School Board
Chairman Joseph Erickson¹⁰**

What is the value of DOD STARBASE for our youth?

It is a unique opportunity to engage in one-of-a-kind science and technology experience in a rigorous academic setting. The “wow” factor is very high due to the topics and opportunities (jets, helicopters, airliners, vintage aircraft, rockets, etc.). All these experiences combine to provide a high quality educational experience while at the same time giving everyone from the K-12 setting a chance to do something different.

How has DOD STARBASE influenced your school system?

It has the potential to open up horizons for teachers to see opportunities for math, science and technology instruction in new and innovative ways. If teachers intentionally use the foundation that DOD STARBASE provides to continue an equally rigorous and exciting math, science and technology curriculum in their own schools, it will have had a very great influence on our children.

How does DOD STARBASE improve community relations for the military?

It puts a face on the military for many children who might otherwise never personally meet someone in the military, especially military folks with such a high science and technology IQ.

What do you think DOD STARBASE means for the future of our country/children?

Educating children is everyone’s responsibility to some extent, so DOD STARBASE represents the tangible evidence that the military cares about kids and is doing its part.

¹⁰ Joseph Erickson is also a Professor of Education at Augsburg College.

The School District

School districts are major partners in the program and commit to support the academy in a formal agreement. Commitment includes the availability of students, targeting at-risk children, transportation, student lunches, a designated time of instruction, and teachers as monitors. Discretionary services may be provided, such as reproduction services, supplies and media application.

The classroom teacher attends each DOD STARBASE class with his/her students. While the presentation and delivery of the curriculum is the responsibility of DOD STARBASE instructors, classroom teachers occasionally assist in test administration and lab experiments. In addition, classroom teachers monitor students while they are participating in the program.

Exhibit 1 presents the range and scope of services provided by the school systems. Coverage ranges from 91% to 100% for the three key areas of support – transportation, teachers as monitors and lunches. Over the past five years the rates have increased in each key area.

Program Support by School District
Exhibit 1

Support Service Provided By School District	2003 Total%	2004 Total %	2005 Total %	2006 Total %	Difference +/- FY'03-FY'06
Transportation	79%	90%	90%	91%	+12%
Teachers as Monitors	88%	92%	96%	95%	+ 7%
Lunches	93%	100%	100%	100%	+ 7%
Printing/Reproduction	19%	7%	24%	21%	+ 2%
Supplies	7%	8%	6%	3%	- 4%
Audio Visual	2%	8%	4%	4%	+ 2%
Communications	12%	6%	10%	14%	+ 2%
Computers	5%	6%	4%	2%	- 3%
Other	26%	19%	16%	0%	- 26%

The Community

Community volunteers continue to be a valuable resource for academies. Public-private partnerships enrich the curriculum and operation of many academies. This often involves community leaders who volunteer time by serving on boards, accessing community facilities, and fund raising. In FY'06, 460 community volunteers contributed 10,819 hours in support of DOD STARBASE. This interesting and diverse group of volunteers includes civilian DOD employees, retired senior citizens, credit union employees, college students, advisory and not-for-profit members and many other community members. In addition, 2,267 parents contributed 31,399 hours.

The Program Elements

DOD STARBASE targets at-risk students who are: historically under-represented in math, science, and technology; living in inner cities or rural locations; disabled; socio-economically disadvantaged; and low in academic performance. Students from disadvantaged backgrounds historically lag behind their peers in math and science. These disparities start as early as kindergarten, persist across grades, and generally widen over time.¹¹

DOD STARBASE motivates the students to develop an interest in science, math, and technology through a challenging, yet exciting curriculum. Children study the physics of flight using Bernoulli's Principle and Newton's Laws of Motion, use math to calculate take offs and landings, and expand their technological horizons through simulated flight and computer-assisted drawings. They test hypotheses about the properties of air and matter using "hands-on, minds-on" experiments. They learn that scientists and pilots rely on a team to be successful. Through participating in carefully designed activities and class responsibilities, they learn what it takes to be a good team member. Setting goals and achieving dreams is taught through the motto that "*dreams + action = Reality*". They also learn that drugs and alcohol can interfere with accomplishing their dreams.

¹¹ Science and Engineering Indicators 2006, National Science Foundation, Chapter 1, page 1.

Military personnel demonstrate the application of classroom learning by discussing and demonstrating the knowledge and skills used in their careers. Applications and demonstrations vary by locality. Students may be exposed to maintenance and navigation of ships or planes, learn what it takes to be a pilot, discuss what a medical team needs to know for a rescue, or learn how a chemical fire is extinguished. They learn that teamwork, as well as knowledge, is critically important for a successful mission.

Grade Level

The legislative mandate states that the program may serve grades K through 12. National statistics indicate that there is a lack of significant progress in science competency that begins at the fourth grade.¹² In both math and science only about one-third of fourth and eighth grade students reached the proficient level. Believing that students must be motivated to value math and science at an early age, DOD STARBASE has chosen to emphasize fifth grade students. Currently, 25 of the academies work with more than one grade and all but two teach fifth grade.

Class Size

The DODI stipulates that class size should range from 20 to 35 students, with exceptions approved on a case-by-case basis. Smaller class size is critical to curriculum delivery, as it focuses on applications, student interaction and problem-solving experiments. These teaching methods require close teacher supervision, student feedback, and individual involvement to facilitate the understanding and application of principles. Almost all academies meet class size requirements. The average class size for DOD STARBASE is approximately 24 students.

Program Schedule

A class attends either a four- or five-day DOD STARBASE program¹³ for 20 or 25 hours of classroom instruction. The five-day, 25 hour curriculum is by far the most popular schedule. The major advantage is that it provides more time to cover the core curriculum and/or allows the individual academy the opportunity to add topics that take advantage of their unique base and community resources. Of the 964 schools served this year, 786 participated in the five-day program and 178 schools attended a four-day program. The four-day format is usually used by an academy when its goal is to increase the number of schools and classes it serves.

Program Service Area

Each academy's location presents unique logistical challenges. Location affects scheduling, hours available for instruction, transportation costs, and selection of schools. A full 77% of students served were within 50 miles of their academy. This year there was a 3-1/2% decline in the number of programs serving students on a statewide basis. Over the last five years there has been a 10% shift from programs that served children within 20 miles to programs serving students within 50 miles. Overall, the shifts are relatively minor, as Exhibit 2 demonstrates.

¹² Results of the 2000 National Assessment of Educational Progress (NAEP) science assessment stated that between 1996 and 2000 average science declined at grade 12 and remained the same at grades 4 and 8. In both science and mathematics, most students did not reach the proficient performance level; a level denoting solid performance for their grade based on judgments of what student should know and be able to do in the subject assessed. In subjects, only about one-third of fourth and eighth grade students and even fewer twelfth grade students reached the proficient level.

¹³ Each academy determines whether it will offer a four- or a five-day program.

**Program Service Area
Exhibit 2**

Service Area	2002	2003	2004	2005	2006
20 Miles or Less	40%	31%	35%	28.5%	27%
20-50 Miles	31%	45%	47%	47%	50%
Statewide	20%	17%	16%	24.5%	21%
Other	9%	7%	2%	2%	2%

Ethnic Composition

As new academies become fully operational, there are accompanying shifts in the DOD STARBASE program's ethnic composition (See Exhibit 3). Over the last six years, the Hispanic population has grown the most, with a 4% increase. However, the percentage of Hispanic students compared to the total number of students has remained relatively steady since 2003. The category in which students describe themselves as multiracial has grown slowly but steadily from 0% to 3% since 2001. Growth is also seen in the number of Native American children served due to the outreach programs in Mississippi, Oklahoma, Alaska and South Dakota. The percentage of African-American students has declined. The Caucasian population continued to be the majority.

**Ethnic Composition of Students 2001-2005
Exhibit 3**

Ethnicity/Race	2001	2002	2003	2004	2005	2006
Black/ African American	25%	27%	27%	23%	22%	21%
Asian/ Pacific Islander	4%	5%	5%	4%	4%	5%
White	54%	47%	46%	47%	48%	49%
Hispanic or Latino	11%	14%	15%	15%	16%	15%
Multiracial	0%	1%	2%	3%	3%	3%
American Indian/ Alaskan Native	3%	4%	4%	5.5%	5%	6%
Other	3%	2%	1%	3%	0%	2%

Gender Composition of Students

Female and male representation in the student composition was almost evenly split, as 49.3% were females and 50.7% males.

Academy Staffing

The DODI staffing model authorizes four full-time staff members: a director, a deputy director/program instructor, a program instructor, and an office manager. Over the years, several academies have reorganized this staffing model, which is permissible with written approval from OASD/RA. Changes include: replacing the deputy director with an instructor-only position, splitting the instructor position into two part-time positions, reducing the hours of or eliminating the administrative assistant, or expanding the duties of the administrative assistant to include instructional assistance. Most of the changes increase instructor capability and resources. Seven academies share a director, and these programs typically serve multiple sites within a state. Exhibit 4 provides an accounting of the FY'06 DOD STARBASE composition.

Academy Staffing Profile ¹⁴			
Exhibit 4			
Position	Number of Staff	Full-Time	Part-Time
Director	44	43	1
Deputy Director/Instructor	42	41	1
Program Instructor	94	79	15
Administrative Assistant	42	34	8
Other (EA, Maintenance, etc.)	11	2	9
Total	233	199	34

Instructors

Academies are urged to hire experienced, fully-credentialed, highly-trained personnel in math, science, and technology. The program methodology promotes the experiential and “hands-on, minds-on” classroom applications where students are actively involved in simulations, lab applications, computer-assisted drawings, demonstrations, and practical problem-solving. This approach requires instructors to have several years of teaching experience, certification, content skills, and enthusiasm for the curriculum techniques.

Employment Relationships

DOD STARBASE programs are affiliated with different organizations for administrative and auditing purposes. Upon installation, academies have the option to be affiliated with their state, school district, local university, a private contractor, a not-for-profit board, or the federal government. While DOD has provided general guidance on equivalencies for the employment relationship and budget allocations, the differences in the academies’ organizational affiliations and their military service components have led to employee relationships that are variable within and between sites.

¹⁴ One director and seven instructional staff are not included in chart, as they are paid by outside sources. Seven academies share a director: AK, CT, KS, MI, NC, OK, and VT.

Academies may have more than one set of guidelines for benefits, salary administrations, and employee practices because of the different organizational affiliations (see Exhibit 5). More than half of the academies are affiliated with a state or the federal government. When affiliate agencies experience limitations and/or freezes in hiring, DOD STARBASE personnel are sometimes employed as independent contractors, consultants, or employed under a different organizational umbrella; thus, their employee status, benefits, and salary administration may be different from those of their peers. These differences influence budget management decisions, changes in organizational structure, and the rate of staff turnover.

Academy Organizational Affiliations Exhibit 5	
Organizational Affiliation	Number of Staff Members
Federal employee	54
State employee	69
Contract employee	110

Staff Departures

This year there were 36 staff departures from the 53 DOD STARBASE programs. This continues the pattern begun in 2005 of higher than expected staff turnover. The departures represent 15% of the total staff, which is higher than the 13% experienced by the education profession as a whole.¹⁵ In the last three years, over 100 staff members have left, which represents a significant loss of highly trained and talented personnel who know and understand the specialized program.

Staff Departure Rate 2003-2005 Exhibit 6				
Program Year	2003	2004	2005	2006
Number of Staff Members	168	238	231	233
Number of Departures	10	30	39	36
Turnover Rate	6%	13%	17%	15%

Reasons for the staff departures are varied. However, it is important to note that one-third of those departing cited better opportunities, pay, and job security. Factors in the DOD STARBASE program that might cause staff to seek career moves include limited career steps, restricted affiliate benefits, and relatively stagnant payrolls.

¹⁵ Teachers Wanted: Attracting and Retaining Good Teachers, Daniel A. Heller, Association for Supervision and Curriculum Development, Alexandria, Virginia, August 1, 2004.

Reasons for Departure Exhibit 7	
Reason	#Staff Members
Moved	3
Retirement	3
Personal/Resigned	5
Termination	2
Further Education	1
Better Opportunity (pay, benefits, security, upward mobility)	16
Career Change	2
Position Eliminated	1
Critical Events (Katrina, military deployment)	3

Staff Changes

In addition to the 36 departures there were 14 personnel changes. The changes included: five individuals who transferred or were promoted within the organization, four individuals who were hired to fill vacant positions, one additional hire, and an instructor position that is rotated on an annual basis with a school system. When staff changes and staff departures are combined, there is 21% turnover within academy staffing. This raises several issues that must be considered in staff training and curriculum continuity. For example, an 16% change among program directors and a 14% change in deputy directors might warrant training in program leadership expectations with DOD program administrators. A review of departures and changes by positions is presented in Exhibit 8.

Staff Changes and Departures Exhibit 8			
Staff Position	Number Changes and Departures	Total Staff	Percent Change
Director	7	44	16%
Deputy Director	6	42	14%
Instructors	26	94	28%
Administrative Assistants	11	42	26%
Other	0	11	0%
Total	50	233	22%

Not-for-Profit Organizations

The Secretary of Defense and the Secretaries of the military departments are authorized under Section 2193 (b) subparagraph (f) to accept financial support as well as other types of support from not-for-profits and other private sector organizations. While several academies make use of this option to help enhance and expand their program, there are academies that are uncomfortable with this opportunity (see Exhibit 9). The Navy, for example, does not encourage its academies to use not-for-profits.

Not-For-Profits by Military Components Exhibit 9			
Military Component	# Academies	# Not-For-Profits	% Academies with not-for-profits
National Guard	31	24	77%
Navy/Navy Reserve	13	0	0%
Air Force	4	2	50%
Air Force Reserve	3	3	100%
Marines	2	2	100%

Most of the not-for-profits were established prior to 2001 when fiscal sponsorship was uncertain and attempts were made by academies to find alternative sources of funding. Today, these organizations remain important sources to the programs. They can assist in obtaining funds to enhance the program's operations; market the program to the community; write and submit grants; assist with program and budget planning; and help with in-house review of program operations (see Exhibit 10). Most commanders find the involvement of not-for-profits an added value for enhancing community relations.

Not-for-Profit Services Exhibit 10		
Service	2005 % Academies	2006 % Academies
Marketing/Fundraising	80%	68%
Grant Writing/Submissions	57%	42%
Program Planning and Annual Review	47%	58%
Budget Planning and Review	47%	55%
DOD Compliance Review	27%	52%
Other	27%	13%
Review of Potential Staff	23%	23%
Review of Subcontractor Relations	23%	23%

There was an interesting shift that occurred over the past year. Not-for-profits are becoming less utilized by the academy for marketing, fund raising, and grants submissions, i.e., a drop of 12% in marketing/fundraising and 15% in grantsmanship.

Steering Committees

Steering Committees were formed to guide the program into the future and to support the Bush Administration's five-year Mathematics and Science Initiative (MSI). The initiative to create the committees was proposed and acted upon during the FY'04 Directors' Conference. Individuals were selected from academy staffs and military personnel based upon content expertise/interest, a range of academy experience, and a willingness to commit time and energy to the committee. OASD/RA provided funding, support, and guidance for the committees. Below is a listing of the steering committees, their missions, and an update on their progress during FY'06.

PARTNERSHIPS

- **Mission:** To identify, assess, and review potential partnerships with local/national organizations that would enhance and support DOD STARBASE.
- **Action:** A partnership manual was created and is currently being reviewed and revised by DOD attorneys. The manual will be shared at the 2007 Director's Conference in February.

PROFESSIONAL DEVELOPMENT

- **Mission:** To identify, review, and recommend steps to enhance professional development and activities for all staff.
- **Action:** A two-day professional development conference for DOD STARBASE instructors has been designed and developed. The conference is scheduled for July 25-27, 2007.

MIDDLE SCHOOL COMPONENT

- **Mission:** To identify, review, and assess instructional materials to strengthen and enhance the standard core curriculum of the middle school component.
- **Action:** In the process of working with the Mentoring Committee to develop a pilot program for the summer of 2007. The program would incorporate both a middle school and mentoring component.

MENTORING INITIATIVE

- **Mission:** To identify and review mentoring programs that would be compatible, supportive, and effective in improving student performance in the subject areas of the DOD STARBASE curriculum.
- **Action:** In the process of working with the Middle School Committee to develop a pilot program for the summer of 2007. The program would incorporate both a middle school and mentoring component.

PROGRAM OPERATIONS

- **Mission:** To review and update the current program management and training manuals.
- **Action:** Will meet in February 2007 to review curriculum objectives and update current Director's Guide.



PROGRAM ASSESSMENT OVERVIEW

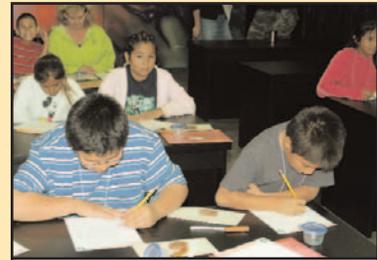
The assessment process has two objectives: 1) to determine whether the DOD STARBASE program meets its program goals; and 2) to measure the impact of the DOD STARBASE program on students and participants. To achieve these objectives, the assessment process focuses on gathering information via structured interviews and questionnaires from key participants.

DOD STARBASE® Student Composite

The mission of DOD STARBASE is to raise the interest and improve the knowledge and skills of youth in science, math, and technology. Mary and Bill are “composite children” that will reflect the data results from the 2006 analyzed student knowledge assessments and student attitude surveys. From their profiles you can see how typical students performed and see how their views aligned with the DOD STARBASE mission. The data results that form the basis of the student descriptions come from “STARBASE Student and Teacher Assessment Results,” by Pearson Performance Solutions. Numerical data results in chart format are found in the section Student Assessment Comprehensive Analysis.

Mary and Bill are “composite” fifth graders who participated in a five-day DOD STARBASE in 2006. They are very much like the typical students you might see if you visited a National Guard Armory or military base hosting these science, math, and technology DOD STARBASE activities. Mary is eleven years old and attends school in Georgia. Bill is ten years old and goes to school in Michigan. They are quite enthusiastic as they anticipate the sessions. Many of the students heard about DOD STARBASE from other children who participated in past years. Also likely as not, they may have met someone in the military before, and they have a comfort level about military instructors and others the students will interact with there.

From the start, Mary and Bill wanted to learn new science, math, and technology concepts by trying them. They wanted to make things and work as a team. These students have aspirations to complete high school and they think about what they’d like to be when they grow up.



Sample Knowledge Assessment Items:

What is the smallest particle of water?

1. A water molecule
2. A water atom
3. A water nucleus
4. A water drop

If you are landing an airplane in a city that is 5,000 feet above sea level and your altimeter reads 5,500 feet, how many feet are you above the ground?

1. 500 feet
2. 1,000 feet
3. 5,000 feet
4. 5,500 feet

If you launched two rockets, one with a mass of 50 grams and one with a mass of 100 grams, using the same amount of force, which rocket would go highest?

1. The heavier rocket would go the highest.
2. The lighter rocket would go the highest.
3. The two rockets would go the same height.
4. The heavier rocket would go twice as high as the lighter rocket.

How was the experience for students such as Bill and Mary? They liked the instructors and left thinking about their own future careers. They did try things and were successful. They enjoyed the experiences on the base. They were more likely to notice the variety of military careers if they had some earlier contact with the military. In fact, the experiences at DOD STARBASE that most changed Mary and Bill's minds from before the program had to do with "making my dreams come true," their positive experiences with the program instructors, and the military base experience. In students' terms, DOD STARBASE is not boring.

Students like Bill and Mary not only had fun at DOD STARBASE, they also learned a lot. Their scores on the knowledge assessments improved 33% in the post-test. The content curriculum areas during DOD STARBASE included properties of air and matter, Bernoulli's Principle, aircraft, forces of flight, flight simulation, rocketry, Newton's Laws of Motion, space exploration, technology, teamwork, goal-setting and avoiding substance abuse. As much as they improved their scores, these students improved their understanding of the content areas. Half of the students had a final score on their assessment of 80% or better.

When 2006 students were compared to past years of DOD STARBASE, students like Mary and Bill improved their views on their science competency, making good decisions, setting goals, following directions, and self-realization. Overall, their view of the program improved and they would recommend the program to their friends. Likewise, 2006 students made improvements on post-test scores in most of the content curriculum areas from the year before.

Bill and Mary both like math. They are optimistic about graduating from high school. They enjoyed the military base experience, the instructors, and the military personnel they observed in different jobs.

Bill tends to like science and math a little better than Mary and be better at the subjects. At the same time, Mary improved more in her view of math during DOD STARBASE. Mary likes setting goals, making good decisions, her future, and has a positive view of learning. She sees application in what she learned in the program. Bill views military people with different careers on base. He enjoys the accomplishment from teamwork.

Boys and Girls Agree*

- I like math.
- I think I can graduate from high school.
- Military people do lots of different things.
- STARBASE instructors are kind and helpful.
- You can have fun working in a group.
- The military is a good place to work.
- I am enjoying coming to a military base.
- Military bases are fun.
- I think STARBASE will help me do better in school.
- I like to think of new ways to use things.

** Results from pre-and post-assessment
DOD STARBASE surveys*

Bill scored higher than Mary on the knowledge assessment pre-and post-test. Mary, however, improved more in her final scores. Aspiring students who recognize many things that DOD STARBASE offers for students also find much to learn in this program. They are willing learners that like the instructors and find the whole experience enjoyable. These learners are thinking about their futures and setting personal goals. They recognize military and other career options. They are capable students. DOD STARBASE is fortunate to have the opportunity to impact these students.

Classroom Teacher Composite

Teachers of DOD STARBASE students are essential partners for program success. Their enthusiasm sets the tone for students anticipating DOD STARBASE. As program observers who have worked with the children over the school year, these professionals may have helpful learning insights for motivation of their students. By continuing to use materials and resources from DOD STARBASE, these teachers may extend the impact of the program well into next year's students. Teachers' integration of the content areas from DOD STARBASE into their local district science, math, and technology curricula ensure that the program becomes part of the learning structure for the school year. For these reasons, the survey feedback from these teachers provides insights for the DOD STARBASE Mission: to raise the interest and improve the knowledge and skills of youth in science, math, and technology.

A "composite teacher," Mrs. Moore, will allow us to look at the data results that form the basis of typical teacher feedback in "DOD STARBASE Student and Teacher Assessment Results," by Pearson Performance Solutions. Numerical data results in chart format are found in the section titled Student Assessment Comprehensive Analysis.

Mrs. Moore, a veteran teacher of 15 years, teaches fifth grade in Alabama. She has had students participating in DOD STARBASE for the past three years, while some of her colleagues are new to the program this year. Before DOD STARBASE, her past military base experiences were positive. Some of her fellow teachers will visit a military base or National Guard Armory for the first time when their class participates in the program.

Mrs. Moore sees DOD STARBASE as a lasting positive influence on her students. The program content areas fit well in the state curriculum standards. She found the program instructors to be positive role models for her students that reinforced positive student behavior for learning. She notes that students are talking about their experiences at DOD STARBASE after the program ends. For herself personally, Mrs. Moore thinks the program had a positive impact.

Drivers of "At STARBASE, I learned a lot of things that I can use."*

- STARBASE is (not) boring
- I like to think of new ways to use things.
- You can learn a lot by trying things.
- STARBASE Instructors are kind and helpful.
- I am enjoying coming to a military base.
- I think about what I want to be when I grow up.
- The military is a good place to work.
- I set goals for myself.
- I like to make new things.
- I like math.

*Results from Pearson Performance Solutions Assessment Results

**Teachers of DOD STARBASE
Students Top 12 Attitudes about
the Program***

- The STARBASE experience will be a positive influence on students in coming years.
- The STARBASE instructors are good role models for the students.
- The children enjoy sharing their STARBASE experiences with others.
- STARBASE reinforces many positive behaviors I try to teach my students.
- The STARBASE (science, math, and technology) curriculum supports our state standards.
- The STARBASE experience has been a positive influence on me personally.
- The students admire their STARBASE instructors.
- Parents are delighted that their children are participating in STARBASE.
- The students talk about STARBASE long after the program has ended.
- STARBASE has helped improve the students' understanding of science.
- More (students are) interested in learning about science.
- The students enjoyed being on a military base.

