



## Exemplary Big6™ Implementations in K-12 Schools December 2001

In December 2001, Big6 Associates published a call for nominees for Big6 Exemplary Schools. We'd like to recognize the following 22 schools for excellence in helping students learn essential information and technology skills using the Big6 approach. These finalists were selected from more than 40 nominations.

### ***Big6 and Information Literacy***

The Big6 is the most widely known and widely used approach to information and technology literacy in the world. Schools that use the Big6 recognize that a central key to student achievement in the 21<sup>st</sup> Century is the ability to cope with information overload. Students must be able to recognize an information need, and find, use, and evaluate information to meet that need. This is information literacy, and the Big6 is the most successful approach to helping students learn

these important skills. The Big6 approach helps students to be successful inside and outside of the classroom—to develop useful and essential life-long skills!

### ***Essential Skills for the 21<sup>st</sup> Century***

Big6 program at each school listed here focuses on ensuring that students learn essential skills of the 21<sup>st</sup> century as outlined by *Information Power* ([http://www.ala.org/aasl/ip\\_nine.html/](http://www.ala.org/aasl/ip_nine.html/)), the AOL/Time Warner and Bertelsmann Foundations (white paper: <http://www.21stcenturyliteracy.org/>), and many state and regional educational standards. The Big6 provides the crucial framework within which students learn 21<sup>st</sup> century literacy skills.

— Mike Eisenberg and Bob Berkowitz, 2002

School Contact Information	Big6 implementation # students, # classes	Subject Areas that use Big6	Depth of Use (projects, reports, papers, or other assignments)	Influence of Big6 on Student Performance	NOTES:
<p><b>Liberty Elem. School</b>  <b>1250 E. Liberty Hill Dr., Fresno, CA 93720</b>  <b>cyndisteele@clovisusd.k12.ca.us</b></p>	<p>100% of our upper grade classes use the Big6. Our primary classes use the <i>Super3</i>.</p>	<p>Our students use the Big6 for any type of research report. Social studies, science, and language arts are the main subject areas. Students who participate in History Day and Science Fair also use the Big6.</p>	<p>Students use the Big6 Organizer throughout their projects. I have adapted Big6 rubrics for all categories of History Day (exhibit, documentary, paper, and performance). The exhibit rubric works well with science projects, too. Students and teachers use the rubrics for all projects to evaluate the process as well as the final product.</p>	<p>The Big6 definitely affects student performance. Students are focused on their topics and know what steps to follow to complete their projects successfully. The teachers who use the rubrics say that students' scores improve on their next projects because students have evaluated their own strengths and weaknesses. By focusing on the process as well as the product, students see what they need to do in order to improve.</p>	
<p><b>Sun Terrace Elementary</b>  <b>2448 Floyd Lane Concord, CA 94520</b>  <b>mwolf45@yahoo.com</b></p>	<p>All fourth and fifth graders are introduced to the Big6 process. Teachers remind students about the Big6 process every time they begin a major project.</p>	<p>It is used with social studies and science reports.</p>	<p>When students come to the library to begin a project I review the Big6 steps and explain how each one will help them do their best.</p>	<p>I have no documentation. More than half of the teachers have changed the way they introduce reports since I have been working with them on the Big6.</p>	
<p><b>Arlington Elementary School #234</b>  <b>3705 W. Rogers Avenue Baltimore, MD 21215</b>  <b>anorton@harford.cc.md.us</b></p>	<p>Critical thinking skills are practiced throughout the curriculum. The students identify a "problem," discuss what options or choices are available, determine some viable sources, extract the necessary information and apply what was learned or</p>	<p>Math, social studies and "integration of information seeking skills" (in the media center) all make use of the Big6.</p> <p>At least three out of five Core areas use the Big6.</p>	<p>This school is a Baltimore City school that prepares the students for the MSPSP test in September.</p> <p>The Big6 methodology is most prominently used in Science investigations, group projects and literature reports.</p>	<p>The school has had a marked improvement in Performance evaluation scores from 1998 to 2000. (MSPAP)</p>	<p>MSPAP  Reading Grade 5  1993 2.9  1994 3.8  1995 10.5  1996 16.9  1997 10.1  1998 9.4  1999 17.7  2000 33.3</p> <p>MSPAP</p>

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	determine the outcomes or validity. Approximately 60 – 75% of the curriculum requires the Big6 concept.				Reading Grade 3 1993 n/a 1994 11.9 1995 10.6 1996 8.7 1997 16.2 1998 20.5 1999 12.6 2000 34.3  The scores for the other Core areas can be seen at: <a href="http://www.msp.msde.state.md.us">www.msp.msde.state.md.us</a>
<b>Portage Central Middle School</b> <b>8305 S. Westnedge Ave.</b> <b>Portage, MI 49002</b> <b>ssims@portageps.org</b>	The Big6 is part of our District's Information Technology Curriculum. All students at Central Middle School are trained in the 6 <sup>th</sup> grade during a week-long research event. Some of the skills are reinforced with 7th graders and all 8th graders receive an additional day or two of training again. Seventh grade science uses information seeking strategies as part of the scientific method and creates their own "question" from research thus focusing on skills 2, 4, 5.		Half of the 6th grade science classes use these skills to prepare presentations on the planets and other topics. The 7th