** Data from Pearson Performance Solutions
Assessment Results*

Students are motivated to learn more about science after DOD STARBASE, according to Mrs. Moore. She thinks her students' understanding of the science, math, and technology content areas has improved as a result of the program.

Mrs. Moore says that her students liked the DOD STARBASE instructors and enjoyed the military base experience. Parents of her students tell her that they are glad that their children are participating in the program. From being associated with the program in past years, she sees a positive in the parental support that reinforces Mrs. Moore's efforts with DOD STARBASE.

Mrs. Moore views the DOD STARBASE program as reinforcing positive learning behaviors that she tries to teach her students back in the classroom. Students continue to talk about the program after it has ended. Mrs. Moore was positively influenced by DOD STARBASE. She appreciated the program instructors as role models for her students and looks forward to using the materials and resources provided by the program in her classroom. She has included DOD STARBASE materials in her local district science, math, and technology curriculum.

**Teachers of DOD STARBASE
Report about Students**

*Drivers of "STARBASE has helped
improve the students' understanding
of Science"**

- (Students are) more interested in learning about science.
- STARBASE has helped to improve appreciation of how math can be applied in a variety of situations.
- The students talk about STARBASE long after the program has ended.
- (Students are) more willing to cooperate with each other.
- The STARBASE instructors are good role models for the students.
- The children enjoy sharing their STARBASE experiences with others.
- Parents are delighted that their children are participating in STARBASE.
- The students ask more questions about technology.
- (The students are) better at following directions.

** Data from Pearson Performance Solutions
Assessment Results*

Military Volunteer Assessment

Military Volunteers were asked questions on their specific contribution to the program; if they would volunteer in the future; if their volunteer work had affected them; if they had received any feedback from the community or military personnel; and for their suggestions and recommendations for DOD STARBASE. Although the number of responses from military volunteers was less than half the number that responded last year, the results continue to give the program high marks and stress the positive impact that the program has on the students, on the lives of the individual volunteers, and on the community's perception of the military.

Sixty-four military volunteers, representing 15 academies, responded to the survey. Their responses reflected the range of activities that the military volunteers perform in support of the academies. The majority of the volunteers presented information to students, while others served as tour guides, facilitators for experiments, board members, administrative support, and teacher aids. Most planned to volunteer in the future; as one volunteer wrote, "I have helped with STARBASE from the start and always will."

Volunteering for DOD STARBASE has a positive impact on how volunteers see themselves and their jobs. One volunteer stated, "It reminds me of how exciting my job is when I get to explain it to kids that are genuinely interested in what I do." Another wrote, "I feel that STARBASE is an inspirational program, not only for the student participants, but for the military and the community at large." Volunteers enjoy making a difference in the lives of the students, "watching their eyes light up," "seeing new technology through students' eyes," and having an impact on a "child's experience with math and science."

The feedback that military volunteers received from the community and other military personnel was enthusiastic. In speaking with a principal whose students were graduating from the academy, a volunteer reported that this principal noted, "that it's not easy to develop a metric that shows how well STARBASE helps students." Another volunteer reported that the University President, leaders in the community, business and education, as well as the Native American and Hispanic communities "are all praising the efforts of STARBASE." One community was so impressed with a military volunteer's involvement in the program that he was awarded the Patriot of the Year Award. "Numerous accolades from educators, parents, and students on the creativity and the material presented" were received by a different volunteer.

When asked for their suggestions or recommendations for the program a typical response from a military volunteer was, "The STARBASE program is excellent and there should be more programs across the country to spark interest in math and science, allowing our youth to have better jobs and allowing technology to grow."

The demands on the military in FY'06 were staggering as they were deployed overseas and dealt with natural disasters. Yet, 2,487 military men and women took a strong interest in the DOD STARBASE program, donating 22,758 volunteer hours to the academies, a sizeable increase over 2006 as shown in Exhibit 11.

**Military Volunteers FY '05 and FY'06
Exhibit 11**

Year	Number of Volunteers	Volunteer hours
2005	2,362	19,907
2006	2,487	22,758

Civilian Volunteer Assessment

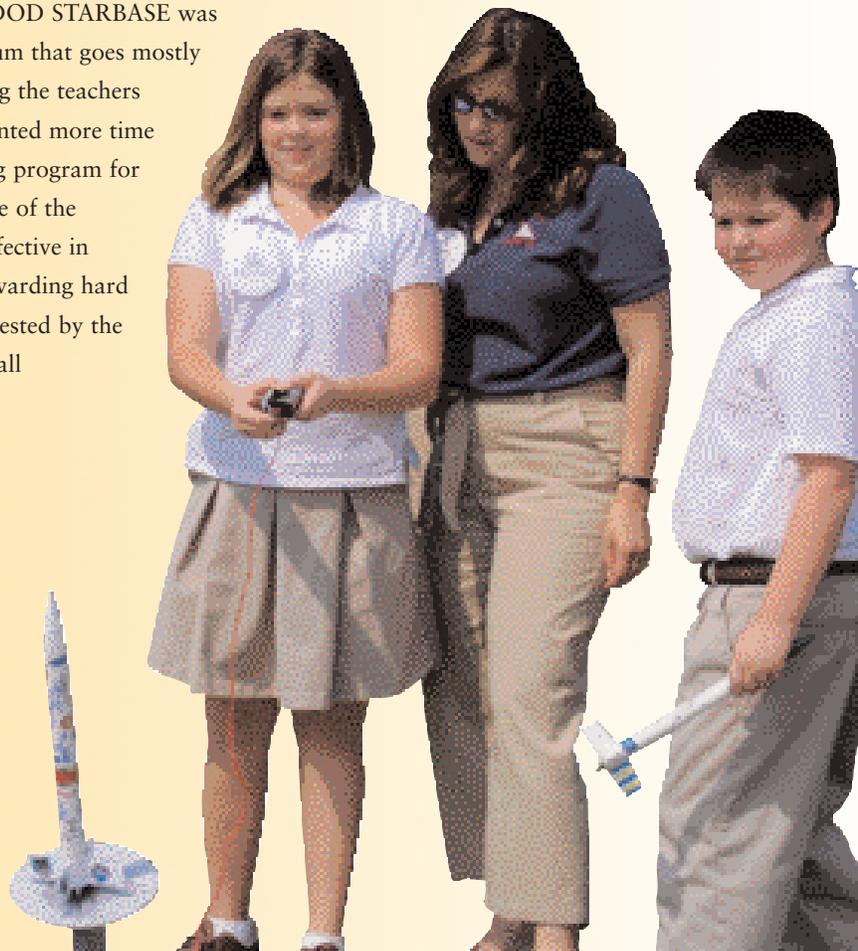
This year the academies were asked to have civilian volunteers complete a survey of their experiences with and impressions of the DOD STARBASE program. Nine academies participated in this assessment with 30 volunteers responding. During the school year, these volunteers served as tour guides, board members, classroom presenters, and teachers' aides.



The volunteers represented a broad range of individuals, from a high school student to a Retired Brigadier General. They also represented a variety of professions, including pharmacy, counseling, law, engineering, and journalism. Approximately 73% had a child or relative who had attended or was attending a DOD STARBASE program.

All rated the program as either highly effective or very effective in improving students' knowledge, skills, and attitudes about themselves. One hundred percent cited that volunteering for the program was personally rewarding, agreed that they would recommend the experience to others, and planned to volunteer in the future. Over 46% indicated that it had improved their understanding of the military's role in civilian affairs, while 43.3% reported that it improved their awareness of how skills learned in the classroom transferred to "real world situations." One civilian noted that he had previously worked as a nuclear weapons technician in the Navy, and that, "it is good to let the kids know that the military does not make mindless war mongers."

When asked how DOD STARBASE could be improved, it was suggested that the program become more visible through better use of the media. They felt that DOD STARBASE was a "tremendous resource to local school curriculum that goes mostly unnoticed. The popularity of the program among the teachers proves its success." Several of the volunteers wanted more time with the students and others requested a training program for volunteers to give them a better idea of the scope of the program. One wrote, "The program is highly effective in teaching goal setting, good study habits, and rewarding hard work on the part of children. For the money invested by the government, the return is huge. Truly a win for all concerned."



PROGRAM GROWTH

DOD STARBASE continues to grow. While the demand for additional academies is persistent, growth is limited by the availability of federal funds. In 2006, new academies were added in Battle Creek, Michigan; Patuxent River, Maryland; Kenai, Alaska; and Corpus Christi, Texas. All of these new academies, except the Patuxent River program, occurred in states that have existing programs and where the demand and immediate support are well-established. Currently these programs are in varying degrees of installation with full operation capabilities projected to be in place by the end of the 2007 fiscal year.

Growth has also occurred by existing academies increasing the number of classes, schools and school districts participating and by establishing supplemental programs. When school systems are not in session, DOD STARBASE academies operate special programs. They offer advanced curriculum for program graduates, and experiment with new curriculum in courses like model rocketry, robotics or advanced naval technology. Another popular offering is "The Best of STARBASE" that exposes students who can not attend the five-day program to two or three days of the curriculum. One academy reaches hundreds of students across the state through video teleconferencing. In FY'06, an additional 2,832 children were served through these supplemental programs.

The demand by nearby school districts for DOD STARBASE programs to expand to their district is practically universal. Demonstrated capability and observed results are credible and effective marketing instruments. Eighteen states now have two or more academies. Almost all the academies have made a request to expand their program to other sites. Meeting the demand for expansion and outreach is a major challenge.

The Cherokee Nation has been very pleased to co-sponsor the Cherokee Nation STARBASE Summer Academies. We understand the value of providing many learning opportunities for our young tribal members. The science, math and technology programs these young scholars are exposed to in the STARBASE classroom provides them with great hands-on learning. We are confident many of them will be interested in career paths in these fields. This is a great spring board to future learning. They have built not only classroom projects, but their own self-esteem as they complete the tasks and activities in the STARBASE classroom.



*Chad "Corntassel" Smith
Principal Chief, Cherokee Nation, Tahlequah,
Oklahoma*

There are several factors that limit an academy's ability to respond to demand and growth. A major factor is the availability of facilities and personnel. Most academies operate in one or two classrooms with two instructors. The size of classes is limited as dictated by state policy and by DODI guidelines (20-35 students per class). Equipment, such as computers and simulators, along with facility size, also limit the capability to expand the program.

Balancing demand and growth with available resources remains a constant challenge. Offering additional services without damaging the quality of existing commitments or overburdening staff is a continuous balancing act. At this point, the challenge has been met by innovative programming, economies of scale, and personal energy.

CRITICAL EVENTS

Hurricane Katrina was the costliest storm in the history of the United States and one of the deadliest. It caused catastrophic damage throughout the Gulf Coast area. Two DOD STARBASE academies were severely impacted by the storm – Pelican State STARBASE in New Orleans, Louisiana and STARBASE Atlantis Gulfport in Gulfport, Mississippi.

The Pelican State STARBASE Academy was totally destroyed by Katrina and had to rebuild at Camp Beauregard in Pineville, Louisiana. The program went from a fully operational academy with an experienced staff back to an academy similar to a start-up program that was unable to receive students until the fall of 2006. The STARBASE Atlantis Gulfport Academy was severely damaged and lost its records, equipment, and supplies to the storm. Its dedicated staff received supplemental funds for new equipment and supplies and was able to reopen their academy doors in a few months. The surrounding area served by this academy was severely disrupted. The Atlantis Gulfport director reported that 11 schools were lost, requiring the student population to be relocated. Another result of the hurricane was that student demographics changed and test scores dropped, reflecting the disruption in the students' lives. A third site, STARBASE Robins at Robins Air Force Base in Georgia was not as directly impacted but had to alter schedules to compensate for schools that closed.

The Iraq War continues to impact programs on a variety of levels, especially for the three sites that reported staff members being called to active duty. Four other academies reported that their supporting units had been activated, resulting in fewer volunteers to assist with activities such as tours and class presentations. The added security affected other sites, making it more difficult for parents to attend graduation ceremonies and rocket launches.

The rising cost of gasoline increased the cost of transportation and forced some school districts to cancel plans for their children to participate in DOD STARBASE. This is especially important when one considers the targeted at-risk population that the program serves. These children often attend school districts with a lower tax base and reduced budget options to meet needs such as increase fuel costs.

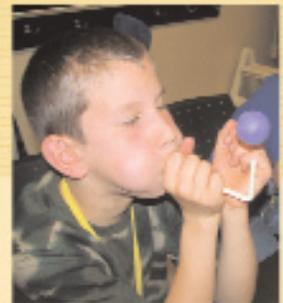
PROGRAM COMPLIANCE

OASD/RA has oversight responsibility for the DOD STARBASE program. There are several ways that this office fulfills this function starting with sponsoring, installing, and operating the academy. Formal agreements are made with each academy that specifies their responsibilities. Written guidelines and compliance policies are detailed in the manager's guide, letters of agreement, and the DODI. These policies are implemented and enforced at each stage of the program development process by: 1) managing the funding allocation process; 2) developing and implementing the regulatory guidelines; 3) monitoring each program's compliance with the regulations; 4) assessing the program's performance and effectiveness in achieving program goals; 5) assessing the development and publication of the Annual Report; and 6) providing administrative oversight as deemed necessary.

Background Information

In the fall of 2000, OASD/RA distributed a set of instructions and guidelines regulating the DOD STARBASE program under DODI 1025.7. These instructions were designed to ensure overall consistency in the DOD STARBASE program objectives, policy, and procedures. The DODI contains guidelines for the core elements in the content, delivery, methodology, and operational integrity of the program. Key emphasis is placed on such factors as class size, core curriculum, number of classroom hours, participant eligibility, military base delivery, and several other administrative and operational procedures. Most of these policies were the result of proven methodologies and concepts of DOD STARBASE that originated from pilot programs, along with time-proven educational practices.

The DODI was distributed to academies for review and compliance. Academies were given maximum flexibility to enhance their programs in both content and approach as long as they met the basic core requirements. Academies were also instructed to document any exceptions or deviations to the instruction; to note whether the conditions were temporary or permanent; and to provide the necessary documentation to the OASD/RA office for further guidance or exemption. The academies were instructed to develop and suggest corrective actions to bring any deviation they had back to standard. The expectation, if no exception was given, was that compliance would be obtained and a scheduled, detailed action plan approved by OASD/RA.





In the early years, each academy operated in relative independence. Differences in program emphasis, operational procedures, and program delivery started to emerge even though they shared basic curriculum and core applications. Academies were, in fact, encouraged to take advantage of local capabilities and resources. The inventiveness of the staff created a number of innovative curricula and methodologies that were unique to individual academies.

While directors shared program innovations, most were not universally adopted. Differences among the academies started to emerge in areas of program design and procedures. Variations in classroom hours, core curriculum, program location, and new methodologies were also occurring. Ultimately OASD/RA became aware of the dissolution of key concepts, best practices, and proven methodologies that were originally piloted and tested as successful elements of the program. While OASD/RA understood the value and advantages that local resources provided the program, they also recognized the need to blend those attributes with the core elements of DOD STARBASE. Thus the DODI was designed and formally introduced to reflect the balance of supporting local diversity along with the protection of proven key practices and core curriculum.

Compliance Procedures

After the distribution of the DODI to the academies, the OASD/RA designed a compliance program. This involved: 1) orientation sessions with newly installed academies; 2) compliance visitations to conduct on-site desk audits of operating sites; and 3) an annual reporting requirement on academy compliance.

Compliance visits are scheduled on a rotating basis. The assessment team reviews documents, validates annual report claims, observes program activities and operations, and interviews academy staff on compliance requirements. Each academy is visited at least once every three years. If turnover at the director's position occurs, an orientation visit may be scheduled during the new director's first year of responsibility in order to review and establish a full understanding of compliance requirements.

Compliance Adherence and Considerations

While most academies currently meet the requirements outlined in the DODI, there is an increase in technical violations, many of which are inadvertent. Violations are reported by the directors through the Director's Questionnaire or have been observed on site visits.

Changes in organizational structure and the manning module have been made by all but 13 academies. These changes are permissible and occur for legitimate reasons, such as adjustments in staff assignments to expand program delivery, outreach efforts or budget limitations. Academies have identified program changes when submitting a budget request, and have assumed that the acceptance of their budget indicated approval. However, written approval for organizational changes is required. This situation can be rectified through a written request to OASD/RA for approval of changes in organization and staffing.

Ten academies have average class sizes below the 20-student minimum prescribed in the DODI. There may be valid reasons for the decrease in class size, such as school districts reducing their class sizes to raise test scores. However, OASD/RA has not been formally notified of the need to reduce class size nor have requests been made for review, guidance or exemption.

A more significant issue is that academies are required to have a fiscal and a property audit every three years and programs are systematically audited. There are eight academies with outstanding audits.

An emerging area of non-compliance is conducting classes and program delivery off a military installation. Conducting classes on a military installation is a well-established and desired requirement of the program. This is a significant

change that requires written notification of OASD/RA for approval, and guidance. Eight academies spend the majority of their teaching hours off-base.

Core curriculum coverage is a strong area for the academies. Only two academies are not covering all required content. One omits flight simulation and the other omits space exploration.

The number of classroom contact hours is a growing concern. Most academies go well beyond the DODI requirement of offering a minimum of 700 classroom hours per fiscal year. In this reporting period, five academies did not meet the minimum requirement in some combination of classroom hours or number of classes (35 classes for a four-day program and 28 classes for a five-day program). Neither a written notification with a request for exception nor a corrective action plan was presented.

As indicated, much of the above simply lacks official notification; a plan of action to correct the concern and/or a waiver is outstanding. Thus, several considerations for corrective action can be found in the “Considerations” section of this report.

PROGRAM COST

The principal funding agency for the DOD STARBASE academies is the Department of Defense. The total program funding for the operation and management of the program in FY'06 was \$17,027,000. The analytical data in this report is based on the actual amount allocated for academy operation, which totals to \$15,559,931. During FY'06, there were 53 academies of which 49 were fully operational and four were in the start-up phase. The FY'06 budget was \$1.9 million more than what was budgeted in FY'05 for 50 academies of which 49 were fully operational and one was in start-up.

The average operational cost of an academy for FY'06 was \$293,584, which is 7.5% higher than last year's average of \$273,040. The average cost per student in FY'06, based on funding provided to each academy, was \$292.78, which is \$30 higher than it was in FY'05 and approximately the same as FY'04.

FY'04 – FY'06 Average Annual Cost Per Academy/Per Student Exhibit# 12			
Year	Average Annual Cost Per Academy	Average Number of Students Per Academy	Average Cost Per Student
FY'04	\$272,469	932	\$292.35
FY'05	\$273,040	1042	\$262.03
FY'06	\$293,584	1002	\$292.78

The increased cost of an average academy and the increased cost per student can be attributable to several factors. These include the addition of four new sites (Kenai, Alaska; Patuxent River, Maryland; Corpus Christi, Texas; and Battle Creek, Michigan) that were awarded start-up funds in FY'06, and two sites (Gulfport, Mississippi and New Orleans, Louisiana) that were affected by Hurricane Katrina. These latter two sites required additional funding to replace facilities/furnishings, lost equipment and supplies. Of the total dollars allocated by DOD in FY'06 \$214,600 were directed toward Hurricane Katrina rebuilding.

Operational costs vary from one academy to another. There are several factors that explain these differences including: geographical location, variance of in-kind support by the local military bases, supplemental funding by outside sources, salary scales of the different sponsoring affiliates, service expansion to additional school systems, and outreach programs. Each factor produces a challenge in fiscal budgeting. OASD/RA reviews these budgeting requests on a case-by-case basis while trying to maintain equity across all the academies.

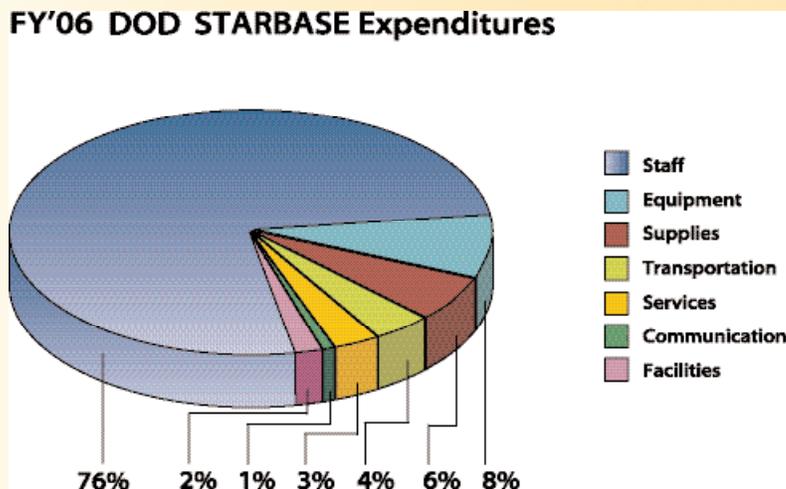
There is a standardized process through which DOD awards funds to the academies. Each academy presents its budget through its command system or affiliate organization. Any variation from prior budget submission requires examination and documentation. For the newly installed academies, there are start-up costs for upgrading facilities, purchasing computers and equipment. After the initial installation, new academies follow the same budget process as the existing sites. Exhibit 13 below shows the average cost per academy by military affiliate.

Average Cost per Academy by Military Affiliate
Exhibit 13

Military Affiliate	Number of Academies	Average Cost Per Academy
National Guard	31	\$289,025
Navy and Navy Reserve	13	\$296,941
Air Force	4	\$239,907
Air Force Reserve	3	\$282,474
Marine Corps	2	\$256,006

Historically, the largest operational expense for the academies is staff salary and benefits. This accounts for 76% of the FY'06 budget expenditures. In past years, salary and benefits accounted for over 80% of operational costs. The reduced percentage this year is due to the funding of start-up costs for the four new academies and the replacement of supplies and equipment for the two sites damaged or destroyed by Hurricane Katrina. Supplies and equipment accounted for 14% of expenditures and the remaining 10% percent was used for travel/transportation, communication, facilities, and services (see Exhibit 14).

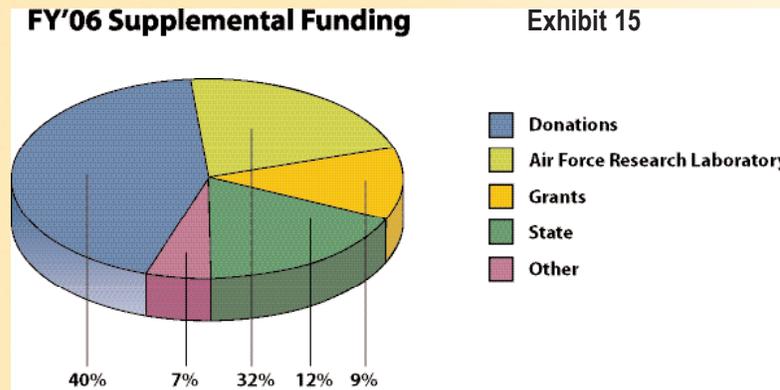
Exhibit 14



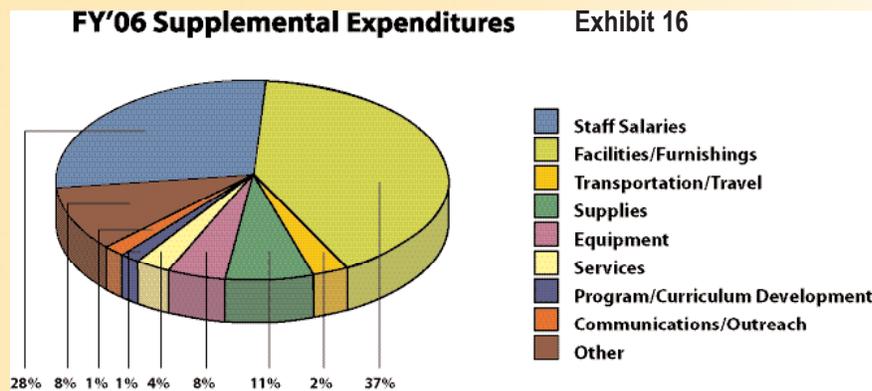
Supplemental Funds

DOD funding generally covers an academy's total operating costs. As programs mature, cost of living increases, services expand, and equipment upgrades and replacements are needed. These factors and others put pressures on operating costs that result in a funding requirement above the standard budget. When DOD funds are not available, academy directors usually make budget adjustments by re-organizing staff or obtaining supplemental funding.

Fifty-eight percent of the academies are affiliated with a not-for-profit organization that pursues supplemental funding. The academies do not solicit gifts. The amount of additional contributions from not-for-profits for FY'06 was over \$1,000,000, which is a 45% increase over last year. Seventy-seven percent of the funds raised were dedicated to three academies: Sacramento, California; Selfridge, Michigan; and Albuquerque, New Mexico. Most of the additional funding came from donations or another government agency as shown in Exhibit 15.



Over the past several years, most of the supplemental funds were used for staff salaries and supplies (64% in FY'05). In FY'06 there was a shift in these expenditures. Only 39% was spent on staff salaries and supplies while 37% went to facilities/furnishings. The remaining dollars were spent on equipment, transportation, contract services, program development, communication, and other needs as reflected in Exhibit 16 below.



OBSERVATIONS AND CONSIDERATIONS

Program observations are developed from a comprehensive review of the DOD STARBASE program. They are drawn from 20 site visits, evaluation of the Director's Questionnaires submitted by each academy, review of comments from 95 military and civilian volunteers, and an analysis by Pearson Performance Solutions of pre- and post-program data from 2,669 students as well as 374 assessments by classroom teachers. The program considerations are intended to build on the program's success. Observations listed below flow from assessments, as well as from the suggestions of program participants, academy staff, and sponsors.

Program Operations

Staff Retention

Staff turnover continues to increase across the program. The numbers of staff has increased to 233 employees, of which 199 are full-time and more than half are federal or state employees. The turnover rate is 16%. This turnover rate, specifically in the area of instructors, is higher than the profession as a whole.¹⁶

Considerations

- Address issues of retention and termination at the Director's Conference.
- Canvas staff employees on their current view of the program, their concerns, satisfactions, and desires for changes in practices, procedures, and job requirements.
- Develop a number of recommendations and action steps that relate to job satisfaction and staff retention.

DOD STARBASE Web Site

The Web site has two separate purposes. The first purpose is to inform the general public about the program and the second is to serve as a source of information, resources, contact information, and as a bulletin board for staff to exchange ideas. The Web site does an adequate job of informing both groups on essential information. However, it lacks a "wow" factor that one expects from a program that emphasizes cutting-edge technology. In addition, the software program used to maintain the site is subject to frequent periods when it can not operate because of technical difficulties.

Considerations

- Conduct a systematic review of the Web site to determine how it can be used more effectively.
- Consider expanding the site for students who want to explore DOD STARBASE subject matter in more depth.
- Review alternative software packages that would allow a more interactive format.
- Request input from DOD STARBASE personnel on how they would like to use the site and what they would suggest to improve it.
- Consider hiring a professional Web master to maintain and upgrade the site.

¹⁶ Teachers Wanted: Attracting and Retaining Good Teachers, Daniel A. Heller, Association for Supervision and Curriculum Development, Alexandria, Virginia, August 1, 2004.

Volunteers

Volunteers enrich the DOD STARBASE experience for the students by donating thousands of hours as tour guides, classroom presenters, teacher's aids, grant writers, and board members. It would be beneficial for all involved to formally recognize this service. Given the magnitude of volunteer service it is important to revisit last year's recommendations on this matter.

Considerations

- Develop a formalized tool to record hours contributed to DOD STARBASE that would include: tasks performed, time volunteered, and site-specific information.
- Develop a national letter of recognition for volunteers who make a significant contribution. In the case of military volunteers, the letter should be copied to his/her commander.



Curriculum & Instruction

Math

Field observations made during site visits and the assessments received from classroom teachers indicate a need to re-examine the current teaching of math. This topic remains at the bottom of the ratings by both the teachers and students. Math is a technique and methodology in problem-solving for the curriculum that is currently unevenly applied across the academies.

Considerations

- Document when and how math is currently being applied in the classroom curriculum and review each core area for appropriate math applications.
- Task the Professional Development Committee to review the results of the canvas report and make recommendations.
- Field test and rate the proposed applications (i.e., essential, highly recommended, highly desirable, etc.).
- Recommend curriculum changes to the directors for universal application.
- Develop and field test math items for inclusion in the national assessment.

Data Collection

The Director's Questionnaire used a spreadsheet format this year and was electronically sent to the directors for completion. This format proved to be more reliable than the previous pencil and paper format but may be impractical in the future, as its ability to accommodate additional questions is limited. A second issue is the need for reported data to be accurate.

Considerations

- Explain to directors the importance of reporting reliable, accurate data that would stand-up to a rigorous evaluation. The opportune time to discuss data issues would be at the Director's Conference.
- Evaluate databases that could be used.
- Implement a Web based format to collect data in a structured data base.
- Train staff to develop, field test, and implement the data base.
- Teach directors how to use the new format.

Compliance Issues

Minor technical violations occur because directors often are not aware of the need to notify and/or received a written waiver/exemption from OASD/RA.

Considerations

- Offer a session that will clarify DODI requirements and the process necessary to request an exemption/waiver at the Directors' Conference.

STUDENT ASSESSMENT COMPREHENSIVE ANALYSIS



The Testing Instruments

An annual psychometric test is given to evaluate the students' participation, understanding, and use of the knowledge, skills, and attitudes taught in the core curriculum of the DOD STARBASE program. Two instruments are used in the student assessment: one focuses on knowledge and skills while the other focuses on pro-social, citizenship, and community awareness attitudes.

Student Assessment constructs include:

- Knowledge, skills, and problem solving items presented in the DOD STARBASE curriculum and concepts;
- Attitudes towards math, science, and technology;
- Attitudes towards the military, military personnel, the military environment, and military careers;
- Attitudes towards citizenship, community awareness, and pro-social behaviors;
- DOD STARBASE experiences and effectiveness; and
- DOD STARBASE impact on students as individuals.

The assessment instruments were developed in 2000 by expert test designers following a review of program curricula, local DOD STARBASE academy tests, responses to surveys, sponsor interests, and program end-result objectives.

The development of a single, standardized test has its limitations and challenges in design and application. This is particularly true for assessing the abilities and skills of the diverse cultural and geographic characteristics found in the 53 academies. The diversity of the academies include: at-risk composition, size, enrollment policies, available resources, and funding. In addition, curriculum discretion is given to academies in areas of lab applications, use of local resources, and other factors that create variations in curriculum delivery. To reduce these variations, the assessment relies on control features, such as grade levels, at-risk composition of the student population, and the core curriculum. Control is also built into the administrative design by focusing on fifth grade, at-risk students, the core curriculum, and the development of the test items at the middle ability level. Core concepts, such as experiential applications, are a key modality, as is administrative design of operations. The instruments are designed to be easily read by students with limited English reading ability. A Spanish version is also available.



The knowledge test items are designed from 11 of the 13 core content areas:

- Properties and states of matter
- Properties of air
- Bernoulli's Principle
- Aircraft controls, surfaces and components
- Newton's Laws of Motion
- Space exploration
- Development, innovation and uses of technology
- Avoiding substance abuse
- Goal setting
- Teamwork
- Four forces of flight



Math is not taught separately, but it is embedded in the presentation of the core curriculum. In general, there is more than one test item for each of the eleven curriculum areas, while some test items combine application of more than one concept. Some items are simple knowledge constructs, while others are applications of concepts and/or are problem solving.



The second instrument is the student attitudinal assessment. It is designed to measure a key objective of DOD STARBASE, i.e., the encouragement of positive attitudes about self, life choices, citizenship, social responsibility, and team building; as well as the development of positive problem solving attitudes and skills in math and science. Therefore, a separate pre- post-attitudinal and perception test is part of the testing process. It is designed to measure shifts in attitudes as a consequence of program participation. Attitudinal constructs include:

- Attitudes towards math, science, and technology
- Attitudes towards the military, military personnel, the military environment and military careers
- Community awareness, citizenship, and social responsibilities
- Program effectiveness
- Program impact on students and others.

The difference in the pre-test with 23 items and the post-test with 26 items is that the three additional questions are related to specific DOD STARBASE experiences and are not comparative items, except when the items are related to teacher perceptions. Each test includes negatively scaled items to assess rating scale reliability, and determine the student's understanding of the scales.

All tests and assessment instruments are reviewed and revised annually with input from field personnel and professional testing personnel. This includes test administration, curriculum content changes, item analysis, and sample size. The incremental modifications are part of the annual comparative analysis. Modifications are guided by the following considerations:

- Balancing item difficulty levels with a range of easy to difficult items. Since students enter the program with different levels of background knowledge of the curriculum concepts, the range of item difficulty establishes a pre-program baseline that permits the measurement of post-program improvement.
- Designing and developing knowledge/skill items and attitudinal items. Changes and additions to test items should reflect changes in the core curriculum, while maintaining the degree of difficulty of items and the total testing paradigm.
- Continual review of the coverage of the core curriculum in item construction. New items should be rotated into the assessment design with a view towards balanced coverage of the core curriculum.
- Rotating one or two new items each year with occasional re-entry of old items in subsequent space with attention to the degree of difficulty.
- Increasing the use of additional items that require conceptual application or synthesis of basic concepts in the core curriculum.

Given the above considerations, changes in the 2006 student assessment include:

- Removing the item, *“If you threw two balls of different weight using the same amount of force...”*
- Adding the item, *“If you launched two rockets, one with a mass of 50 grams and one with a mass of 100 grams, using the same amount of force, which rocket would go the highest?”*
- Refining a knowledge item based on instructor feedback.
- Piloting the item, *“What scientific law is operating that makes it important to wear a seatbelt?”*
- Piloting the item, *“In what state of matter do molecules have the least amount of energy or motion?”*

Data Collection, Administration and Logistics

There was a substantial increase in the number of academy and student responses in this year’s student assessments. Fifty-three DOD STARBASE locations provided data, while 51 obtained matched pre- and post-performance assessments. Of the 5,776 student questionnaires returned, 2,669 were matched on the pre- and post-assessment. This is a 92.4% matching of the student respondents in 2006 as compared with the 80% matching in 2005. This is an increase of more than 700 matched respondents.

This is a representative sample of the total student population that attended the program during the winter/spring of 2006. The sample format reduces the intrusiveness of the testing process, eases scheduling logistics, and maximizes instructional time. If a central group design is considered desirable, there is a substantial student population in the same districts, with similar socio-demographic characteristics, who do not participate in the program.

Student assessment instruments were sent to each academy with instructions on administration, sample size and scheduling. The instructors were asked to give the test prior to program start and upon program completion. In addition, they were directed to review the tests for completion, matching requirements, proper identification of site location, student and class affiliation. Completed questionnaires were then sent to Pearson Performance Solutions for scanning, processing, and analysis.

Analytical Approach

This year's comprehensive analysis of the test results has several dimensions in both the knowledge/skills and the attitudinal assessment. The analysis of the knowledge/skills assessment includes:

- Pre- and post-program comparison
- Age and grade comparison
- Program strengths
- Gender differences
- Test item difficulty
- Program development needs
- Four-day versus five-day program comparisons
- Differences in academy maturity of operation
- Identifying drivers of preferred student outcomes
- Differences over time

Attitudinal analysis follows a similar format and includes:

- Pre- and post-program experiences
- Gender comparisons
- Age and grade differences
- Prior experiences with the military
- Site location comparisons
- Attitudinal clusters
- Trends over time

Student Assessment Results

The 2,669 matched responses were comparable in all demographics and background data, and mirrored the 2005 student responses. There were very few incomplete tests and their numbers did not have a significant effect on the sample size or analysis. As in previous years, the student population is evenly split between girls (49.3%) and boys (50.7%). The fifth grade comprises some 75% of the participants, while 80% of the students were either 10 or 11 years old. Although the southeast region of the United States had the highest representation of the five regions, the other regions were well represented. No region had less than 15% of the sample (see Appendices).

Student Knowledge and Skills Assessment

The 2006 pre- and post-test scores had a mean increase of 6.34, which is the largest increase in the last five years. The previous high score of 5.47 was recorded in 2005.

Pre/Post Test Mean Scores 2002 –2006 Exhibit 17					
Scores	2002	2003	2004	2005	2006
Pre-Test Mean	18.44	19.12	19.09	17.81	19.06
Post-test Mean	22.67	24.42	24.25	23.28	25.40
Mean Increases	+4.23	+5.30	+5.16	+5.47	+6.34

Pre- and Post-Test Item Analysis

The pre- and post-test scores demonstrate that while many of the students enter the program with a basic knowledge of the curriculum concepts, their exposure to the program results in a significant increase in understanding and application. The program entry score on the pre-test provides a baseline from which improvement can be measured. This is especially true with scientific items that were not familiar to students at the start of the program.

Pre/Post Test Mean Scores 2002 – 2006
Exhibit 18

Test Item	Pre-Test % Correct	Post-Test % Correct	+/-% Change
Drinking alcohol may decrease our bodies' ability to do easy things.	79%	87%	+ 8.0%
Matter does not take up space.	75	87	+12.0
The Earth is the closest planet to the sun.	80	90	+10.0
Negative actions may make it hard for you to reach your goals.	91	94	+ 3.0
Technology usually decreases in cost after many units are sold.	51	74	+23.0
What is the smallest particle of water?	31	60	+29.0
What force causes a rocket to launch?	41	58	+17.0
Which of the following is NOT a team?	97	98	+1.0
Which of the following is NOT one of the states of matter?	51	79	+28.0
The earth's atmosphere is how thick?	53	77	+24.0
Air presses down 15 pounds on every inch of our bodies. The reason we don't feel this pressure is...	25	74	+49.0
The air is composed mostly of what element?	24	65	+41.0
Cockpit	81	96	+15.0
Wing	87	93	+6.0
Elevator	67	81	+14.0
Rudder	64	81	+17.0
If you are landing an airplane in a city that is 5,000 feet above sea level and your altimeter reads 5,500 feet, how many feet are you above the ground?	55	69	+14.0
To move an airplane's nose to the left, you would move the...	41	63	+22.0
One reason an airplane is able to gain lift is because the air moving across the top of the wing...	27	55	+28.0
Produced by air flow over the wings and the angle of the wing into the wind.	59	81	+22.0
Force that pulls an aircraft down.	79	87	+8.0
Forward movement produced by a propeller, jet, or rocket engine.	70	84	+14.0
Slows the forward movement of an aircraft.	62	83	+21.0
What is Sir Isaac Newton's Law of Inertia?	28	73	+45.0
If you launched two rockets, one with a mass of 50 grams and one with a mass of 100 grams, using the same amount of force, which rocket would go highest?	55	69	+14.0
Which of the following planets has more than 30 moons and thousands of rings?	81	89	+ 8.0
Which planet do humans believe they could inhabit in the future?	70	84	+14.0
The development of something new or improvement of something already existing is...	59	79	+20.0
If you have something you want to do, or something you want to be in life, you should...	90	96	+ 6.0
Which of the following can damage an individual's dreams?	91	95	+ 4.0
What scientific law is operating, that makes it important to wear a seat belt?	46	70	+24.0
In what state of matter do molecules have the least amount of energy or motion?	44	63	+19.0

Average-Mean Score on Post Program Test

This year's average-mean post program score of 25.40 is a two-point increase over last year, and the highest score in the last six years. This increase occurred with the addition of two difficult test questions that increased the total number of questions to 32. However, if the new items are omitted, the average is 24.08. This adjustment brings the average-mean score closer to prior years. The two additional questions were: "What is the smallest particle of water?" and "Which of the following is NOT one of the states of matter?"

Average-Mean Scores Post-Program Knowledge/Skills Test 2001-2006 Exhibit 19					
2001	2002	2003	2004	2005	2006
22.78	22.78	24.42	24.25	23.28	25.40

Gender Differences on Knowledge/Skills Test

As in previous years, the assessment report identified gender differences in performance and attitudinal changes. The more dramatic differences are found in the attitudinal section. However, a difference is also reported in the knowledge assessment where the boys scored higher in the pre/post tests, but the girls showed more improvement. Those who did not identify their gender were not included in the tabulations.

Gender Differences on Knowledge Test Exhibit 20				
Gender	Number of Students	Pre-Test Score	Post-Test Score	Improvement Score
Boys	1,314	19.67	25.76	+6.09
Girls	1,339	18.49	25.07	+6.58

The performance gap score in the following exhibit illustrates the improvement on post-test scores for both genders.

Gender Performance Improvement 2004-2006 Exhibit 21			
Gender	2004 Performance Gap Score	2005 Performance Gap Score	2006 Performance Gap Score
Boys	+5.08	+5.33	+6.09
Girls	+5.25	+5.64	+6.58

Post-Program Knowledge Test Scores

Over the past six years, the percentages of correct answers on the post-test remained relatively constant. This year, most of the items received slightly higher scores than were recorded in previous years. Only five items out of the 32 had lower scores than they did in 2005. As the following chart indicates, the test has changed over the years, but most questions have been retained or modified slightly.¹⁷

¹⁷ Scores by individual academies present highly variable differences. Academies are encouraged to identify and compare their results with the normative data.

Post-Program Knowledge Test Scores – Percentage Correct¹⁸
Exhibit 22

Attitudinal Item	2001	2002	2003	2004	2005	2006
<i>A team works together to achieve a common goal¹⁹</i>	97	98	99	99		
Drinking alcohol may decrease our bodies' ability do easy things				81	88	87
<i>Drinking alcohol may decrease our bodies' ability to do simple tasks.</i>		95	89			
Matter does not take up space	87	82	85	85	82	87
The Earth is the closest planet to the sun	80	85	90	87	90	90
Negative actions may make it harder for your to reach your goals		91	94	93	94	94
Technology usually decreases in cost after many items are sold		63	70	70	71	74
What is the smallest particle of water?					49	60
<i>Using teamwork results in</i>	93	97	98	98		
What force causes a rocket to launch?					53	58
Which of the following is not a team?	89	93	96	95	99	98
Which of the following is not one of the states of matter?	60	59	68	66	69	79
How thick is the earth's air?	48	58	60	68		
The Earth's atmosphere is how thick?					69	77
Air presses down 15 pounds on every inch of our bodies. The reason we don't feel this is	51	64	70	67	70	74
The air is composed mostly of what element?	46	53	56	63	63	65
Cockpit	91	94	97	96	95	96
Wing	91	93	94	95	93	93
Elevator	73	81	87	82	82	81
Rudder	72	78	86	82	82	81
If you are landing an airplane in a city that is 5,000 feet above sea level and your altimeter reads 5,500 feet above sea level what will your altimeter read when you are on the ground?					64	69
<i>If you are landing in a city that is 5,000 feet above sea level what will your altimeter read when you are on the ground?</i>	48	52	58	57		
To move an airplane's nose to the left, you would move the ...		53	58	60	56	63
One reason an airplane is able to gain lift is because the air moving across the top of the wing		44	51	55	52	55
Produced by air flow over the wings and the angle of the wing into the wind	69	78	84	84	80	81
Forward movement produced by a propeller, jet or rocket engine	74	79	84	85	84	84
Force that pulls an aircraft down	80	84	84	88	87	87
Slows the forward movement of an aircraft	71	76	80	82	80	83
What is Sir Isaac Newton's Law of Inertia	49	60	70	66	67	73
<i>If you threw two balls of different weight using the same amount of force...</i>	67	77	84	82	77	
If you launched two rockets, one with a mass of 50 grams and one with a mass of 100 grams, using the same amount of force, which rocket would go highest?						84
Our Solar System consists of how many planets?	82	86	91			
<i>Which planet is the smallest of all planets and the farthest away from the sun?</i>	93	95	97			
<i>Which planet has 23 known moons and thousands of rings?</i>				90		
Which planet has more than 30 moons and thousands of rings?					89	89
Which planet do humans believe they could inhabit in the future?				89	86	84
The development of something new, or improvement of something already existing is...	50	68	80	79	78	79
If you have something you want to do, or something you want to be in life	89	93	96	95	96	96
Which of the following can destroy an individual's dreams?	89	92	95	95	94	95
What scientific law is operating, that makes it important to wear a seat belt?						70
In what state of matter do molecules have the least amount of energy or motion?						63
Post-test score	22.78	22.78	24.42	24.25	23.28	25.4

¹⁸ Scores based on a 32-question test.

¹⁹ Items in italics were removed from the assessment.

Knowledge Differences Between Four- and Five-Day Curriculums

The number of academies conducting a four-day program is relatively small. In this assessment, there were 306 students in the four-day program and 2,363 in the five-day program. The pre- post-assessment in the knowledge test indicates that the four-day students had higher test scores upon entry and completion. However, there is a significant difference between the groups on the gap between pre- and post-test scores. Students who attended the five-day program scored significantly higher, 1.12 points higher, when their pre- and post-tests are compared.

Knowledge Mean by Program Duration Exhibit 23				
Program Duration	Sample Size	Pre-Test Score	Post-Test Score	Individual Gaps
4-day program	306	20.71	26.06	+5.35
5-day program	2,363	18.85	25.32	+6.47

Knowledge Performance by Length of Academy Operation

For purposes of this analysis, academies were grouped into three categories based on the date that their program started. The oldest group consists of programs which began between 1991 and 1996; the second group or middle-age academies started operations between 1998 and 2001; the final group of relatively new academies originated between 2002 and 2005. The differences on the knowledge assessment were significant across groups. Although all three groupings demonstrated high mean performance scores the newer academies showed a slightly higher gap performance, i.e., improvement on post-test scores. One possibility for this difference may be that the newer academies often have a more rigorous adherence to the core curriculum. The following chart presents the results.²⁰

Knowledge Test Mean by Length of Academy Operation Exhibit 24				
Length of Operation	Sample Size	Pre-Test Score	Post-Test Score	Individual Gaps
Old academies	781	17.96	24.48	+6.52
Middle-aged academies	955	19.21	25.60	+6.39
Relatively new academies	590	19.72	26.78	+7.06

Knowledge Test Scores by Military Service Branch

In this assessment, the National Guard was represented by 1,544 students, the Navy by 663 students, the Air Force Reserve by 207, the Marines by 173, and the Air Force by 82. The scores from each military branch were positive and demonstrate significant improvement on the post-test.

²⁰ See Academy Timeline on page 103.

Student Attitudinal Results

This year, 2,669 students completed the assessment. More than 30% of the attitudinal items were positively rated above the 6+ level, while the remaining items were all above the 5+ level, with the exception of two control items which were negatively stated.²¹

Pre-Program Attitudinal Ratings

Students arrive at DOD STARBASE with high expectations that would appear to provide little room for ratings improvement. However, the post-program assessments are, overall, more favorable. The military, science, and DOD STARBASE items are significantly more favorable in the post-program ratings. The average ratings across all opinion items for the post-program assessments were significantly higher than the pre-program ratings. However, both the pre- and post-test ratings were slightly lower this year than last year. The 2006 pre-test mean rating is 5.81 and the post-mean is 6.05, while in 2005 these numbers were 5.83 and 6.06, respectively.

Post-Program Attitudinal Ratings

After completing the program students report greater confidence in their abilities to succeed in the academic environment, team-building, self-actualization, and trying new things. The data suggest that the program promotes a positive shift in student attitudes towards themselves, future aspirations, trying new things, and the military. The top 15 rated attitudinal items in the post-program assessment had mean scores above 6.0 on a seven-point scale (see Exhibit 25 below).

15 Highest Ranked Post Program Attitudes ²²
Exhibit 25

Attitudinal Item	Post-Program Rank	Post-Program Mean
STARBASE instructors are kind and helpful.	1	6.61
I think I can graduate from high school.	2	6.53
At STARBASE, I learned a lot of things that I can use.	3	6.51
You can learn a lot by trying things out.	4	6.51
I think about what I want to be when I grow up.	5	6.36
I am enjoying coming to a military base.	6	6.28
Military people do lots of different things.	7	6.26
I like to make new things.	8	6.24
I can make my dreams come true.	9	6.21
You can have fun working in a group.	10	6.20
I would tell my friends to come to STARBASE.	11	6.19
I set goals for myself.	12	6.14
You can accomplish a lot in a group.	13	6.11
Learning can be fun.	14	6.03
I like to think of new ways to use things.	15	6.00

²¹ See Appendix for Pre- and Post-Flight Questionnaire

²² Differences are statistically significant.

Significant Shifts in Attitudes

The significant shifts in post-program attitudes occur in 13 diverse areas. The data in Exhibit 26 highlights these shifts.

Significantly Different Post-Program Attitudes Exhibit 26			
Attitudinal Item	Pre-Program Mean	Post-Program Mean	% Shift
STARBASE instructors are kind and helpful.	6.28	6.61	+.33
I am enjoying coming to a military base.	5.97	6.28	+.31
Military people do lots of different things.	6.06	6.26	+.20
I can make my dreams come true.	5.83	6.21	+.38
I set goals for myself.	5.91	6.14	+.23
You can accomplish a lot in a group.	5.94	6.11	+.17
Learning can be fun.	5.87	6.03	+.16
Military bases are fun.	5.51	5.94	+.43
I make good decisions.	5.68	5.86	+.18
I like science.	5.57	5.72	+.15
Learning is easy for me.	5.34	5.48	+.14
The military is a good place to work.	5.14	5.38	+.24
I am good at math.	5.14	5.28	+.14

Military Attitudinal Items

The students' positive experiences and interaction with military personnel are emerging as a highly ranked activity. The students enjoy being at the military base, learning about military careers and see the military as a good place to work. The items related to the military consistently demonstrate significantly positive ratings and shifting scores in the post-assessment. In fact, four military related items are among the top eight shift scores in the attitudinal assessment.

Military Related Service Items Shift Percentages and Ranking Exhibit 27		
Attitudinal Item	% Shift in Pre-Post	Rank in Shift
Military bases are fun.	+.43	2
I enjoy coming to a military base.	+.31	4
The military is a good place to work.	+.24	6
Military people do lots of different things.	+.20	8

Math and Science Attitudinal Items

Data indicates that students' attitudes toward math and science improve by the end of the program, but had lower ratings than the other items. The lowest attitudinal item was "I like math" at 5.25. The item "I like science" was slightly higher at 5.72.

Post-Program Attitudinal Scores

The average for all opinion items for the post-test was significantly higher than the pre-test. The average mean rating for items in FY'06 was lower than the last two years, but the shift scores were not dramatic.

Attitudinal Mean Scores and Shifts 2004 - 2006
Exhibit 28

Attitudinal Mean Score	2004	2005	2006
Pre-Test Mean Score	5.78	5.83	5.81
Post-Test Mean Score	5.97	6.06	6.05
Score Shift +/-	+.19	+.23	+.24



The post-program mean ratings for the past five years have remained approximately the same. More importantly the items have all remained positive and have documented positive shifts from pre- to post-program experience as can be seen in Exhibit 29.

Post-Program Attitudes 2002 - 2006 ²³					
Exhibit 29					
Attitudinal Item	2002 Mean	2003 Mean	2004 Mean	2005 Mean	2006 Mean
I like math.	5.34	5.24	5.33	5.39	5.25
I am good at math.	5.32	5.27	5.26	5.35	5.28
I like science.	5.67	5.56	5.67	5.78	5.72
I am good at science.	5.43	5.39	5.43	5.50	5.53
I am good at following directions.	5.85	5.77	5.70	5.79	5.82
Learning is easy for me.	5.58	5.51	5.55	5.54	5.48
Learning can be fun.	6.18	6.16	6.15	6.12	6.03
You can learn a lot by trying things out.	6.49	6.48	6.51	6.57	6.51
I think I can graduate from high school.	6.53	6.43	6.47	6.54	6.53
Military people do lots of different things.	6.34	6.31	6.29	6.30	6.26
I set goals for myself.	6.14	6.02	6.07	6.07	6.14
I make good decisions.	5.76	5.62	5.73	5.79	5.86
<i>I think I could grow up to be a STARBASE Instructor.</i>	4.36	4.49			
STARBASE instructors are kind and helpful.			6.54	6.54	6.61
I can make my dreams come true.	6.07	6.16	6.17	6.23	6.21
You can accomplish a lot in a group.	6.34	6.34	6.29	6.10	6.11
You can have fun working in a group.	6.34	6.35	6.34	6.24	6.20
I like to make new things.	6.36	6.29	6.29	6.36	6.24
I think about what I want to be when I grow up.	6.34	6.40	6.38	6.37	6.36
<i>I want to be like my STARBASE Instructor.</i>	4.55	4.52			
The military is a good place to work.			5.40	5.40	5.38
I am enjoying coming to a military base.	6.28	6.37	6.35	6.30	6.28
<i>Military bases are cool.</i>	6.16	6.22			
Military bases are fun.			6.01	5.93	5.94
I do not think STARBASE will help me do better in school.				1.97	1.98
I like to think of new ways to use things.	6.19	6.13	6.17	6.13	6.00
At STARBASE, I learned a lot of things that I can use.	6.51	6.53	6.53	6.53	6.51
STARBASE is boring.	1.70	1.64	1.56	1.64	1.55
I would tell my friends to come to STARBASE.	6.07	6.15	6.21	6.15	6.19

Gender Comparisons

The gender differences on attitudes are appreciable. Girls show more academic learning tendencies such as being a willing learner (“You can learn a lot by trying things,” “I set goals for myself,” “I like to make new things”). The boys score higher on items related to the military, math, and science. The gap scores (the differences in scores between pre- and post-test) indicate that the boys had the greatest gain on “I can make my dreams come true.” The girls’ greatest gain was “Military bases are fun” and “I enjoy coming to a military base.” The girls continue to have more confidence in the educational process as a means to improving their lives.

²³ Items in italics are no longer used.

Post-Program Rank Order on Attitudinal Comparisons By Gender
Exhibit 30

Attitudinal Item	Girls' Rank	Girls' Mean	Boys' Rank	Boys' Mean
At STARBASE I learned a lot of things I can use.	1	6.48	1	6.38
STARBASE instructors are helpful and kind.	2	6.40	2	6.35
I think I can graduate from high school.	3	6.34	3-4	6.22
You can learn a lot by trying new things.	4	6.30	3-4	6.22
I would tell my friends to come to STARBASE.	5	6.21	6	6.04
I think about what I want to do when I grow up.	6	6.19	8	5.99
I am enjoying coming to a military base.	7	6.04	7	6.02
I can make my dreams come true.	8	6.04	12	5.89
Military people do lots of different things.	9	6.00	5	6.08
You can accomplish a lot in a group.	15	5.94	9-10	5.94
You can have fun working in a group.	12	5.94	9-10	5.94

The boys continue to move interpersonal and pro-social performance upward, and the girls express a more positive attitude on military items, as well as minor shifts in math and science. Overall, the difference between the genders on the attitude mean performance is slightly higher for the girls. However, the boys had a slightly higher gap performance as shown in Exhibit 31.

Gender Differences on Attitudinal Assessment²⁴
Exhibit 31

Gender	Number	Pre-Program Mean	Post-Program Mean	Performance Gap Score
Boys	1,314	5.77	6.02	+.25
Girls	1,339	5.85	6.07	+.22

Prior experience with military locations and/or personnel did impact the pre-program and post-program responses for some items. Pre-program responses had seven items that were significantly different, while the post-program responses had six items that were significantly different. After the DOD STARBASE experience the two groups were more in-line with each other.

Students' Prior Knowledge of DOD STARBASE²⁵

The majority of the respondents knew about the program before attending (N=1,602) and were more positive about the military and DOD STARBASE than those who did not have prior knowledge (N=1,005). The rating scores were higher for the group that responded affirmatively to the statement, "I heard about STARBASE before I knew I was coming here." The rank order was similar for both groups.

²⁴ Sixteen students did not self-identify gender.

²⁵ Sixty-two students did not respond to this question.

Attitudinal Response Comparisons Based on Program Duration

The six academies with four-day programs had 306 pre-post student assessments in the sample. The remaining academies with five-day programs had 2,363 students in the sample. The four- and five-day programs had significantly different results on six items that were primarily related to the military. This suggests that the additional day provides an opportunity for greater exposure and appreciation of the military. As previously noted, the scores on the five-day program on the knowledge/skills test were greater than the four-day in the gap performance (i.e. +6.47 and +5.55).

Age and Grade Impact on Attitudes

No significant themes or differences emerge on student age and/or grade level. Older students have a slightly less positive response than younger students on several attitudinal dimensions but not significant enough to warrant further examination. These findings are consistent with past results.

Academy Location and Attitudes

Academy location produces the greatest statistical variation across all assessment variables. This observation has been consistent through the years. There is more variation across the academies than common experience which suggests that each academy delivers the curriculum differently and with varying degrees of intensity. These differences may also be affected by the variances of the socio-demographic characteristics of the students.

Each academy should analyze their assessment results in comparison with the normative data to obtain an understanding of how their program deviates from the norm. This information can be used to analyze and improve core curriculum delivery, coverage, and intensity of themes.

Student Summary

The student assessment analysis for 2006 found positive results in both knowledge/skills and attitude. The shifts are consistent with program goals and objectives. The scores in both areas of the post-test assessment were significantly higher in almost all areas than the scores on the pre-test. Gender differences, program duration, prior contact with the military, and prior knowledge of the DOD STARBASE program yielded significant positive differences in scores and rankings. As in past years, the highest variability and differences in positive/significant ratings is attributed to academy location. This factor is consistent and strongly suggests that program content, delivery of curriculum, and program emphasis by each academy are highly variable.

“Drivers of Attitudes” are provided in the Appendices. The list of “drivers” offers insights into attitudes that produce positive results. Instructors can develop strategies to improve curriculum delivery by examining these drivers and their academies’ results.

CLASSROOM TEACHER ASSESSMENT RESULTS



Classroom teachers accompany their students to the DOD STARBASE academy. Professional educators know and understand their students and their students' environments. Most have multiple years of experience at the academies and are familiar with the methodology and curriculum. They are expert observers of their students' behavior, performance, attitude and that of the academy's instructors. The fact that they are able to observe the students' participation when they are at the academy and when they return to the school, enriches their assessment. Many are also able to observe downstream results of the students in subsequent years.

This year's teacher panel of 374 respondents is an experienced professional group. More than half (52%) have had more than 11 years of teaching experience and only 18% had four years or less. The model group falls above 15 years in tenure at 40% of the teacher panel; more than 60% teach at the fifth grade level. The vast majority had exposure to military institutions prior to attending this year's program. About two-thirds had been to DOD STARBASE with prior classes and were familiar with program content. Overall, they comprise an expert panel for review of program effectiveness.

Their responses to the 2006 assessment were positive and similar in rankings to previous evaluations. This year's average was slightly lower than previous years but still above the 6+ range. There were 33 items in the assessment and 16 items were above the 6+ rating as compared to last year's 23 out of 33. Exhibit 32 below shows the average teacher rating for the last four years.



**Average-Mean Ratings
By Teachers (2003-2006)
Exhibit 32**

2003	2004	2005	2006
+6.10	+6.15	+6.18	+6.00

Teachers rate the DOD STARBASE programs positively for themselves and their students. They report that students' attitudes and behaviors are improved when they return to their classroom. Math remains a topic that needs attention as it is rated at the bottom. However the math item, "more interested in learning about math," is 5.39 rating on a seven-point scale. Science items are given higher marks.²⁶ Supporting state standards moved from seventh to sixth place this year. This year's results, when compared with the previous five years, are slightly lower, but similar in ranking and in high marks for program effectiveness (see Exhibit 33).

Ten Highest Teacher Ratings over a Five-Year Period 2001-2006
Exhibit 33

Stem Item	2001	2002	2003	2004	2005	2006
STARBASE instructors are good role models for the students.	6.77	6.73	6.82	6.75	6.72	6.68
The STARBASE experience will be a positive influence on students in coming years.				New item	6.70	6.68
The children enjoy sharing their STARBASE experience with others.	6.81	6.77	6.70	6.74	6.68	6.68
STARBASE reinforces many positive behaviors I try to teach my students.	6.81	6.72	6.68	6.71	6.67	6.63
The STARBASE experience has been a positive influence on me personally.				New item	6.65	6.59
The STARBASE curriculum supports state standards.	6.76	6.66	6.75	6.75	6.63	6.60
Students admire their STARBASE instructors.	6.57	6.61	6.66	6.59	6.58	6.49
The students talk about STARBASE long after the program has ended.	6.73	6.64	6.66	6.57	6.53	6.47
The students enjoyed being on a military base.	6.50	6.69	6.61	6.70	6.52	6.37
STARBASE has helped improve the students' understanding of science.	6.66	6.37	6.48	6.40	6.52	6.41

After the students completed the program, the teachers with more teaching experience reported that their students had more positive attitudes about the military and the DOD STARBASE program. Teachers that had more experience with DOD STARBASE reported that their students were better at following directions and more interested in learning about science. Teachers in the lower grades indicated that students talk about DOD STARBASE long after the program. These current observations are consistent with previous findings.



²⁶ See Appendix for Rank-Ordered Attitudes

Teacher perceptions are important to understand as they may affect expectations that influence program delivery. Results indicate that teacher perceptions support and mirror student attitudes about their experiences. Students and teachers agree on: positive pro-social factors including positive role models, opportunities to build and maintain self-confidence and esteem, and a “can do” attitude (see Exhibit 34).

Comparison of Teacher and Student Assessment of Pro-Social Attitudes Exhibit 34			
Student Statement	Mean Score	Teacher Statement	Mean Score
I set goals for myself.	6.14	Students more confident in what they can accomplish.	5.92
I can make my dreams come true.	6.21	More excited about their future.	5.93
I think about what I want to be when I grow up.	6.36	More goal oriented.	5.67
You can have fun working in a group.	6.20	More willing to cooperate with each other.	5.93
You can accomplish a lot in a group.	6.11	More likely to encourage each other.	5.89

Students’ perception of their attitudes and behaviors is appreciably higher than those of the teachers. Teachers’ math ratings are higher than the students’ ratings, but overall math ratings are low. Over the years, science has been consistently rated higher than math by both students and teachers.

Teacher Summary

Teachers remain strong advocates of DOD STARBASE. Their role as panel experts is critical in the assessment process because they can best assess the program’s impact on their students’ performance. State requirements combined with their expectations drive their desire that the students have a successful learning experience. Their continued involvement in the program; their high ratings of the program’s operation; their candid appraisal of math and science content; and their assessment of the class environment following participation in the program provide important and unique perspectives.





APPENDICES

U. S. REGIONAL MAP

DRIVERS OF OPINION

RANK ORDERED ATTITUDES

PRE-FLIGHT AND POST-FLIGHT QUESTIONNAIRE

DOD STARBASE TEACHER QUESTIONNAIRE

CIVILIAN VOLUNTEER QUESTIONNAIRE

MILITARY VOLUNTEER QUESTIONNAIRE

2006 DIRECTOR'S QUESTIONNAIRE

DIRECTORY OF DOD STARBASE ACADEMIES

LISTING OF SCHOOL DISTRICTS AND SCHOOLS SERVED

ACADEMY TIME LINE

US REGIONAL MAP



West

Washington
Montana
Oregon
Idaho
Wyoming
California
Nevada
Utah
Colorado
Hawaii
Alaska

South

Arizona
New Mexico
Oklahoma
Texas
Arkansas
Louisiana
Puerto Rico

East

Maine
New Hampshire
Vermont
Pennsylvania
New York
Rhode Island
Connecticut
New Jersey
Delaware
Maryland
District of Columbia
Massachusetts

Midwest

North Dakota
South Dakota
Nebraska
Kansas
Minnesota
Iowa
Wisconsin
Illinois
Michigan
Indiana
Ohio
Missouri

South East

West Virginia
Virginia
Kentucky
Tennessee
Mississippi
Alabama
Georgia
Florida
North Carolina
South Carolina

DRIVERS OF OPINION

The following sections provide a rank ordered list of non-overlapping statistical predictors of the target attitude in quotation marks. That means that if the conditions in the list are present, it is very likely the target attitude will be present also. Many consider these lists to be prioritized action items for improving the target.

Overall, post-program opinion average may be partially driven by knowledge of the content test score. Those that cannot perform as well on the assessment and may not know the content as well as others are more likely to have less positive attitudes.

Drivers of “At STARBASE, I learned a lot of things that I can use.”

Post responses, n=2177

STARBASE is boring.
I like to think of new ways to use things.
You can learn a lot by trying things.
STARBASE Instructors are kind and helpful.
I am enjoying coming to a military base.
I think about what I want to be when I grow up.
The military is a good place to work.
I set goals for myself.
I like to make new things.
I like math.

Drivers of “I would tell my friends to come to STARBASE.”

Post responses, n=2180

STARBASE is boring.
I am enjoying coming to a military base.
STARBASE instructors are kind and helpful.
I think about what I want to be when I grow up.
The military is a good place to work.
You can have fun working in a group.
You can learn a lot by trying things.
I like to think of new ways to use things.
I like math.
I am good at math.

Drivers of "I can make my dreams come true."

Post responses, n=2165

I think I can graduate from High School.
I set goals for myself.
You can accomplish a lot in a group.
I think about what I want to be when I grow up.
I am good at following directions.
You can learn a lot by trying things.
I make good decisions.
I like to make new things.

Drivers of "Military bases are fun."

Post responses, n=2129

I am enjoying coming to a military base.
The military is a good place to work.
STARBASE is boring.
I like to think of new ways to use things.
You can accomplish a lot in a group.
You can have fun working in a group.
I think about what I want to be when I grow up.

Drivers of "Military people do lots of different things."

Post responses, n=2174

You can learn a lot by trying things.
The military is a good place to work.
I am enjoying coming to a military base.
I think I can graduate from high school.
I like to make new things.
Learning is easy for me.
I am good at science.
You can accomplish a lot in a group.
I like math.
I set goals for myself..

Drivers of "Learning can be fun."

Post responses, n=2165

You can learn a lot by trying things.
Learning is easy for me.
I like math.
You can have fun working in a group.
I like science.
I make good decisions.
STARBASE instructors are kind and helpful.
I think about what I want to be when I grow up.
I like to make new things.
STARBASE is boring.
I am good at following directions.
I am good at math.

Teachers rated the DOD STARBASE experience positively for themselves, their students, and their students' families. The teachers find the DOD STARBASE experience useful beyond the DOD STARBASE program and use the materials in their curriculum. They also notice improvements in their students' attitudes about school and themselves. The lowest rated item (*More interested in learning about math*) suggests that the DOD STARBASE programs may not focus on math as much as they do science.

Rank Ordered Attitudes N=374		
	Mean	Std. Deviation
The STARBASE experience will be a positive influence on students in coming years.	6.68	0.76
The STARBASE instructors are good role models for the students.	6.68	0.84
The children enjoy sharing their STARBASE experiences with others.	6.68	0.78
STARBASE reinforces many positive behaviors I try to teach my students.	6.63	0.88
The STARBASE curriculum supports our state standards.	6.60	0.94
The STARBASE experience has been a positive influence on me personally.	6.59	0.90
The students admire their STARBASE instructors.	6.49	0.98
Parents are delighted that their children are participating in STARBASE.	6.49	0.92
The students talk about STARBASE long after the program has ended.	6.47	1.09
STARBASE has helped improve the students' understanding of science.	6.41	0.94
More interested in learning about science.	6.39	0.98
The students enjoyed being on a military base.	6.37	1.25
My principal is a strong advocate of STARBASE.	6.34	1.19
I would like more STARBASE resources to take back to my classroom.	6.15	1.35
More willing to try new things.	6.11	1.07
I use the resources STARBASE provides to teachers.	6.05	1.41
STARBASE has helped improve the climate for participative learning in the classroom.	5.99	1.21
More excited about learning.	5.98	1.14
More comfortable with military personnel.	5.96	1.32
More willing to cooperate with each other.	5.93	1.20
More excited about their futures.	5.93	1.17
More confident about what they can accomplish.	5.92	1.16
STARBASE has helped to improve appreciation of how math can be applied to a variety of situations.	5.91	1.24
Because of my participation in STARBASE, I am more comfortable with military personnel.	5.91	1.50
Better at working in groups.	5.90	1.23
More likely to encourage each other.	5.89	1.20
I have included many STARBASE resources in my curriculum.	5.77	1.43
More comfortable making decisions.	5.68	1.13
More goal oriented.	5.67	1.30
Better at following directions.	5.55	1.33
The students ask more questions about technology.	5.54	1.30
My school board is very involved in supporting STARBASE.	5.43	1.68
More interested in learning about math.	5.39	1.41

Pre-Flight and Post-Flight Questionnaire

ASSIGNED STUDENT NUMBER							
0	1	2	3	4	5	6	7
8	9	0	1	2	3	4	5
6	7	8	9	0	1	2	3
4	5	6	7	8	9	0	1
2	3	4	5	6	7	8	9
3	4	5	6	7	8	9	0
4	5	6	7	8	9	0	1
5	6	7	8	9	0	1	2
6	7	8	9	0	1	2	3
7	8	9	0	1	2	3	4
8	9	0	1	2	3	4	5
9	0	1	2	3	4	5	6

My school grade is: 0
 1
 2
 3
 4
 5
 6
 7
 8
 9

My age is: 0
 1
 2
 3
 4
 5
 6
 7
 8
 9

I am a: Boy
 Girl

I have met military people before coming to STARBASE. No Yes

I heard about STARBASE before I knew I was coming here. No Yes

I know someone that went through STARBASE before me. No Yes

For each statement, fill in True if you agree or fill in False if you disagree.

- | True | False | |
|---|-----------------------|---|
| <input type="radio"/> | <input type="radio"/> | 1. Drinking alcohol may decrease our bodies' ability to do easy things. |
| <input type="radio"/> | <input type="radio"/> | 2. Matter does not take up space. |
| <input type="radio"/> | <input type="radio"/> | 3. The Earth is the closest planet to the sun. |
| <input type="radio"/> | <input type="radio"/> | 4. Negative actions may make it hard for you to reach your goals. |
| <input type="radio"/> | <input type="radio"/> | 5. Technology usually decreases in cost after many units are sold. |
| 6. What is the smallest particle of water? | | |
| <input type="radio"/> a water molecule | | |
| <input type="radio"/> a water atom | | |
| <input type="radio"/> a water nucleus | | |
| <input type="radio"/> a water drop | | |
| 7. What force causes a rocket to launch? | | |
| <input type="radio"/> lift | | |
| <input type="radio"/> gravity | | |
| <input type="radio"/> thrust | | |
| <input type="radio"/> drag | | |
| 8. Which of the following is NOT a team? | | |
| <input type="radio"/> Fire Department | | |
| <input type="radio"/> Police Force | | |
| <input type="radio"/> Military Squad/Platoon | | |
| <input type="radio"/> Wal-Mart customers | | |
| 9. Which of the following is NOT one of the states of matter? | | |
| <input type="radio"/> air | | |
| <input type="radio"/> gas | | |
| <input type="radio"/> liquid | | |
| <input type="radio"/> solid | | |

Wait for your instructor to read the directions and questions.

PLEASE DO NOT WRITE IN THIS AREA



[SERIAL]

10. The earth's atmosphere is how thick?

- (A) About 10 miles
- (B) About 25 miles
- (C) About 40 miles
- (D) More than 50 miles

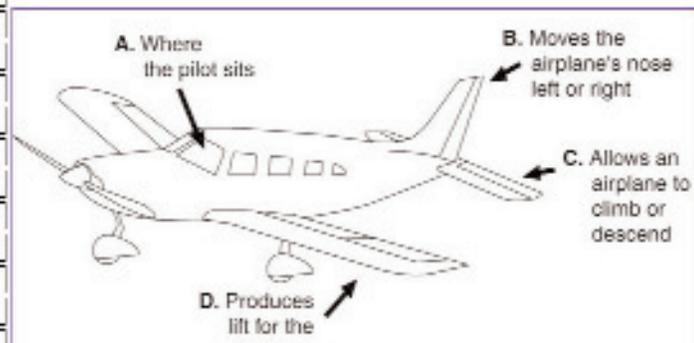
11. Air presses down 15 pounds on every inch of our bodies. The reason we don't feel this pressure is....

- (A) The atmosphere cushions the weight of the air.
- (B) Our bodies push out 15 pounds on every inch to equalize the pressure.
- (C) We are inside a building, so we don't feel it.
- (D) The air is thinner closer to the ground than up in space.

12. The air is composed mostly of what element?

- (A) hydrogen
- (B) helium
- (C) chlorine
- (D) nitrogen

Match each airplane component with the letters from the diagram below.



A. Where the pilot sits

B. Moves the airplane's nose left or right

C. Allows an airplane to climb or descend

D. Produces lift for the airplane

A	B	C	D
(A)	(B)	(C)	(D)
(A)	(B)	(C)	(D)
(A)	(B)	(C)	(D)
(A)	(B)	(C)	(D)

13. Cockpit

14. Wing

15. Elevator

16. Rudder

Select the best answer by filling in the appropriate circle.

17. If you are landing an airplane in a city that is 5,000 feet above sea level and your altimeter reads 5,500 feet, how many feet are you above the ground?

- (A) 500 feet
- (B) 1,000 feet
- (C) 5,000 feet
- (D) 5,500 feet

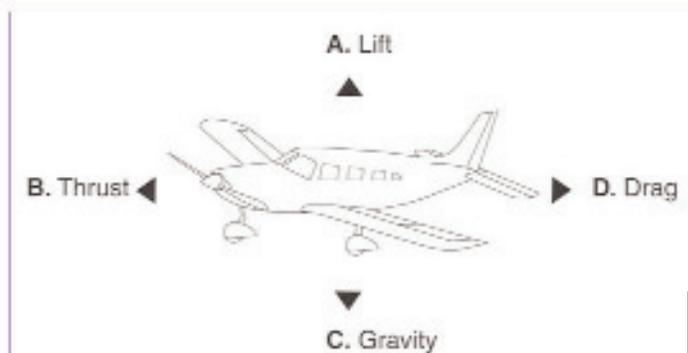
18. To move an airplane's nose to the left, you would move the....

- (A) rudder right
- (B) rudder left
- (C) left flap
- (D) right flap

19. One reason an airplane is able to gain lift is because the air moving across the top of the wing....

- (A) exerts less pressure than the air moving along the bottom.
- (B) exerts more pressure than the air moving along the bottom.
- (C) exerts the same amount of pressure as air moving along the bottom.
- (D) does not exert any pressure on the wing.

Match each force of flight with the letters from the picture below.



A. Lift

B. Thrust

C. Gravity

D. Drag

A	B	C	D
(A)	(B)	(C)	(D)
(A)	(B)	(C)	(D)
(A)	(B)	(C)	(D)
(A)	(B)	(C)	(D)

20. Produced by air flow over the wings and the angle of the wing into the wind.

21. Force that pulls an aircraft down.

22. Forward movement produced by a propeller, jet, or rocket engine.

23. Slows the forward movement of an aircraft.

24. What is Sir Isaac Newton's Law of Inertia?

- (A) Unless acted upon by an outside force, an object at rest will stay at rest and an object in motion will stay in motion.
- (B) The more force given to an object, the more it will accelerate.
- (C) The greater the mass of the object, the greater the force needed to accelerate it.
- (D) For every action, there is an equal and opposite reaction.

Wait for your instructor to read the directions and questions.

25. If you launched two rockets, one with a mass of 50 grams and one with a mass of 100 grams, using the same amount of force, which rocket would go highest?
- (A) the heavier rocket would go the highest.
 - (B) the lighter rocket would go the highest.
 - (C) the two rockets would go the same height
 - (D) the heavier rocket would go twice as high as the lighter rocket
26. Which of the following planets has more than 30 moons and thousands of rings?
- (A) Mercury
 - (B) Pluto
 - (C) Saturn
 - (D) Earth
27. Which planet do humans believe they could inhabit in the future?
- (A) Mercury
 - (B) Mars
 - (C) Saturn
 - (D) Neptune
28. The development of something new or improvement of something already existing is
- (A) gravity.
 - (B) inertia.
 - (C) technology
 - (D) law
29. If you have something you want to do, or something you want to be in life, you should...
- (A) wish for it really hard in order to make it come true.
 - (B) watch other people on TV to see how they do it.
 - (C) do something everyday that will help you reach your goal.
 - (D) wait for someone to give you what you want.
30. Which of the following can damage an individual's dreams?
- (A) setting goals
 - (B) using illegal drugs
 - (C) obtaining an education
 - (D) practicing a skill
31. What scientific law is operating, that makes it important to wear a seat belt?
- (A) Newton's Law of Inertia which explains that the greater the mass of an object, the greater the force needed to accelerate it.
 - (B) Newton's Law of Inertia which explains that an object in motion will stay in motion unless acted upon by an outside force
 - (C) Bernoulli's Principle which states that pressure decreases when air moves faster
 - (D) Bernoulli's Principle which states that air moves faster when an object is curved.
32. In what state of matter do molecules have the least amount of energy or motion?
- (A) solid
 - (B) liquid
 - (C) gas
 - (D) plasma

Wait for your instructor to read the directions and questions.

What is your opinion?



Strongly Disagree
(1)

Disagree
(2)

Slightly Disagree
(3)



**(?)
Uncertain**
(4)

Slightly Agree
(5)

Agree
(6)

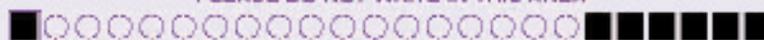


Strongly Agree
(7)

53	1. I like math.	1	2	3	4	5	6	7
52	2. I am good at math.	1	2	3	4	5	6	7
51	3. I like science.	1	2	3	4	5	6	7
50	4. I am good at science.	1	2	3	4	5	6	7
49	5. I am good at following directions.	1	2	3	4	5	6	7
48	6. Learning is easy for me.	1	2	3	4	5	6	7
47	7. Learning can be fun.	1	2	3	4	5	6	7
46	8. You can learn a lot by trying things.	1	2	3	4	5	6	7
45	9. I think I can graduate from High School.	1	2	3	4	5	6	7
44	10. Military people do lots of different things.	1	2	3	4	5	6	7
43	11. I set goals for myself.	1	2	3	4	5	6	7
42	12. I make good decisions.	1	2	3	4	5	6	7
41	13. STARBASE Instructors are kind and helpful.	1	2	3	4	5	6	7
40	14. I can make my dreams come true.	1	2	3	4	5	6	7
39	15. You can accomplish a lot in a group.	1	2	3	4	5	6	7
38	16. You can have fun working in a group.	1	2	3	4	5	6	7
37	17. I like to make new things.	1	2	3	4	5	6	7
36	18. I think about what I want to be when I grow up.	1	2	3	4	5	6	7
35	19. The military is a good place to work.	1	2	3	4	5	6	7
34	20. I am enjoying coming to a military base.	1	2	3	4	5	6	7
33	21. Military bases are fun.	1	2	3	4	5	6	7
32	22. I do not think STARBASE will help me do better in school.	1	2	3	4	5	6	7
31	23. I like to think of new ways to use things.	1	2	3	4	5	6	7
30	Post STARBASE							
29	24. At STARBASE, I learned a lot of things that I can use.	1	2	3	4	5	6	7
28	25. STARBASE is boring.	1	2	3	4	5	6	7
27	26. I would tell my friends to come to STARBASE.	1	2	3	4	5	6	7

Thank You!

PLEASE DO NOT WRITE IN THIS AREA



[SERIAL]

DOD STARBASE Teacher Questionnaire

All information gathered by this questionnaire is for development purposes. The information you provide will help us to continue to improve the STARBASE program. Please provide honest feedback about various issues presented in this questionnaire. Completed questionnaires will be tallied by an agency outside of your school and outside of STARBASE. Individual responses will be strictly confidential and will not be released to your school or to any STARBASE representative. We are collecting information from all of the STARBASE programs. This questionnaire contains a total of 33 questions and should take less than 10 minutes to complete. Please do not fold.

Thank you.

What STARBASE location do you work with? _____ What grade do you teach? _____

Did you ever visit a military base prior to your current STARBASE involvement?

- 1 Never, this is my first STARBASE program.
- 2 Yes, for prior STARBASE programs only.
- 3 Yes, for activities not related to STARBASE.
- 4 Yes, for STARBASE and non-STARBASE activities.
- 5 Other: _____

How many years have you brought students to STARBASE? _____ yrs.

How many years have you been a teacher? _____

Respond to the following statements by completely darkening the appropriate numbered circle next to each item.

After attending STARBASE, the students appear....

Disagree

Agree

1. ... more interested in learning about math	1	2	3	4	5	6	7
2. ... more interested in learning about science	1	2	3	4	5	6	7
3. ... more willing to try new things	1	2	3	4	5	6	7
4. ... better at following directions	1	2	3	4	5	6	7
5. ... better at working in groups	1	2	3	4	5	6	7
6. ... more confident about what they can accomplish	1	2	3	4	5	6	7
7. ... more goal oriented	1	2	3	4	5	6	7
8. ... more comfortable with military personnel	1	2	3	4	5	6	7
9. ... more comfortable making decisions	1	2	3	4	5	6	7
10. ... more excited about their futures	1	2	3	4	5	6	7
11. ... more excited about learning	1	2	3	4	5	6	7
12. ... more likely to encourage each other	1	2	3	4	5	6	7
13. ... more willing to cooperate with each other	1	2	3	4	5	6	7

Please go on to the next section.

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Please indicate your level of agreement with these statements.

Disagree

Agree

- | | | | | | | | | |
|-----|--|---|---|---|---|---|---|---|
| 1. | After S1/AR1/AS1, the students ask more questions about technology. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 2. | S1/AR1/AS1 has helped to improve the students' understanding of science. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 3. | STARBASE has helped to improve appreciation of how math can be applied to a variety of situations. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 4. | STARBASE has helped to improve the climate for participative learning in the classroom. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 5. | Because of my participation in STARBASE, I am more comfortable with military personnel. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 6. | The students talk about S1/AR1/AS1 long after the program has ended. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 7. | STARBASE reinforces many positive behaviors I try to teach my students. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 8. | I use the resources STARBASE provides to teachers. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 9. | I would like more STARBASE resources to take back to my classroom. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 10. | My principal is a strong advocate of STARBASE. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 11. | My School Board is very involved in supporting S1/AR1/AS1. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 12. | The S1/AR1/AS1 instructors are good role models for the students. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 13. | I have included many S1/AR1/AS1 resources in my curriculum. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 14. | The students admire their STARBASE instructors. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 15. | The STARBASE curriculum supports our state standards. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 16. | The children enjoy sharing their STARBASE experiences with others. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 17. | Parents are delighted that their children are participating in STARBASE. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 18. | The students enjoyed being on a military base. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 19. | The S1/AR1/AS1 experience will be a positive influence on students in coming years. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 20. | The STARBASE experience has been a positive influence on me personally. | 1 | 2 | 3 | 4 | 5 | 6 | 7 |

Thank you!

Please mail to: **Pearson Performance Solutions**
1 North Dearborn Street
Suite 1600
Chicago, IL 60602
Attn: Frank Mazzocco

If you have any questions, please call 1-312-242-4386

Civilian Volunteer Questionnaire

Thank you for your time, energy, and commitment to the DOD STARBASE program. The following questionnaire will take only a few minutes and will help in improving program operations.

1) Name:

2) Academy Location:

3) Activity in support of the program:

- Teacher Aide
- Classroom Presenter
- Administrative assistant
- Board Member
- Technology Expert
- Tour Guide
- Other

4) Estimated volunteer hours this past year:

5) Occupation:

6) Number of years as a STARBASE volunteer:

7) Have you ever had a child or relative in the STARBASE program? If yes, what was the relationship e.g. daughter, son, niece, nephew, etc.

Additional comments:

8) Please estimate the program's effectiveness in improving the knowledge/skills of students in math and science:

9) Estimate the program's effectiveness in improving student attitudes about themselves and their ability to improve their school performance:

10) My personal experience as a volunteer (check all that apply):

was personally rewarding.

developed my awareness of the military's involvement in community affairs.

developed an awareness of the skills it takes to be a military staff member.

led to a better understanding of the skill levels that transfer from the educational process to real world situations.

reinforces the value of the program to student performance

had little impact on me.

other

11) If asked, would you recommend others to volunteer their time to the program?

12) Are you planning on being a STARBASE volunteer next year?

13) What recommendations would you make to STARBASE staff to improve the volunteer program?

14) What recommendations would you make to STARBASE staff to improve the STARBASE program?

15) Do you have any further comments, observations, and/or recommendations about the program?

Military Volunteer Questionnaire

Thank you for agreeing to participate in our survey. This brief questionnaire is part of a general assessment on the effectiveness of the DOD STARBASE program that will be presented in an Annual Report to Congress. Your experiences and observations are an important part of the assessment.

1) Name:

2) Rank:

3) Branch of Service:

4) STARBASE site:

5) Activity in support of the program (check all that apply):

Tour Guide

Teacher Aide

Presenter

Facilitator of Experiments/display e.g. rockets, computer simulator, etc.

Administrative services

Board Member

Other

6) Estimated hours you have committed to the DOD STARBASE program this past year:

7) Has the work you have contributed to DOD STARBASE affected you? If yes, in what way?

8) Has the military made a difference in the community as the sponsor of the program?
If yes, in what way(s)?

9) Have you received any feedback from the community, military personnel, or others?
If yes, from what source and what were the responses?

10) If available, will you volunteer your time in the future?

11) Please make any comments, suggestions, and/or recommendations.

Thank you for your time and candid responses.



FY 2006 DIRECTORS' QUESTIONNAIRE

I. INTRODUCTION

It is time to compile the information for the 2006 DOD STARBASE Annual Report to Congress. The data not only documents your Academy's operational activities, but it also identifies key issues, challenges, and concerns that potentially affect future program development. All information requested is for Federal FY06 activities (October 1, 2005 - September 30, 2006) unless otherwise indicated. Your cooperation and timely response are essential to the successful completion of this report to Congress by the end of this calendar year. As required by 10 USC 2193b, OASD/RA shall submit an annual report to Congress on the program which shall contain a discussion of the design and conduct of the program and an evaluation of the effectiveness of the program. Paragraph 6.16.1 of DODI 1025.7 states DOD support for a STARBASE Academy may be terminated because a STARBASE Academy fails to provide data necessary for the compilation of the annual Congressional report. Before returning the questionnaire, review each item for completeness and/or explain the data's unavailability. The due date is on or before October 15, 2006. [Email the completed file to dovenden@spectrumgrp.com](mailto:dovenden@spectrumgrp.com)

INSTRUCTIONS

1. This questionnaire is divided into seven sections, each of which is contained on a separate worksheet.
 - I. Introduction
 - II. Academy Information
 - III. Academy Statistics
 - IV. Curriculum
 - V. Operations
 - VI. Financial Information
 - VII. Supporting Materials and Suggestions
2. Please enter your data in the light blue cells only.
3. Please do not attempt to make changes to the format of the worksheets.
4. Upon completion, submit the entire file with ALL worksheets to dovenden@spectrumgrp.com

II. ACADEMY INFORMATION

<p>1. Please provide this information as you would like it to appear in the annual report and participant directories.</p>	Name of Academy	
	Academy Director	
	Military Affiliation	
	Military Location	
	Address 1	
	Address 2	
	City	
	State	
	ZIP	
	Telephone Number	
	DSN	
	Fax Number	
	Fax DSN	
	Email Address	
	Website Address	
	Base Commander:	
	Name	
	Address 1	
	Address 2	
	City	
	State	
	ZIP	
	Telephone Number	

III. ACADEMY STATISTICS

2. FY06 Statistics	Type of Program	Number of Schools	Number of Classes	Number of Students
	5-Day			
	4-Day			
	Other			
	Total - 4 and 5-Day Programs	0	0	0

2a. Briefly describe the type of program(s) taught outside the 4 or 5-day program, if applicable.

2a. Briefly describe the type of program(s) taught outside the 4 or 5-day program, if applicable.	
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QUESTIONS 3 THROUGH 9 REFER ONLY TO 4 OR 5-DAY CURRICULUM-BASED PROGRAMS.

3. FY06 Average class size

3. FY06 Average class size	
----------------------------	--

4. FY06 Grade Levels

Place an 'X' in the appropriate boxes

K	1	2	3	4	5	6	7	8	9	10	11	12

2. FY06 Demographics
Total numbers

Females	Males	TOTAL
		0

6. FY06 Ethnicity (Please enter a 0 for ethnic groups with no students)

Total numbers

Black/ African American	Asian Pacific Islander	Caucasian	Hispanic or Latino	Multi- Race	American Indian/ Alaska Native	Other	Total
							0

7. Total Number of Students who are Economically Disadvantaged

--

Note: If you do not collect this information please go to www.schoolmatters.com

8. Have you correlated your curriculum with your State's Standards?

--

9. FY06 Locally Administered Pre/Post Test Raw Data	Number of Test Questions	Average Number of Answers Correct		Change	
		Pretest	Post Test	Point Gain	% Increase
					0

IV. CURRICULUM

10. Indicate all the areas of instruction that you currently cover in your program by placing an "X" in the appropriate boxes. Indicate out of the 20-25 required hours, the estimated hours devoted to each topic.	Curriculum Topic	Current Program	Estimated Hours
	Sample Topic	X	1.25
	Newton's Laws of Motion		
	Four Forces of Flight		
	Bernoulli's Principle		
	Model Rocketry		
	Aircraft Control Surfaces		
	Properties of Air		
	Development, Innovation and Use of Technology		
	Properties and States of Matter		
	Flight Simulation		
	Space Exploration		
	Goal Setting		
	Teamwork		
Avoiding Substance Abuse			

10a. Out of the 20-25 required hours, how many are dedicated to PTC?

10b. Out of the 20-25 required hours, how many are spent on math? If it is imbedded, please explain in question.

10c. If a topic is embedded in other topical areas, please explain.

10d. If this coverage is different from last year, please identify and explain.	
---	--

11. Out of the 20-25 required hours per class, indicate the number of hours spent at each location.	Military	Non-military

12. Do you have a staff training program?	
12a. If yes, please describe.	

13. Do you provide training to local teachers?			
13a. If yes, please estimate the number of hours contributed to each topic.	Topic	Estimated Hours	When Do You Provide This Training?
	<i>Sample Topic</i>	4	<i>Late spring</i>
	Continuing Education Workshops		
	Local, State, National Conference Workshops		
	Student-Teacher Workshops		
	Experiential Training for Student Teachers		
	Methods Courses through Local Universities		
	Other (Please describe below)		

14. Over this past year, how often did you share/obtain materials/ lessons-learned with other Academies?	Share	
	Obtain	

15. Do you provide additional curriculum materials to schools/teachers?	
15a. If yes, were they used?	
15b. If yes, what materials did you provide?	
15c. If yes, what purpose do these materials serve?	
15d. If yes, what is the estimated total cost of these materials?	

16. New Sites Only: To what degree did you borrow materials, teaching aids, curriculum, and other program operation procedures from other STARBASE programs?	
16a. New Sites Only: From which STARBASE sites did you borrow materials, teaching aids, curriculum, and other program operation procedures?	
16b. New Sites Only: Were you provided curriculum materials by OASD/RA or your Service Program Manager?	

17. Describe innovative curriculum, administrative procedures or lessons learned during the past year that might benefit other academies.	

V. OPERATIONS

18. FY06 Staffing	Position	Total Number	Full-Time	Part-Time (Hours/week)	Status
		<i>Enter a number</i>	<i>Place an "X" in the appropriate boxes.</i>	<i>Enter a number</i>	<i>Select value from drop-down list</i>
	Assistant Deputy Office Manager	1	X	40	State Employee
	Director				
	Deputy Director / Program Instructor				
	Program Instructor				
	Secretary / Administrative Assistant				
	Other Position (List below)				

19. FY06 Personnel Funded by Non-DOD Cash Donations (If none, please enter "N/A")	Position	Total Number

20. Staff Changes From Last Reporting Cycle (If none, please enter "N/A")	Position	Reason for Departure

21. Volunteer Activity (Please estimate the number of volunteers and volunteer hours committed in FY06)	Volunteer Group	Number of Volunteers	Number of Hours
	Military		
Teachers			
Parents			
Other			

22. Current Program Service Area		
	If other, please explain.	

23. What support services, in whole or in part, did the participating schools provide? (Mark all that apply with an "X")	Transportation	
	Duplication / printing	
	Audiovisual Equipment	
	Teachers as monitors	
	Educational supplies	
	Communications	
	Lunches	
	Graphics	
	Computers	
	Other (Please specify below)	

24. Have you had a real property audit of your program over the past three years?	
If yes, please provide the following information:	
Year	
Auditing Agent	

Please submit a copy of the results of your latest audit(s).

25. Do you have a real property listing on file?	
25a. Does it include all non-expendable property or just property at a certain dollar amount?	

26. Have you had a fiscal audit of your program in the last three years?	
If yes, please provide the following information:	
Year	
Auditing Agent	

27. Do you give STARBASE presentations to community groups?		
27a. Please list which groups and how often.	Group	How Often

28. Do you have a non-profit organization?		
<p>28a. If yes, what is the function of the board of directors? (Mark all that apply with an "X.")</p> <p><i>Please note that the DoDI, para 5.3.6 states that "At no time will such a local non-profit organization assume any fiduciary or legal decision-making responsibility in place of either the DOD Component or the local commander."</i></p>	Selection of schools	
	Review of potential staff personnel	
	Budget planning and review	
	Review of recommendation of subcontractor relationships	
	Grant writing/submissions	
	Program planning/annual review	
	Fundraising/marketing of program	
	Compliant to DoDI policies and review	
	Other (Please specify below)	

29. Please indicate the status of each the core documents listed.	Document	Status
	Staff/Students Schedules	
	Curriculum Outline	
	Program Operations Manual	
	Program Director's Guide	
	Local/State Testing Data	
	FY06 Strategic Plan/Program Goals	
	Memorandums of Understanding (MOU)	
	Minutes of Board Meetings	

	Document	Status
<p>(Continued)</p> <p>29. Please indicate the status of each the core documents listed.</p>	Bylaws and Articles of Incorporation	
	Voluntary Participation Form	
	Hold Harmless Agreement	
	Emergency Health Form	
	Public Affairs Release	
	Incident Report Form	
	Parent/Guardian Acknowledgement of Responsibility for Property Damage	
	DoDI Exemption/Waiver Letter(s)	
	If you have been given a waiver, what was it for?	
	If you have been given a waiver, when does it expire?	
	If your facility is located off a military installation, do you have an approval from OASD/RA?	
	If your personnel manning does not comply with the DoDI, do you have an approval from OASD/RA as required by DoDI?	

<p>30. Over this past program year, have there been any events that have had an effect on your program's operation (e.g. Homeland Security, Iraq information, staff turnover, weather, etc.)?</p>	
<p>30a. If yes, please briefly explain the event(s) and its effect on the program.</p>	
<p>30b. If yes, what residual consequences, if any, will the event have into the FY07 program year?</p>	

<p>New Sites Only: Did you receive a Program Director's Guide?</p>	
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<p>New Sites Only: Do you have a program operations manual?</p>	
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VI. FINANCIAL INFORMATION

31. FY06 Academy Income	DOD Income (\$)	Additional Income (\$)	Total Income (\$)
		\$	\$

32. FY06 DOD Cash Expenditures:	Category of Expenditure	Amount Expended (\$)	Percentage of Total
	Staff		
	Facilities / Furnishings		
	Transportation / Travel		
	Supplies		
	Equipment		
	Contract Services		
	Communications / Outreach		
	Total:	\$	
	Staff Detail		
	Program Director		
	Deputy Director/ Program Instructor		
	Program Instructor		
	Office Manager		
	Other		
	Total:	\$	

33. FY06 Additional Income Expenditures (non-DOD funds expenditures)	Category of Expenditure	Amount Expended (\$)	Percentage of Total
	Staff Salaries		
	Staff Development		
	Facilities / Furnishings		
	Transportation / Travel		
	Supplies		
	Equipment		
	Services		
	Program / Curriculum		
	Development		
	Communications / Outreach		
	Other		
	Total:	\$	

34. FY06 Source of Additional Income	Source of Funding	Amount (\$)	Percentage of Total
	Grants		
	Donations		
	State		
	Other (Please Specify Below)		
	Total:	\$	

35. FY06 In-Kind Donations (non-cash gifts, e.g. classroom space, copiers, printing, etc.)	Donation	Source of Donation	Estimated Dollar Value
	Facilities		
	Furnishings		
	Supplies		
	Transportation / Travel		
	Services		
	Equipment		
	Communications / Outreach		
	Other		
	Total:		\$

36. FY07 Projected Other Income (Provide best estimate)	Source of Funding	Amount (\$)	Percentage of Total
	Grants		
	Donations		
	State		
	Other (Please Specify Below)		
	Total:	\$	

VII. SUPPORTING MATERIALS AND SUGGESTIONS

37. Please provide a complete list of the school districts that your site serves.

NOTE: Please enter the full district name. For example, enter "North South Central Public Schools" rather than just "North South Central."

School Districts	

38. Please submit the following materials for use in the Annual Report and/or steering committees.

a) Testimonials, i.e., quotes, letters, articles, telecom transmittals to Academy from students, teachers, parents, principals, volunteers, etc.

b) Pictures of students/participants in Academy activities

c) Materials, core applications, experiments or demonstrations that enhance curriculum presentations that may be useful to other Academies. This would include operational support activities.

<p>39. Please provide any suggestions regarding curriculum, operational concerns, or program imperatives.</p>	



STARBASE

DIRECTORY OF
**DOD STARBASE
Academies**



Directory of DOD STARBASE® Academies

STATE/CITY	AFFILIATION	MILITARY INSTALLATION	DIRECTOR	EMAIL / WEBSITE	PHONE	MAILING ADDRESS
Alabama Montgomery	Air Force	Maxwell Air Force Base	Marvin (Chip) Haughton, Jr.	marvin.haughton@maxwell.af.mil	Phone: 334.953.4821 Fax: 334.953.4626 DSN: 493.4821	STARBASE Maxwell 60 West Maxwell Blvd Bldg. 835 Basement East Montgomery, AL 36112
Alaska Anchorage	National Guard	Fort Richardson	Shanna McPheters	smcpheters@ngchak.org www.starbasealaska.org	Phone: 907.384.6351 Fax: 907.384.6350	STARBASE Alaska P.O. Box 5185 Fort Richardson, AK 99505-5185
Alaska Kenai	National Guard	Challenger Center	Shanna McPheters	smcpheters@ngchak.org www.starbasealaska.org	Phone: 907.384.6351 Fax: 907.384.6350	STARBASE Alaska-Kenai 9711 Kenai Spurr Road Kenai, AK 99611
Arizona Tucson	Air Force	Davis-Monthan Air Force Base	Margaret Cole	Margaret.cole@dm.af.mil	Phone: 520.288.7827 DSN: 228.7827 Fax: 520.228.0491	STARBASE Arizona 5260 E. Granite St. Tucson, AZ 85707
California Sacramento	National Guard	California National Guard Armory	John Lamb	castarbase@sbcglobal.net www.starbaseca.org	Phone: 916.387.7405 Fax: 916.387.8309	California STARBASE 8400 Okinawa St., Suite 1 Sacramento, CA 95828
California San Diego	Navy	Naval Station San Diego, Training Support Center	Nicholas Jordan	nicholas.jordan@navy.mil	Phone: 619.556.7589 Fax: 619.556.9310 DSN: 922.7589	STARBASE Atlantis San Diego 3975 Norman Scott Road San Diego, CA 92136
Connecticut Hartford	National Guard	Bradley Air National Guard Base	Bob Gillanders	bobcms86@sbcglobal.net www.bob.gillanders@ po.state.ct.us	Phone: 860.728.0090 Fax: 860.728.3293	STARBASE Hartford 251 Maxim Road Hartford, CT 06114
Connecticut Waterbury	National Guard	Bradley Air National Guard Base	Bob Gillanders	bobcms86@sbcglobal.net www.bob.gillanders@ po.state.ct.us	Phone: 203.575.8271 Fax: 203.575.8018	STARBASE Waterbury 750 Chase Parkway Waterbury, CT 06708
District of Columbia Washington	Navy	Washington Navy Yard	Dr. Judy Kalish	judy.kalish@navy.mil www.ndw.navy.mil/headquarters/ communityservices/starbase /index.htm	Phone: 202.433.0531 Fax: 202.433.0534 DSN: 288.0531 Fax DSN: 288.0534	STARBASE Atlantis Washington Navy Yard 645 Rickover Street, SE Bldg. 21, Suite 102 Washington, DC 20374
Florida Jacksonville	National Guard	125th Fighter Wing Jacksonville, International Airport	Greg Stritch	Starbase.fl@fjjack.ang.af.mil	Phone: 904.741.7320 Fax: 904.741.7324 DSN: 641.7320 Fax DSN: 641.7320	STARBASE Florida 14300 Fang Drive Jacksonville, FL 32218
Florida Pensacola	Navy	Naval Air Station Pensacola Naval Air Station Whiting Field	Donna Eichling	deichling@aol.com www.cnet.navy.mil/ community/starbase/sa.html	Phone: 850.452.8287 Fax: 850.452.8288 DSN: 922.8287 Fax DSN: 922.8288	STARBASE Atlantis NAS Pensacola 6490 Saufley Field Road Pensacola, FL 32509
Georgia Marietta	National Guard	Dobbins Air Reserve Base	Bill Wells	bill.wells@ga.ngb.army.mil	Phone: 678.655.4667 Fax: 678.655.4667	Peach State STARBASE 1484 Patrol Road Bldg. 935 Dobbins ARB, GA 30069
Georgia Warner Robins	Air Force Reserve	Robins Air Force Base	Wesley Fondal	Wesley@starbaserobins.org www.starbaserobins.org	Phone: 478.926.1769 Fax: 478.926.1770 DSN: 468.1769	STARBASE Robins 1941 Heritage Blvd. P.O. Box 2469 Warner Robins, GA 31099

STATE/CITY	AFFILIATION	MILITARY INSTALLATION	DIRECTOR	EMAIL / WEBSITE	PHONE	MAILING ADDRESS
Hawaii Pearl Harbor	Navy	Naval Submarine Training Center Pacific	Joseph Barrett	joseph.p.barrett@navy.mil	Phone: 808.472.7389 Fax: 808.472.9923 DSN: 315.472.7389 Fax DSN: 315.472.9923	STARBASE Atlantis Hawaii Naval Submarine Training Center Pacific 1130 Bole Loop, Bldg. 39 Fort Island Pearl Harbor, HI 96860
Illinois Great Lakes	Navy	Naval Station Great Lakes	Steve Surbrook	steven.surbrook@navy.mil	Phone: 847.688.2509 Fax: 847.688.3136 DSN: 792.2509 Fax DSN: 792.3136	STARBASE Atlantis Great Lakes 2221 Mac Donough Dr Bldg. 617 Rm. 122 Great Lakes, IL 60088
Kansas Topeka	National Guard	Forbes Field	Jeff Gabriel	Jeff.Gabriel@kstope.ang.af.mil www.kansasstarbase.org	Phone: 785.861.4709 Fax: 785.861.4127 DSN: 720.4709 Fax DSN: 720.4127	STARBASE Topeka and Kansas City 5920 SE Coyote Dr. Topeka, KS 66619-5370
Kansas Wichita	National Guard	McConnell Air Force Base	Jeff Gabriel	Jeff.Gabriel@kstope.ang.af.mil www.kansasstarbase.org	Phone: 316.759.7096 Fax: 316.759.7094 DSN: 743.7096 Fax DSN: 743.7094	STARBASE Wichita and Salina 52870 Jayhawk Dr. McConnell AFB, KS 67221
Louisiana Pineville	National Guard	Camp Beauregard	Cheryl Arbour	cheryl.arbour1@us.army.mil	Phone: 318.290.5252 Fax: 318.290.5937	Pelican State STARBASE 609 F Street Camp Beauregard Pineville, LA 71360
Louisiana Barksdale	Air Force Reserve	Barksdale Air Force Base	Kathy Brandon	kathy.brandon@barksdale.af.mil 26ows.barksdale.af.mil/starbase/	Phone: 318.456.1315 Fax: 318.456.1151 DSN: 781.1315	STARBASE Louisiana 1000 Davis Ave East Barksdale AFB, LA 71110
Maine Bangor	National Guard	Maine Air National Guard Base	Michele Barnes	michele.barnes@mebngr.ang.af.mil	Phone: 207.990.7505 Fax: 207.990.7150 DSN: 698.7505	STARBASE Maine 105 Maineiac Ave Suite 510 Bangor, ME 04401
Maryland Patuxent River	Navy	Naval Air Station Patuxent River	Steven Mustain (Acting Director)	steven.mustain@navy.mil	Phone: 840.452.1001 ext 1604 Fax: 850.452.1027 DSN: 922.1001 ext 1604 Fax DSN: 922.1027	Primary address not yet assigned NETPDC 6490 Saufley Field Road Pensacola, FL 32509
Michigan Battle Creek	National Guard	Battle Creek ANG Base	Barbara Koscak	mistarbase@aol.com	Phone: 586.307.4884 Fax: 586.307.5751 DSN: 273.4884 Fax DSN: 273.5751	STARBASE Battle Creek 3595 Mustang Avenue Battle Creek ANG Base, MI 48045
Michigan Selfridge	National Guard	Selfridge Air National Guard Base	Barbara Koscak	mistarbase@aol.com	Phone: 586.307.4884 Fax: 586.307.5751 DSN: 273.4884 Fax DSN: 273.5751	STARBASE One/Detroit P.O. Box 450082 Selfridge ANG Base MI 48045

STATE/CITY	AFFILIATION	MILITARY INSTALLATION	DIRECTOR	EMAIL / WEBSITE	PHONE	MAILING ADDRESS
Minnesota St. Paul	National Guard	Minnesota National Guard Base 133rd Airlift Wing	Kim Van Wie	kvanwie@starbasemn.org www.starbasemn.org	Phone: 612.713.2530 Fax: 612.713.2540 DSN: 783.2530 Fax DSN: 783.2540	STARBASE Minnesota 659 Mustang Avenue St. Paul, MN 55111
Mississippi Gulfport	Navy	Naval Construction Training Command	Shelley Bard	shelley.bard@navy.mil	Phone: 228.871.3735 Fax: 228.871.3468 DSN: 868.3735 Fax DSN: 868.3468	STARBASE Atlantis Gulfport 5510 CBC 8th Street Gulfport, MS 39501
Mississippi Meridian	Navy	Naval Air Station Meridian Choctaw Indian Reservation	Pam Litton	pam.litton@navy.mil	Phone: 601.679.3809 Fax: 601.679.3812 DSN: 637.3809 Fax DSN: 637.3812	STARBASE Atlantis Meridian 266 Rosenbaum Ave. Meridian, MS 39309
Nebraska Lincoln	National Guard	National Guard Base Lincoln	vacant	www.starbasene.org	Phone: 402.309.1044 Fax: 402.309.1045 DSN: 279.1044	STARBASE Nebraska Rm. 201 Penterner Armory 2400 NW 24th St. Lincoln, NE 68524
New Mexico Albuquerque	Air Force	Kirtland Air Force Base	Ronda Cole	Ronda.Cole@kirland.af.mil www.vs.afri.af.mil/TechOutreach /TT/K-12.aspx	Phone: 505.846.8042 Fax: 505.846.8932 DSN: 246.8042 Fax DSN: 246.8932	AF STARBASE La Luz PO Box 9566 Albuquerque, NM 87119
North Carolina Charlotte	National Guard	North Carolina Air National Guard 145th Airlift Wing	Barbara Miller	Barbara.miller.ctr@ ncchar.ang.af.mil	Phone: 704.398.4819 Fax: 704.398.4822 Fax DSN: 213.4822	STARBASE North Carolina- Charlotte 5225 Morris Field Dr. Charlotte, NC 28208
North Carolina Kure Beach	National Guard	North Carolina National Guard Training Center	Barbara Miller	Barbara.miller.ctr@ nochar.ang.af.mil	Phone: 910.251.7332 Fax: 910.252.7335	STARBASE North Carolina Kure Beach 116 Air Force Way Kure Beach, NC 28449
Ohio Wright-Patterson	Air Force	Wright-Patterson Air Force Base	Kathy Schweinfurth	Kathleen.schweinfurth@ wpafb.af.mil http://edoutreach. wpafb.af.mil/starbase.htm	Phone: 937.255.0692 Fax: 937.904.8033 DSN: Prefix 785	STARBASE Wright-Patt DETI 1 AFRL/WSC 2130 8th St. Wright-Patterson AFB, OH 45433
Oklahoma Oklahoma City	National Guard	Will Rogers Air Natl. Guard	Bill Scott	Bill.scott@oktuls.ang.af.mil www.starbaseok.org	Phone: 918.833.7757 Fax: 918.833.7769 DSN: 894.7757 Fax DSN: 894.7769	STARBASE Oklahoma Oklahoma City 137th Fighter Wing Will Rogers Air National Guard Base <i>Contact Information:</i> 9131 E Viper Street Tulsa, OK 74115
Oklahoma Tulsa	National Guard	Tulsa Air National Guard Base Native American Initiative	Bill Scott	Bill.scott@oktuls.ang.af.mil www.starbaseok.org	Phone: 918.833.7757 Fax: 918.833.7769 DSN: 894.7757 Fax DSN: 894.7769	STARBASE Oklahoma Tulsa & NIA 138th Fighter Wing Tulsa Air National Guard Base 9131 E Viper Street Tulsa, OK 74115

STATE/CITY	AFFILIATION	MILITARY INSTALLATION	DIRECTOR	EMAIL / WEBSITE	PHONE	MAILING ADDRESS
Oregon Klamath Falls	National Guard	Kingsley Field	Marsha Beardslee	starbase2@earthlink.net www.starbasekingsley.org	Phone: 541.885.6472 Fax: 541.885.6196 DSN: 830.6472 Fax DSN: 830.6196	STARBASE Kingsley 173rd FW/Kingsley Field 302 Bong Street, Suite 19 Klamath Falls, OR 97603
Oregon Portland	National Guard	Portland Air National Guard Base	Marilyn Sholian	msholian@pps.k12.or.us www.mil.state.or.us/starbaseor/ starbasepdx/starbase	Phone: 503.916.5404 ext.1061 Fax: 503.916.2795	STARBASE Portland 6433 NE Tillamook Portland, OR 97213
Pennsylvania Boswell	Marine	US Marine Corp Johnstown	Brandon Jones	brandon@outdoorodyssey.org www.outdoorodyssey.org	Phone: 814.629.6516 Fax: 814.629.9172	STARBASE Pennsylvania 450 Boy Scout Road Boswell, PA 15531
Pennsylvania Pittsburgh	Navy	Navy and Marine Corps Reserve Center	Ken Mechling, Jr.	starbase.ken.mechlingjr@ adelphia.net www.starbase-atlantis- pittsburgh.org	Phone: 412.672.4890 Fax: 412.672.4894	STARBASE Atlantis Pittsburgh 625 East Pittsburgh/ McKeesport Blvd. North Versailles, PA 15137
Puerto Rico Carolina	National Guard	Muniz Air National Guard Base	Idabells Matos	idabells.matos@prsanj.ang.af.mil www.prsanj.ang.af.mil/ STARBASE/html/site/index.htm	Phone: 787.253.7502 Fax: 787.253.2513	STARBASE Puerto Rico 200 Jose A. Santana Ave. Carolina, PR 00979-1514
Rhode Island Newport	Navy	Naval Station Newport	Patrick Rossoni	patrick.rossoni@navy.mil	Phone: 401.841.4072 Fax: 401.841.4075 DSN: 948.4072 Fax DSN: 948.4075	STARBASE Atlantis Newport 440 Meyerkord Avenue Perry Hall, Room 012 Newport, Rhode Island 02841
South Carolina Beaufort	Marine	Marine Corps Air Station Beaufort	Wendell Roberson Sr.	robby@islc.net www.homestead.com/ starbaseinc/homeindex.html	Phone: 843.524.1320 1322/1328 Fax: 843.524.1326	STARBASE MCAS Beaufort P.O. Box 55013 Bldg. 660 Beaufort, SC 29904
South Carolina Columbia	National Guard	McEntire Joint National Guard Station	James Hiott	hiottj@tag.scmd.state.sc.us www.scstarbase.com	Phone: 803.806.4444 Fax: 803.806.1466 DSN: 583.3300	STARBASE Swamp Fox Eastover, SC 29044
South Dakota Rapid City	National Guard	Camp Rapid	Judy Gorman	starbase@sd.ngb.army.mil	Phone: 605.737.6083 Fax: 605.737.6082 DSN: 4.747.8083 Fax DSN: 4.747.8082	STARBASE Rapid City 2823 West Main St. Bldg. 123 Rapid City, SD 57702
South Dakota Sioux Falls	National Guard	South Dakota National Guard Project NOVA	Susan Garrett	sdstarbase@hotmail.com	Phone: 605.367.4930 Fax: 605.367.4926	STARBASE Sioux Falls 801 W. National Guard Dr. 1201 W. Algonquin St. Sioux Falls, SD 57104
Texas Corpus Christi	Navy	Naval Air Station Corpus Christi	Crystal Trujillo	crystal.trujillo@navy.mil	Phone: 361.961.5318 Fax: 361.961.3566 DSN: 861.5318 Fax DSN: 861.3566	STARBASE Atlantis Corpus Christi 11001 D Street Building 252 Corpus Christi, TX 78419
Texas Houston	National Guard	Ellington Field	Gail Whittemore- Smith	gail.whittemore@ txelli.ang.af.mil	Phone: 281.929.2034 Fax: 281.929.2036 DSN: 454.2034 Fax DSN: 454.2034	Texas STARBASE 14657 Sneider Street Bldg 1055 Houston, TX 77034

STATE/CITY	AFFILIATION	MILITARY INSTALLATION	DIRECTOR	EMAIL / WEBSITE	PHONE	MAILING ADDRESS
Texas San Antonio	Air Force Reserve	Lackland Air Force Base	Ron Jackson	starbase@stic.net	Phone: 210.925.3708 Fax: 210.925.3702 DSN: 945.3708 Fax DSN: 945.3702	STARBASE Kelly 203 Galaxy Road Suite 112 Lackland AFB, TX 78236
Vermont Rutland	National Guard	Vermont Army National Guard Rutland Armory	Doug Gilman	Douglas.gilman@ vtburl.ang.af.mil www.starbasevt.org	Phone: 802.660.5201 Fax: 802.660.5940 DSN: 220.5201 Fax DSN: 220.5940	STARBASE Vermont -Rutland 15 West Street Rutland, VT 05701
Vermont South Burlington	National Guard	Vermont Air National Guard Base	Doug Gilman	Douglas.gilman@ vtburl.ang.af.mil www.starbasevt.org	Phone: 802.660.5201 Fax: 802.660.5940 DSN: 220.5201 Fax DSN: 220.5940	STARBASE Vermont South Burlington 100 NCO Drive Bldg 110 South Burlington, VT 05403
Virginia Norfolk	Navy	Naval Base Norfolk	Scott Weltzin	scott.weltzin@navy.mil www.npdc.navy.mil/starbase. norfolk/index.html	Phone: 757.445.5905 Fax: 757.445.2624 DSN: 565.5905 Fax DSN: 565.2624	STARBASE Atlantis Norfolk Building N25 Room 102 1474 Gilbert Street Norfolk, VA 23511
Washington Silverdale	Navy	Naval Base Kitsap (Bangor Submarine Base)	Shannon Ricles	Shannon.Ricles@navy.mil www.cfs.cnet.navy.mil/tt/bangor/ pers_dev/starbase/starbase.htm	Phone: 360.315.2671 Fax: 360.315.2747 DSN: 322.2671 Fax DSN: 322.2747	STARBASE Atlantis, Trident Training Facility, Bangor 2000 Thresher Ave, Rm. D-222 Silverdale, WA 98315
West Virginia Charleston	National Guard	West Virginia National Guard 130th Airlift Wing	Chris Treadway	starbase@wvchar.ang.af.mil www.WVSTARBASE.org	Phone: 304.341.6441 Fax: 304.341.6445 DSN: 366.6441 Fax DSN: 366.6445	West Virginia STARBASE Academy 1679 Coonskin Dr. Charleston, WV 25311
West Virginia Martinsburg	National Guard	West Virginia Air National Guard 167th Airlift Wing	David Frush	STARBASE@wvmart.ang.af.mil www.WVSTARBASE.org	Phone: 304.616.5501 Fax: 304.616.5478 DSN: 242.5501 Fax DSN: 242.5478	STARBASE Martinsburg 222 Sabre Jet Boulevard Room 104 Martinsburg, WV 25405
Wyoming Cheyenne	National Guard	Wyoming Air National Guard	David Orr	davido@starbasewy.org www.starbasewy.org	Phone: 307.772.6161 Fax: 307.772.6017 DSN: 388.6161 Fax DSN: 388.6017	Wyoming STARBASE 217 Dell Range Boulevard Cheyenne, WY 82009

FY06 School Districts and Schools Served

ALABAMA

District: Autauga County Public Schools

Autaugaville Elementary School
Prattville Intermediate School
Billingsley Elementary School
Pine Level Elementary School

District: Elmore County Public Schools

Wetumpka Intermediate School

District: Montgomery County Public Schools

Carver Elementary School
Catoma Elementary School
Dalraida Elementary School
Dannelly Elementary School
Floyd Elementary School
Garrett Elementary School
Harrison Elementary School
Head Elementary School
Morningview Elementary School
Morris Elementary School
Nixon Elementary School
Paterson Elementary School
Pintlala Elementary School

District: Department of Defense Elementary

School System (DODESS)
Maxwell Elementary School

ALASKA

Anchorage

District: Anchorage School District

Abbott Loop Elementary School
Airport Heights Elementary School
Alpenglow Elementary School
Aurora Elementary School
Baxter Elementary School
Bayshore Elementary School
Bear Valley Elementary School
Birchwood ABC Elementary School
Bowman Elementary School
Campbell Elementary School
Chester Valley Elementary School
Chinook Elementary School
Chugach Optional Elementary School
Chugiak Elementary School
College Gate Elementary School
Creeside Park Elementary School
Denali Elementary School
Eagle River Elementary School
Fairview Elementary School
Fire Lake Elementary School
Girdwood Elementary School
Government Hill Elementary School
Homestead Elementary School
Huffman Elementary School

Inlet View Elementary School
Kasuun Elementary School
Kincaid Elementary School
Klatt Elementary School
Lake Hood Elementary School
Lake Otis Elementary School
Mount Iliamna Elementary School
Mount Spurr Elementary School
Mountain View Elementary School
Muldoon Elementary School
North Star Elementary School
Northwood Elementary School
Nunaka Valley Elementary School
O'Malley Elementary School
Ocean View Elementary School
Orion Elementary School
Ptarmigan Elementary School
Rabbit Creek Elementary School
Ravenwood Elementary School
Rogers Park Elementary School
Russian Jack Elementary School
Sand Lake Elementary School
Scenic Park Elementary School
Spring Hill Elementary School
Susitna Elementary School
Taku Elementary School
Trailside Elementary School
Tudor Elementary School
Turnagain Elementary School
Tyson, William Elementary School
Ursa Major Elementary School
Ursa Minor Elementary School
Williwaw Elementary School
Willow Crest Elementary School
Wonder Park Elementary School
Woods, Gladys Elementary School

District: Matanuska Susitna School District

Big Lake Elementary School
Butte Elementary School
Cottonwood Creek Elementary School
Finger Lake Elementary School
Goose Bay Elementary School
Iditarod Elementary School
Larson Elementary School
Meadow Lakes Elementary School
Pioneer Peak Elementary School
Sherrod Elementary School
Snowshoe Elementary School
Swanson Elementary School
Tanaina Elementary School
Wasilla Middle School

Other:

Aquarian Charter School
Family Partnership School
Northern Lights ABC K-8 Elementary School
The Academy Charter
Twindly-Bridge Charter

Kenai

District: Kenai Peninsula Borough School

District

Soldotna Montessori Charter School

ARIZONA

District: Amphitheater School District

Coronado K-8 School
Harelson Elementary School
Keeling Elementary School
Mesa Verde Elementary School
Painted Sky Elementary School
Rio Vista Elementary School
Walker Elementary School
Wilson K-8 School

District: Vail School District

Cottonwood Elementary School
Desert Willow Elementary School
Old Vail Middle School
Sycamore Elementary School

CALIFORNIA

Sacramento

District: Elk Grove Unified School District

Arthur C. Butler Elementary School
Charles E. Mack Elementary School
Elk Grove Elementary School
Elliott Ranch Elementary School
Florence Markofer Elementary School
Pleasant Grove Elementary School
Prairie Oaks Elementary School
Union House Elementary School

District: Elverta Joint School District

Elverta Elementary School

District: Folsom Cordova Unified School District

Blanche Sprentz Elementary School
Carl H. Sundahl Elementary School
Cordova Gardens Elementary School
Cordova Lane Elementary School
Cordova Meadows Elementary School
Cordova Villa Elementary School
Empire Oaks Elementary School
Folsom Hills Elementary School
Gold Ridge Elementary School
Mather Heights Elementary School
Natoma Station Elementary School
Navigator Elementary School
Oak Chan Elementary School
Peter J. Shields Elementary School
Rancho Cordova Elementary School

Riverview Elementary School
Sandra J. Gallardo Elementary School
Theodore Judah Elementary School
White Rock Elementary School
Williamson Elementary School

District: Loomis Union School District
Franklin Elementary School
H. Clark Powers Elementary School
Loomis Elementary School
Penryn Elementary School
Placer Elementary School

District: Newcastle Elementary School District
Newcastle Elementary School

District: Ophir Elementary School District
Ophir Elementary School

District: Rio Linda Union School District
Aero Haven Elementary School
Allison Elementary School
Dry Creek Elementary School
FC Joyce Elementary School
Foothill Oaks Elementary School
Frontier Elementary School
Hillsdale Elementary School
Holmes Elementary School
Kohler Elementary School
Larchmont Elementary School
Madison Elementary School
Oakdale Elementary School
Orchard Elementary School
Pioneer Elementary School
Regency Park Elementary School
Ridgepoint Elementary School
Rio Linda Elementary School
Sierra View Elementary School
Village Elementary School
Westside Elementary School
Woodbridge Elementary School

District: Robla Elementary School District
Bell Avenue Elementary School
Glenwood Elementary School
Main Avenue Elementary School
Robla Elementary School

District: Sacramento City Unified School District
Cesar Chavez Elementary School
Martin Luther King, Jr. Elementary School

Other:
Gloria Dei Lutheran Elementary School
St. Peter's Lutheran Elementary School

San Diego

District: Chula Vista Elementary School District
Feaster-Edison Charter School
Harborside Elementary School
John J. Montgomery Elementary School
Lillian J. Rice Elementary School
Vista Square Elementary School

District: National City School District
Central Elementary School
El Toyon Elementary School
Ira Harbison Elementary School
Palmer Way Elementary School
Rancho De La Nacion Elementary School

District: San Diego School District
Jefferson Elementary School
Porter Elementary School

CONNECTICUT

Hartford

District: Hartford School District
Anne Fisher Elementary School
Barnard Brown Elementary School
Breakthrough Elementary School
Burns Elementary School
Burr Elementary School
Dwight Elementary School
Jumoke Elementary School
Kennelly Elementary School
Mark Twain Elementary School
Martin Luther King Elementary School
McDonough Elementary School
Michael D Fox Elementary School
Milner Elementary School
Moylan Elementary School
Naylor Elementary School
Noah Webster Elementary School
Parkville Elementary School
Rawson Elementary School
Sand Elementary School
Simpson Waverly Elementary School
West Middle School

Waterbury

District: Seymour School District
Our Lady of Mount Carmel Elementary School

District: Waterbury School District
Barnard Elementary School
Brooklyn Elementary School
Bunker Hill Elementary School
Carrington Elementary School
Chase Elementary School
Driggs Elementary School

Generali Elementary School
Kingsbury Elementary School
Maloney Magnet Elementary School
Regan Elementary School
Rotella Elementary School
Sprague Elementary School
State Street Elementary School
Tinker Elementary School
Walsh Elementary School
Washington Elementary School
Wendell Cross Elementary School
Woodrow Wilson Elementary School

DISTRICT OF COLUMBIA

District: District of Columbia Public Schools
Aiton Elementary School
Brent Elementary School
Garfield Elementary School
Ludlow-Taylor Elementary School
Patterson Elementary School
Payne Elementary School
Raymond Elementary School
Savoy Elementary School
Simon Elementary School
Thurgood-Marshall Elementary School
Trusdell Elementary School
West Elementary School
Whittier Elementary School

Other:
St. Peter's Interparish Elementary School

FLORIDA

Jacksonville

District: Duval County School District
Cedar Hills Elementary School
Center Academy Elementary School
Lola Culver Elementary School
Long Branch Elementary School
Martin Luther King Elementary School
North Shore Elementary School
Norwood Elementary School
Pinedale Elementary School
Rutledge Pearson Elementary School
St. Clair Evans Elementary School
West Riverside Elementary School

Pensacola

District: Escambia County School District
Blue Angels Elementary School
Montclair Elementary School
Myrtle Grove Elementary School
Navy Point Elementary School
R C Lipscomb Elementary School
Spencer Bibbs Elementary School
West Pensacola Elementary School

Other:

St Paul Catholic Elementary School

Whiting Field

District: Santa Rosa County School District

Bagdad Elementary School
Berryhill Elementary School
Chumuckla Elementary School
East Milton Elementary School
Jay Elementary School
Oriole Beach Elementary School
Pea Ridge Elementary School
W.H. Rhodes Elementary School

Other:

Escambia Westgate Elementary Academy

GEORGIA

Marietta

District: City of Marietta School District

Lockheed Elementary School

District: Cobb County School District

Belmont Hills Elementary School
Brown Elementary School
Green Acres Elementary School
Milford Elementary School
Powder Springs Elementary School
Russell Elementary School

Warner Robins

District: Bibb County School District

Bernd Elementary School
Burdell-Hunt Magnet Elementary School
Hartley Elementary School
Morgan Elementary School
Ingram-Pye Elementary School
Morningside Elementary School
Jones Elementary School
Skyview Elementary School
Union Elementary School
Vineville Elementary Academy

District: Houston County School District

Lindsey Elementary School
Linwood Elementary School
Miller Elementary School
Pearl Stephens Elementary School
Tucker Elementary School
Westside Elementary School

District: Twiggs County School District

Jeffersonville Elementary School

Other:

Gilead Christian Elementary Academy
St. Joseph's Elementary School
St. Peter Claver Elementary School

HAWAII

District: Oahu Central School District, Aiea-

Moanalua-Radford Complex Area
Admiral Chester W. Nimitz Elementary School
Aliamanu Elementary School
Lt. Col Horrace Meek Hickam Elementary School
Major General William R. Shafter Elementary School
Makalapa Elementary School
Mokulele Elementary School
Pearl Harbor Elementary School
Pearl Harbor Kai Elementary School
Waimalu Elementary School

District: Oahu Leeward School District,

Campbell-Kapolei-Waianae Complex Area
Ewa Elementary School
Iroquois Point Elementary School

Other:

Christian Elementary Academy
Holy Family Catholic Elementary Academy
Our Savior Lutheran Elementary School
Pearl Harbor Christian Elementary Academy
St. Elizabeth Elementary School

ILLINOIS

District: North Chicago School District

A J Katzenmaier Elementary School
Forrestal Elementary School
Greenbay Elementary School
Hart Elementary School
North Elementary School
South Elementary School

District: Zion Elementary School District

Beulah Park Elementary School
East Elementary School
Elmwood Elementary School
Shiloh Park Elementary School
West Elementary School

KANSAS

Topeka

District: Archdiocese of Kansas City Kansas

Christ the King Elementary School
St. Patricks Elementary School

St. Peters Cathedral School
Xavier Elementary School

District: Auburn Washburn Unified School

District
Auburn Elementary School
Pauline South Intermediate School

District: Baldwin City Unified School District

Marion Springs Elementary School

District: Basehor-Linwood Unified School

District
Glenwood Ridge Elementary School

District: Kansas City Unified School District

Banneker Elementary School
Eugene Ware Elementary School
Stoney Point South Elementary School
Thomas A Edison Elementary
White Church Elementary School

District: Kaw Valley Unified School District

St Mary's Elementary School

District: Lawrence Unified School District

Pinckney Elementary School
Sunflower Elementary School

District: Marais Des Cygnes Valley Unified

School District
Marais Des Cygnes Valley Elementary School

District: North Jackson Unified School

District
Jackson Heights Elementary School

District: Onga-Havensville-Wheaton Unified

School District
Onaga Elementary School

District: Royal Valley Unified School District

Royal Valley Elementary School

District: Seaman Unified School District

East Indianola Elementary School
Lyman Elementary School
West Indianola Elementary School

District: Shawnee Mission Public Schools

Unified School District
Neiman Elementary School

District: Topeka Public Schools Unified

School District
McEachron Elementary School
Shaner Elementary School
Whitson Elementary School

District: Wamego Unified School District
West Elementary School

Other:
Cair Paravel Latin Elementary School, Inc.
Kansas City Christian Elementary School
Westminster Elementary Academy

Wichita

District: Andover Unified School District
Sunflower Elementary School

District: Augusta Unified School District
Ewalt Elementary School

District: Bethany Lutheran Elementary School District
Bethany Lutheran Elementary School

District: Bluestem Unified School District
Bluestem-Leon Elementary School

District: Caldwell Unified School District
Caldwell Elementary School

District: Concordia Unified School District
Concordia Elementary School

District: Ell-Saline Unified School District
Ell-Saline Elementary School

District: Goddard Unified School District
Clark Davidson Elementary School

District: Hutchinson Public Schools Unified School District
Wiley Elementary School

District: Kaw Valley Unified School District
St. Mary's Elementary School

District: Lincoln Unified School District
Lincoln Elementary School

District: North Ottawa County Unified School District
Minneapolis Elementary School

District: Salina Christian
Salina Christian Elementary Academy

District: Salina Unified School District
Meadowlark Ridge Elementary School
Stewart Elementary School
Sunset Elementary School

District: Sylvan Grove Unified School District
Sylvan Unified Elementary School

District: Syracuse Unified School District
Syracuse Elementary School

District: Twin Valley Unified School District
Bennington Elementary School
Tescott Elementary School

District: Valley Center Public School Unified School District
Wheatland Elementary School

District: Wichita Catholic Diocese
St. Patrick Catholic Elementary School

District: Wichita Unified School District
Bostic Traditional Magnet Elementary School
College Hill Elementary School
Lawrence Elementary School

LOUISIANA

Pineville

District: Rapides Parish Schools
Alma Red Wine Elementary School

Other:
Our Lady of Prompt Succor Elementary School
St. Robert of Bellarmine Elementary School

Shreveport

District: Bossier Parish Public Schools District
Bossier Elementary School
Carrie Martin Elementary School
Central Park Elementary School
Curtis Elementary School
R.V. Kerr Elementary School

District: Caddo Parish Public Schools District
Barret Elementary School
Central Elementary School
Ingersoll Elementary School
Keithville Elementary/Middle School
Mooringport Elementary School
Oil City Elementary/Middle School
Werner Park Elementary School
West Shreveport Elementary School

MAINE

District: Brewer School Department
State Street Elementary School

District: Bucksport School Department
Miles Lane Middle School

District: Dedham School Department
Dedham Elementary School

District: Glenburn School Department
Glenburn Elementary School

District: Greenville School Department
Greenville Middle School
Nickerson Elementary School

District: MSAD 22
George B. Weatherbee Elementary School
Newburgh Elementary School

District: MSAD 23
Carmel Elementary School

District: MSAD 63
Holbrook Middle School

District: Orono School Department
Asa C. Adams Elementary School

District: Orrington School Department
Center Drive Middle School

District: Otis School Department
Beech Hill Elementary School

District: Surry School Department
Surry Elementary School

District: Trenton School Department
Trenton Elementary School

Other:
All Saints Catholic Middle School

MICHIGAN

Detroit

District: Detroit Public Schools District
Bates Academy
Clara Rutherford Elementary School
Cleveland Middle School
Clippert Academy
Courville Elementary School
Davison Elementary School
Golightly Educational Center
John King Elementary School
Malcolm X Middle Academy
O.W. Holmes Elementary School
Stark Elementary School
Von Stueben Elementary School

Other:
Marilyn Lunday Middle Academy
Plymouth Elementary Ed Center
Southfield Elementary Academy
Warrendale Charter Elementary Academy

Selfridge

District: Anchor Bay Public Schools District
Ashley Elementary School
Dean A. Naldrett Elementary School

District: Lamphere Public Schools District
Hiller Elementary School

District: L'Anse Creuse Public Schools District
South River Elementary School
Carkenord Elementary School

District: New Haven Public Schools
Siefert Elementary School

District: Taylor Public Schools District
Eureka Heights Elementary School
Fischer Elementary School
Holland Elementary School
Kinyon Elementary School
Moody Elementary School
Myers Elementary School

MINNESOTA

District: Minneapolis Public Schools
Andersen Elementary School
Jefferson Community School
Keewaydin Community School
Nellie Stone Johnson Elementary School

District: St. Paul Public Schools District
American Indian Magnet School
Ames Elementary School
Battle Creek Middle School
Bruce Vento Elementary School
Como Park Elementary School
Farnsworth Aerospace Magnet School
Four Seasons Elementary School
Franklin Music Magnet School
Hayden Heights Elementary School
Homecroft Elementary School
Humbolt Junior High School
John Johnson Elementary School
Phalen Lake Elementary School
Sheridan Elementary School
Washington Technology Middle School
World Cultures Magnet School

Other:
Achieve Language Academy
Community of Peace School
New Spirit School
Risen Christ School
St. Bernard's School
Seed Academy and Harvest Preparatory

MISSISSIPPI

Gulfport

District: Gulfport School District
Gaston Point Elementary School

District: Harrison County School District
Lizana Elementary School
Saucier Elementary School
West Wortham Elementary and Middle School

District: Long Beach School District
W J Quarles Elementary School
Harper-McCaughn Elementary School

Other:
St. Paul Elementary School
St. Thomas Elementary School

Meridian

District: Lauderdale County Schools District
Northeast Lauderdale Middle School
Southeast Lauderdale Middle School

District: Meridian Public Schools
Crestwood Elementary School
Harris Upper Elementary School
Oakland Heights Elementary School
West Hills Elementary School
Witherspoon Elementary School

Other:
Calvary Christian School
North Hills Christian School
Russell Christian Academy

Choctaw (Outreach):

District: Choctaw Tribal Schools
Bogue Chitto Elementary School
Choctaw Alternative School
Conehatta Elementary School
Pearl River Elementary School
Red Water Elementary School
Standing Pine Elementary School
Tucker Elementary School

Other:
Pharr Elementary School
Philadelphia Elementary School

NEBRASKA

District: Area Parochial Schools
Lincoln Christian Schools
Sacred Heart School
Helen Hyatt School
St. Teresa's School
St. John's School

North American Martyrs School
Blessed Sacrament School
Messiah Lutheran Elementary School

District: Lincoln Public School District
Arnold Elementary School
Cheney Public Elementary School
Clinton Elementary School
Elliott Elementary School
Everett Elementary School
Fredstrom Elementary School
Hartley Elementary School
Hawthorne Elementary School
Holmes Elementary School
Huntington Elementary School
McPhee Elementary School
Norwood Park Elementary School
Pershing Elementary School
Randolph Elementary School
West Lincoln Elementary School

NEW MEXICO

District: Albuquerque Public Schools
Ernie Pyle Middle School
Jackson Middle School
Sandia Base Elementary School
Van Buren Middle School

District: Archdiocese of Santa Fe
Our Lady of Fatima School

District: Belen Consolidated Schools
Belen Middle School

District: Bernalillo Public Schools
Bernalillo Middle School
Santo Domingo Elementary School

District: Gallup-McKinley County Schools
Thoreau Middle School

District: Los Lunas Public Schools
Raymond Gabaldon Intermediate School

District: Moriarty Municipal Schools
Edgewood Middle School

District: Pueblo of Laguna, Department of Education
Laguna Middle School

District: Rio Rancho Public School
Eagle Ridge Middle School
Mountain View Middle School

District: Southern Pueblos Agency
San Felipe Pueblo Elementary School
T'siya Middle School

Other:

Anderson Elementary Home School
Budd Elementary Home School
Cottonwood Valley Charter Elementary School
Hope Christian Middle Elementary School

NORTH CAROLINA

Charlotte

District: Alexander County Schools
Taylorsville Elementary School

District: Ashe County Schools
Westwood Elementary School

District: Burke District
Hillcrest Elementary School

District: Charlotte-Mecklenburg School System
Allenbrook Elementary School
Devonshire Elementary School
Lansdowne Elementary School
Pawtucket Elementary School
Reedy Creek Elementary School
Selwyn Elementary School
Statesville Road Elementary School
Tuckaseegee Elementary School
Walter G. Byers Elementary School

District: Davidson County Schools
Southwood Elementary School

District: Guilford County Schools
Fairview Elementary School

District: Iredell-Statesville Schools
Ebenezer Elementary School
Lakeshore Elementary School
Monticello Elementary School

District: Kannapolis City Schools
Kannapolis Intermediate School

District: Lincoln County Schools
Rock Springs Elementary School

District: Thomasville City Schools Liberty Drive Elementary School

District: Wilkes County
Wilkes County Elementary School

District: Yancey County
Bald Creek Elementary School
South Toe Elementary School

Kure Beach

District: Brunswick County Schools District
Belville Elementary School
Bolivia Elementary School
Jessie Mae Monroe Elementary School
Supply Elementary School
Union Elementary School
Virginia Williamson Elementary School
Waccamaw Elementary School

District: Carteret County Schools
Beaufort Elementary School
Bogue Sound Elementary School
Harkers Island Elementary School
White Oak Elementary School

District: Currituck County Schools
Knotts Island Elementary School

District: Dare County Schools
Manteo Elementary School

District: Hyde County Schools
Mattamussett Elementary School

District: Martin County Schools
E.J. Hayes Elementary School

District: New Hanover County Schools
Annie H. Snipes Elementary School
Carolina Beach Elementary School
Dorothy B. Johnson Elementary School
Dr. Hubert Eaton Sr. Elementary School
John Coddington Elementary School
John J. Blair Elementary School
Murrayville Elementary School
Rachel Freeman Elementary School
Southport Elementary School

District: Pender County Schools
Cape Fear Elementary School

District: Perquimans County Schools
Hertford Grammar School

District: Sampson County Schools Union Elementary School

OHIO

District: Beaver Creek City Schools
Main Elementary School
Parkwood Elementary School

District: Jefferson Township Schools
Blairwood Elementary School

District: Mad River Township Schools
Spinning Hills Middle School

District: Miamisburg City Schools
Mark Twain Elementary School
Mound Elementary School

District: Northmont City Schools
Englewood Elementary School
OR Edgington Elementary School
Union Elementary School

District: Springfield City Schools
Lincoln Elementary School
Snowhill Elementary School

District: Yellow Springs Exempted Village Schools
Mills Lawn Elementary School

OKLAHOMA

Oklahoma City

District: Archdiocese of Oklahoma City
St. Phillip Neri Elementary School

District: Hennessey Public School
Hennessey Upper Elementary School

District: Millwood Public Schools
Millwood Elementary School

District: Oklahoma City Public Schools
Coolidge Elementary School
Gatewood Elementary School
Horrace Mann Elementary School
Kaiser Elementary School
Marcus Garvey Elementary School
Parmelee Elementary School
Shidler Elementary School
Stonegate Elementary School
Van Buren Elementary School
Westwood Elementary School

District: Tecumseh Public Schools
Tecumseh Middle School

Tulsa

District: Anderson Public School
Anderson Elementary School

District: Barnsdall Public School
Barnsdall Elementary School

District: Berryhill Public School
Berryhill Elementary School

District: Catoosa Public School
J.W. Sam Elementary School

District: Diocese of Tulsa
St. Pius X Catholic Elementary School

Sts Peter & Paul Catholic Elementary School

District: Pretty Water Public School
Pretty Water Elementary School

District: Sand Springs Public School
Pratt Elementary School

District: Sapulpa Public School
Jefferson Elementary School

District: Tulsa Public Schools
Greely Elementary School
McKinley Elementary School
Robertson Elementary School

District: Verdigris Public School
Verdegris Elementary School

Other:
Riverfield Day Elementary School
Undercroft Montessori Elementary

NAI (Outreach)

District: Andadarko Public Schools
East Grade Elementary School

District: Braggs Public Schools
Braggs Elementary School

District: Carnegie Public Schools
Carnegie Elementary School

District: Chickasha Public School
SW Elementary School

District: Gore Public Schools
Gore Elementary School

District: Kansas Public Schools
Kansas Elementary School

District: Keys Public Schools
Keys Elementary School

District: Leach Public School
Leach Elementary School

District: Locust Grove Public Schools
Locust Grove Elementary School

District: Lost City Public School
Lost City Elementary School

District: Muskogee Public Schools
Ben Franklin Science Academy Elementary School
Grant Forman Elementary School

District: Okay Public School
Okay Elementary School

District: Osage Public Schools
Osage Elementary School

District: Peggs Public School
Peggs Elementary School

District: Pryor Public School
Jefferson Elementary School
Washington Elementary School

District: Shady Grove Public School
Shady Grove Elementary School

District: Tenkiller Public School
Tenkiller Elementary School

District: Vinita Public Schools
Will Rogers Elementary School

District: Weber Falls Public School
Weber Falls Elementary

OREGON

Kalmeth Falls

District: Klamath County Schools
Bonanza Elementary School
Chiloquin Elementary School
Fairhaven Elementary School
Ferguson Elementary School
Henley Elementary School
Keno Elementary School
Malin Elementary School
Merrill Elementary School
Peterson Elementary School
Shasta Elementary School
Stearns Elementary School

District: Klamath Falls City Schools
Conger Elementary School
Fairview Elementary School
Mills Elementary School
Pelican Elementary School
Roosevelt Elementary School

Other:
Hosanna Christian Elementary School

Portland

District: Centennial School District
Lynch Meadow Elementary School

District: Portland Public Schools District
Access at Sabin Elementary School
Alameda Elementary School
Atkinson Elementary School
Ball Elementary School
Captial Hill Elementary School
Clark Elementary School
Duniway Elementary School

Grout Elementary School
Irvington Elementary School
Kelly Elementary School
Llewellyn Elementary School
Maplewood Elementary School
Sabin Elementary School
Vestal Elementary School
Woodmere Elementary School

Other:
Damascus Christian Elementary School

PENNSYLVANIA

Boswell

District: Berlin School District
Berlin Elementary School

District: Forest Hills School District
Forest Hills Elementary School

District: North Star School District
Cantner Elementary School
North Star Elementary School

District: Rockwood School District
Kingwood Elementary School
Rockwood Elementary School

District: Salisbury School District
Salisbury Elementary School

District: Shade School District
Shade Elementary School

District: Somerset School District
Eagle View Elementary School

District: St. Andrews School District
St. Andrews Elementary School

District: St. Benedicts School District
St. Benedicts Elementary School

District: St. Patricks School District
St. Patricks Elementary School

District: Windber School District
Windber Elementary School

Other:
Our Mother of Sorrows Elementary School

Pittsburgh

District: California Area School District
California Elementary School

District: East Allegheny School District
Westinghouse Elementary School

District: McKeesport Area School District
Cornell Intermediate School

District: Penn Hills School District
Penn Hebron Elementary Academy
William Penn Elementary School

Other:

Good Shepherd School
Monessen Elementary Center
Urban League of Pittsburgh Charter
School

PUERTO RICO

District: Arecibo Educational Region
Escuela Elemental Clemente Ramírez de
Arellano
Escuela Elemental José Meléndez Ayala
Escuela Intermedia Marta Lafontaine
Escuela Segunda Unidad Antonio Reyes
Reyes
Escuela Segunda Unidad Antonio Reyes
Reyes

District: Bayamón Educational Region
Escuela Elemental Cristobal Colón
Escuela Elemental Ernestina Bracero
Escuela Elemental Juan Román Ocasio
Escuela Intermedia Felipe Díaz González

District: Caguas Educational Region
Escuela Elemental Federico Degetau I
Escuela Elemental Victoria Santiago Colón
Escuela Intermedia Benigno Fernández
García

District: Fajardo Educational Region
Escuela Elemental Domingo Nieves Ortiz
Escuela Elemental Julio Millán Cepeda
Escuela Elemental Manuel Agosto Lebrón
Escuela Elemental Parcelas Suarez
Escuela Segunda Unidad Antonio Rios

District: Humacao Educational Region
Escuela Elemental Andrés Soto Quiñones
Escuela Elemental Cándido Berríos
Escuela Elemental Higinio Figueroa
Escuela Intermedia Agapito López Flores
Escuela Intermedia Generoso Morales
Muñoz
Escuela Intermedia Juan Ponce de León
Escuela Segunda Unidad Andrés Sandín
Martínez
Escuela Segunda Unidad Andrés Soto
Quiñones
Escuela Segunda Unidad Cristobal Del
Campo
Escuela Segunda Unidad Marcos Sánchez

District: Mayagüez Educational Region
Escuela Elemental de la Comunidad
Consuelo Pérez Cintrón
Escuela Elemental Lucia Cubero
Escuela Intermedia Antonio Badillo
Hernández
Escuela Intermedia Narciso Rabell

District: Morovis Educational Region
Escuela de la Comunidad Segunda Unidad
Manuel A. Martínez Dávila
Escuela Elemental Almirante Sur
Escuela Intermedia Angel Sandín Martínez
Escuela Segunda Unidad Bonifacio
Alvarado
Escuela Segunda Unidad Federico Degetau
Escuela Segunda Unidad Ramón T. Rivera

District: Ponce Educational Region
Escuela Elemental de la Comunidad Santa
Teresita
Escuela Elemental José Gautier Benítez
Escuela Elemental Ramón Baldorioty de
Castro
Escuela Elemental Rufino Huertas
Escuela Intermedia Francisco Zayas
Escuela Intermedia Rafael Irizarry
Escuela Intermedia Rafael Irizarry Rivera
Escuela Segunda Unidad Eugenio Nazario
Soto

District: San Germán Educational Region
Escuela Elemental Herminia C. Ramírez
Escuela Intermedia Ernesto Ramos Antonini

District: San Juan Educational Region
Escuela Elemental Berwin Elemental
Escuela Elemental Fray Bartolomé de las
Casas
Escuela Elemental Roberto Clemente
Escuela Intermedia Antonio Sarriera
Egozcue
Escuela Intermedia José Julián Acosta
Escuela Intermedia Julia de Burgos
Escuela Intermedia Licenciado Jesús Rivera
Bultrón
Escuela Intermedia Lola Rodríguez de Tió
Escuela Intermedia Martín González
Escuela Intermedia Padre Rufo
Escuela Intermedia Rafael M. Labra
Escuela Villa Granada Elemental

RHODE ISLAND

*District: Bristol/Warren Regional School
District*
Byfield Elementary School
Guiteras Elementary School
Mary V. Quirk Elementary School
Reynolds Elementary School
Rockwell Elementary School

District: Middletown Public Schools
Joseph H. Gaudet Middle School

District: Newport Public Schools
Carey Elementary School
Coggeshall Elementary School
Cranston-Calvert Elementary School
Sullivan Elementary School
Underwood Elementary School

District: North Kingstown School Department
Hamilton Elementary School
Quidnesset Elementary School

District: Portsmouth School Department
Portsmouth Middle School

SOUTH CAROLINA

Beaufort

District: Beaufort County Schools
Beaufort Elementary School
Bluffton Elementary School
Broad River Elementary School
Coosa Elementary School
James J. Davis Elementary School
Joseph F. Shanklin Elementary School
Lady's Island Elementary School
M.C. Riley Elementary School
Mossy Oaks Elementary School
Okatie Elementary School
Port Royal Elementary School
Shell Point Elementary School
St Helena Elementary School
Whale Branch Elementary School

District: Colleton County Schools
Bells Elementary School
Black Street Elementary School
Cottageville Elementary School
Forest Hills Elementary School
Hendersonville Elementary School
Northside Elementary School

District: Hampton County Schools
Brunson Elementary School
Estill Elementary School
Fennell Elementary School
Hampton Elementary School
Varnville Elementary School

District: Jasper County School
Ridgeland Elementary School

Other:

Agape Christian Elementary Academy
Beaufort Elementary Academy
Beaufort Marine Elementary Institute
Bolden Elementary School

Community Bible Christian Elementary Academy
Home School Elementary Group of the Lowcountry
St Peter's Catholic Elementary School

Columbia

District: Fairfield County
Gieger Elementary School

District: Richland County
Brennan Elementary School
Caughman Road Elementary School
EE Taylor Elementary School
Forrest Heights Elementary School
Hyatt Park Elementary School
Logan Elementary School
Mill Creek Elementary School
Summit Parkway Elementary School

District: Sumter County
RE Davis Elementary School

SOUTH DAKOTA

Rapid City

District: Rapid City Area Schools

Black Hawk Elementary School
Canyon Lake Elementary School
General Beadle Elementary School
Horace Mann Elementary School
Knollwood Heights Elementary School
Rapid Valley Elementary School
Robbinsdale Elementary School
South Park Elementary School
Valley View Elementary School
Woodrow Wilson Elementary School

District: Douglas Schools
Vandenberg Elementary School

Other:
Zion Lutheran Elementary School
Home School Elementary Association

Sioux Falls

District: Beresford Schools
Beresford Middle School

District: Brandon Valley Schools
Brandon Elementary School
Robert Bennis Elementary School
Valley Springs Elementary School

District: Canton Schools
Canton Middle School

District: Garretson
Garretson Elementary School

District: Sioux Falls Schools
Anne Sullivan Elementary School
Axtell Middle School
Eugene Field Elementary School
Garfield Elementary School
Hawthorne Elementary School
Hayward Elementary School
Jefferson Elementary School
Laura B. Anderson Elementary School
Longfellow Elementary School
Renberg Elementary School
Terry Redlin Elementary School

Project NOVA (Outreach):

District: American Horse Pass Creek School System 03301
American Horse Elementary School

District: Cheyenne Eagle Butte 20-1
Cheyenne Eagle Butte Upper Elementary School

District: Crazy Horse School System 3530
Crazy Horse Elementary School

District: Crow Creek Sioux Tribal School 34301
Crow Creek Elementary School

District: Dupree School District 64-2
Dupree Elementary School

District: Little Wound School System 65306
Little Wound Elementary School

District: Loneman School Corporation 65307
Loneman Elementary School

District: Lower Brule School Systems
Lower Brule Elementary School

District: Red Cloud Indian School 65301
Red Cloud Elementary School
Our Lady of Lourdes Elementary School

District: St. Joseph's Indian School
St. Joseph's Indian School

District: Timber Lake School District 20-3
Timber Lake Elementary School

District: Tiospaye Topa School System 20303
Tiospaye Topa Elementary School

District: Todd County School District
Mission South Elementary School
Rosebud Elementary School

TEXAS

Corpus Christi

District: Calallen Independent Schools
Magee Intermediate School

Houston

District: Cleveland Independent Schools
Eastside Intermediate School

District: Dickinson Independent Schools
Barber Middle School
Dunbar Middle School

District: Galena Park Independent Schools
Mac Arthur Elementary School

District: Hitchcock Independent Schools
Crosby Middle School

District: Houston Independent Schools
Berry Elementary School
Betsy Ross Elementary School
Bruce Elementary School
De Zavala Elementary School
Fleming Middle School
Gordon Elementary School
Helms Community Elementary Learning Center
Lantrip Elementary School
McReynolds Middle School
Park Place Elementary School
Pleasantville Elementary School
Pugh Elementary School

District: La Marque Independent Schools
Highlands Elementary School
Westlawn Elementary School

District: Pasadena Independent Schools
Jensen Elementary School
Meador Elementary School
Morris 5th Grade Center
Pomeroy Elementary School

District: Shepherd Independent Schools
Shepherd Intermediate School

San Antonio

District: Edgewood Independent Schools
L. B. Johnson Elementary School
H. B. Gonzalez Elementary School

District: San Antonio Independent Schools
Bowden Pfiefer Elementary Academy
Tynan Elementary School
Riverside Park Elementary Academy

District: South San Antonio Independent School District
Carillo Elementary School
Hutchins Elementary School

District: Southwest Independent Schools
Kriewald Road Elementary School
Sky Harbour Elementary School

Other:
New Life Christian Elementary Academy
St. Joseph's Elementary School

VERMONT

Rutland

District: Addison Central Supervisory Union
Salisbury Community Elementary School
Ripton Elementary School

District: Addison Rutland Supervisory Union
Orwell Village Elementary School
Bensen Village Elementary School

District: Bennington-Rutland Supervisory Union
Currier Memorial Elementary School

District: Rutland Central Supervisory Union
West Rutland School
Proctor Elementary School

District: Rutland City School District
Rutland Intermediate School

District: Rutland Northeast Supervisory Union
Neshobe Elementary School

District: Rutland South Supervisory Union
Clarendon Elementary School
Wallingford Elementary School

District: Rutland Southwest Supervisory Union
Poultney Elementary School

District: Rutland Windsor Supervisory Union
Mt. Holly Elementary School

District: Southwest Vermont Supervisory Union
Shaftsbury Elementary School
Monument Elementary School

District: Vermont Approved Independent Schools
Christ the King Elementary School

District: Vermont Recognized Schools
Rutland Area Christian Elementary School

District: Windsor Central Supervisory Union
Reading Elementary School
Sherburne Elementary School

District: Windsor Southeast Supervisory Union
Windsor State Street Elementary School
Albert Bridge Elementary School
Cavendish Town Elementary School

South Burlington

District: Addison Northeast Supervisory Union
Bristol Elementary School

District: Burlington Public School District
C.P. Smith Elementary School
H.O. Wheeler Elementary School
J.J. Flynn Elementary School

District: Caledonia Central Supervisory Union
Danville Elementary School
Walden Elementary School

District: Chittenden Central Supervisory Union
Thomas Fleming Elementary School

District: Franklin Central Supervisory Union
St. Albans Town Elementary Educational Center

District: Grand Isle Supervisory Union
Folsom Community Elementary School
North Hero Elementary School

District: Orleans Central Supervisory Union
Albany Community Elementary School

District: Orleans Southwest Supervisory Union
Craftsbury Elementary School

District: Vermont Approved Independent Schools
St. Monica Elementary School

District: Vermont Recognized Schools
Trinity Baptist Elementary School

District: Washington Central Supervisory Union
East Montpelier Elementary School

District: Washington South Supervisory Union
Northfield Elementary School

District: Washington West Supervisory Union
Crosset Brook Elementary School

District: Winooski School District
JFK Elementary School

Other:
Home School Elementary Group

VIRGINIA

District: Norfolk Public Schools
Campostella Elementary School
Dreamkeepers Elementary Academy
Fairlawn Elementary School
Ghent Elementary School
Ingleside Elementary School
James Monroe Elementary School
Little Creek Elementary School
Oakwood Elementary School
Tidewater Park Elementary
Willoughby Elementary School

WASHINGTON

District: Central Kitsap Schools
Clear Creek Elementary School
Emerald Heights Elementary School
Green Mountain Elementary School
Sliver Ridge Elementary School
Woodlands Elementary School

District: Chimacum Schools
Chimacum Elementary School

District: North Kitsap Schools
Pearson Elementary School
Suquamish Elementary School
Vinland Elementary School
Wolfe Elementary School

Other:
Peace Lutheran Elementary School

WEST VIRGINIA

Charleston

District: Kanawha County Schools
Alban Elementary School
Bonham Elementary School
Bridgeview Elementary School
Cedar Grove Community School
Chamberlain Elementary School
Chesapeake Elementary School
Clendenin Elementary School
Cross Lanes Elementary School
Kanawha City Elementary School
Malden Elementary School
Midland Trail Elementary School
Overbrook Elementary School
Piedmont Year-Round Elementary Education

Pinch Elementary School
Pratt Elementary School
Ruthlawn Elementary School
Sissonville Elementary School
Watts Elementary School

Martinsburg

District: Berkeley County Schools
Orchard View Intermediate School
Tomahawk Intermediate School
Mill Creek Intermediate School
Eagle School Intermediate School
Potomack Intermediate School

WYOMING

District: Laramie County School District No.1

Afflerbach Elementary School
Alta Vista Elementary School
Anderson Elementary School
Arp Elementary School
Baggs Elementary School
Buffalo Ridge Elementary School
Cole Elementary School
Davis Elementary School
Dildine Elementary School
Freedom Elementary School
Gilchrist Elementary School
Goins Elementary School
Hebard Elementary School
Henderson Elementary School
Hobbs Elementary School
Jessup Elementary School
Miller Elementary School
Pioneer Park Elementary School

Rossman Elementary School
West Elementary School

District: Laramie County School District No.2

Carpenter Elementary School
Albin Elementary School
Pine Bluffs Elementary School

Other:

Noah Webster Christian Elementary School
St. Mary's Catholic Elementary School

GLOSSARY

ACC: Academic Competitiveness Council.

Academy: See DOD STARBASE academy.

Adjusted data: Data derived from the same academies that were operating last year so that comparisons can be made concerning the internal growth of the program.

After school programs: Center- or school-based programs regularly scheduled at least once each month during after school hours.

Alternative education provider: A public or private school designed for children who do not function well in the traditional school setting. This may include continuation high schools or schools that fall outside the categories of regular, special education or vocational education.

Appropriations: Budget authority provided through the congressional appropriation process that permits federal agencies to incur obligations and to make payments.

At-risk: Being "at-risk" means having one or more family background, or other factors, that have been found to predict a high rate of school failure at some time in the future. This "failure" generally refers to dropping out of high school before graduation but also can mean being retained within a grade from one year to the next. The risk factors include having a mother whose education is less than high school, living in a single-parent family, receiving welfare assistance, and living in a household where the primary language spoken is other than English.

At-risk youth: Students at risk are those who have characteristics that increase their chances of dropping out or falling behind in school. These characteristics may include being from a single-parent household, having an older sibling who dropped out of high school, changing schools two or more times other than the normal progression (e.g., from elementary to middle school), having C's or lower grades, being from a low socio-economic status family, or repeating an earlier grade.

Class: Within the context of a DOD STARBASE academy, a class is a grouping of students. This group may not necessarily have been a homogenous entity prior to DOD STARBASE instruction; it may be a temporary grouping only for the purposes of assembling for the 20-hour minimum period of DOD STARBASE instruction.

Classroom contact hour: A period of 60 minutes, plus or minus 5 minutes, in which a DoD STARBASE academy instructor is actively involved with students or in which a military member is demonstrating, displaying, or teaching an application of math, science, or technology to the students.

Core curriculum: STARBASE core curriculum is comprised of the 13 following areas: 1) Teamwork; 2) Properties and States of Matter; 3) Properties of Air; 4) Bernoulli's Principle; 5) Aircraft Control Surfaces and Components; 6) Four Forces of Flight; 7) Newton's Laws of Motion; 8) Space Exploration; 9) Development, Innovation, and Uses of Technology; 10) Avoiding Substance Abuse; 11) Goal setting 12) Model Rocketry; and 13) Flight Simulation.

Current expenditures: Expenditures for operating STARBASE Academies, excluding capital outlay. These expenditures include such items as salaries for school personnel, fixed charges, student transportation, books and materials, and energy costs.

Current expenditures per pupil: Current expenditures for the STARBASE academies divided by the total number of participating students.

Disability: Physical, mental, or sensory impairments that render major life activities more difficult.

DOD: Department of Defense.

DOD components: Those Department of Defense entities that have established or are in pursuit of establishing a DOD STARBASE academy, including the military departments, defense agencies, and defense field activities.

DOD instruction (DODI): Document that implements policies, responsibilities, and procedures for executing the DOD STARBASE program.

DOD STARBASE academy: A DOD educational entity that seeks to improve knowledge and skills of students in kindergarten through twelfth grade in mathematics, science, and technology, and follows the academy model description in DODI 1025.7. A DOD STARBASE academy is not defined in terms of a geographic location.

DOD STARBASE core curriculum: The fixed course of study referenced in the DODI that must be taught by all DOD STARBASE academies. (See also core curriculum.)

DOD STARBASE program: The DOD STARBASE program is authorized by Title 10 United State Code Section 2193b as a DOD science, math, and technology education improvement program. The Office of the Assistant Secretary of Defense for Reserve Affairs administers policy and oversight; the DOD components execute the program at DOD STARBASE academies. DOD STARBASE is funded by Congress as a Civil Military Program.

DOD STARBASE site: The component of a DOD STARBASE academy that performs instruction. Sites can be co-located at a DOD STARBASE academy or geographically separated from the academy.

DOE: Department of Education.

Driver: Drivers identify a set of related attitudinal clusters for the student population (i.e. when the driver is present, the set of attitudes will most likely be present, or in reverse, when the condition in the list of attitudes are present the target “driver” attitude will also be present).

Elementary school: An elementary/secondary school with one or more grades of K-6 that does not have any grade higher than grade 8.

Elementary/secondary school: Elementary/secondary schools include regular schools (i.e., schools that are part of state and local school systems and private elementary/secondary schools, both religiously affiliated and nonsectarian); alternative schools; vocational education schools; and special education schools. Subcollegiate departments of postsecondary institutions, residential schools for exceptional children, federal schools for American Indians or Alaska Natives and federal schools on military posts and other federal installations are not included in the definition of elementary/secondary school.

Enrollment: The total number of students registered at a DOD STARBASE academy at a given time, generally in the fall of the year.

Expenditures: Charges incurred, whether paid or unpaid, that are presumed to benefit the current fiscal year.

Expenditures per pupil: Charges incurred for a particular period of time divided by a student unit of measure, such as enrollment, average daily attendance, or average daily membership.

Fiscal year: The yearly accounting period for the federal government, which begins on October 1 and ends on the following September 30. The fiscal year is designated by the calendar year in which it ends; for example, fiscal year 2006 begins on October 1, 2005 and ends on September 30, 2006.

Gap score: Difference between pre- and post-scores.

Graduate: An individual who has received formal recognition for the successful completion of a prescribed program of studies.

High school: A secondary school offering the final years of high school work necessary for graduation, usually including grades 10, 11 and 12 (in a 6-3-3 plan) or grades 9, 10, 11, and 12 (in a 6-2-4 plan).

Inner city location: Central section of a city, which is usually older and more densely populated.

Kindergarten: Includes transitional kindergarten, kindergarten, and pre-1st grade students.

Mathematics: A body of related courses concerned with knowledge of measurement, properties, and relations quantities, which can include theoretical or applied studies of arithmetic, algebra, geometry, trigonometry, statistics, and calculus.

MSI: Mathematics and Science Initiative

Median: A number such that half of the data is larger than it and a half-smaller. If the itemized data are listed in order of size, the median is the middle number in the list.

Middle school: A separately organized and administered school between the elementary and senior high schools. When called a “junior high school,” a middle school usually includes grades 7, 8, and 9 (in a 6-3-3 plan) or grades 7 and 8 (in a 6-2-4 plan.) In some districts, however, a middle school spans grades 5 to 8 or grades 6 to 8.

Minority: Any individual or racial/ethnic group that is not categorized as White, Hispanic or Latino.

National school lunch program: Established by President Truman in 1946, the program is a federally assisted meal program operated in public and private nonprofit schools and residential child care centers. To be eligible, a student must be from a household with an income at 185 percent of the poverty level for reduced-price lunch or 130 percent of the poverty level for free lunch.

Not-for-profit organization: A legal entity recognized or chartered by competent state authority and to which the Internal Revenue Service has given status as a 501(c)3 tax-exempt educational organization.

OASD/RA: Office of the Secretary of Defense/Reserve Affairs.

Operational academies: An academy that is processing students.

Participant: The term participant not only includes the DOD STARBASE students, but is utilized to reflect the time, energy, skills, and commitment of institutions and individuals that make the DOD STARBASE program operate successfully. Participants include military service command support units, the local sponsoring base command, community leaders, local community sponsoring committees, school systems, schools, teachers, military service volunteers, DOD STARBASE Board members, staff, and parents. Most participants are voluntary, self-recruiting, and active. Their support and contributions are not limited to a one-time activity, but are usually ongoing and long-term, often covering the life-cycle of the program’s operation.

Percentile (score): A value on a scale of zero to 100 that indicates the percent of a distribution that is equal to or below it.

Pre/Post application: Prior to the start of the program and at the completion of the program.

Program year: The DOD STARBASE program year is the same as the government fiscal year, October 1 – September 30.

Public school: An institution that provides educational services for at least one of grades 1-12 (or comparable upgraded levels), has one or more teachers to give instruction, is located in one or more buildings, receives public funds as primary support, and is operated by an education or chartering agency. Public schools include regular, special education, vocational/technical, alternative, and public charter schools. They also include schools in juvenile detention centers, schools located on military bases and operated by the Department of Defense, and Bureau of Indian Affairs-funded schools operated by local public school districts.

Rural location: The population and territory outside any urbanized area and the urban part of any place with a decennial census population of 2,500 or more.

Salary: The total amount regularly paid or stipulated to be paid to an individual, before deductions, for personal services rendered while on the payroll of a business or organization.

Sample population: A statistically significant representation of the total number of students tested each year.

School district: An education agency at the local level that exists primarily to operate public schools or to contract for public school services.

School year: The 12-month period of time denoting the beginning and ending dates for school accounting purposes, usually from July 1 through June 30.

Science: The body of related course concerned with knowledge of the physical and biological world and with the processes of discovering and validating this knowledge.

Secondary school: An elementary/secondary school with one or more of grades 7-12 that does not have any grade lower than grade 7.

Site: See DOD STARBASE site.

Socio-economic disadvantage: A term used to describe economically deprived, poor, poverty stricken, or disadvantaged individuals or groups. (See also Socio-economic status.)

Socio-economic status: A measure of an individual or family's relative economic and social ranking based on such factors as father's education level, mother's education level, father's occupation, mother's occupation and family income.

STEM: Science, Technology, Engineering, and Math.

Supplemental programs: These are programs that for one reason or another (e.g. below minimum hours, don't cover the 13 core curriculum areas, etc.) do not meet DODI standards. They are more diverse than traditional STARBASE programs, are often conducted during the summer months and are specially designed to reach students that do not fall under the targeted "participant" schools or are in response to requests by members of the community to serve "hard-to-reach" children. Supplemental programs are initiatives that go beyond the normal operation and obligations of the Academy. In many cases, supplemental programs are established in response to the demand created by the popularity and success of the DOD STARBASE program within the community.

Teacher certification: License granted by states for teachers to teach a given subject. In 2002, all states required a bachelor's degree that included subject matter as well as pedagogical studies; all but 10 states required basic skills tests in reading, mathematics, or general knowledge; and 31 states required subject-matter examinations.

Tuition and fees: A payment or charge for instruction or compensation for services, privileges, or the use of equipment, books, or other goods.

DOD STARBASE® Academy Time Line

1991	Michigan, Selfridge*		
1993	California, Sacramento Kansas, Topeka/Wichita Minnesota, St. Paul	North Carolina, Charlotte Oklahoma, Tulsa Oregon, Portland/Klamath Falls	
1994	Florida, Jacksonville Florida, Pensacola Iowa, Johnston**	South Dakota, Sioux Falls Texas, Houston Vermont, South Burlington	Wyoming, Cheyenne
1995	Puerto Rico, Carolina Texas, San Antonio Virginia, Norfolk		
1996	Georgia, Warner Robbins		
1998	California, San Diego		
1999	Louisiana, Barksdale Louisiana, New Orleans South Carolina, Beaufort		
2000	Kansas, Wichita*** Michigan, Detroit Oregon, Klamath Falls***	Pennsylvania, Boswell Vermont, Rutland	
2001	Connecticut, Hartford DC, Washington Georgia, Atlanta Hawaii, Pearl Harbor	Illinois, Great Lakes Maine, Bangor Mississippi, Gulfport Oklahoma, Oklahoma City	South Carolina, Columbia Washington, Silver Dale West Virginia, Charleston
2002	Alaska, Anchorage Mississippi, Meridian Nebraska, Lincoln	Pennsylvania, Pittsburgh Rhode Island, Newport South Dakota, Rapid City	West Virginia, Martinsburg
2003	New Mexico, Kirtland Connecticut, Waterbury		
2004	Alabama, Maxwell North Carolina, Kure Beach Ohio, Wright-Patterson		
2005	Arizona, Tucson		
2006	Alaska, Kenai Maryland, Patuxent River	Texas, Corpus Christi Michigan, Battle Creek****	

* Initial pilot program site with grant from the Kellogg Foundation.

** Iowa was officially terminated at the end of FY02 in accordance with the November 21, 2001 OASD/RA Memorandum.

*** January 2000 OASD/RA identified sites in Kansas and Oregon as separate DOD STARBASE Academies.

**** In 2006, STARBASE One at Selfridge and STARBASE Detroit were combined into one program-STARBASE One/Detroit. A second academy was started at Battle Creek, Michigan.



The illustrations above are some of the designs DOD STARBASE students created while using PTC, a 3-D design and technology program.

DOD

STARBASE[®]

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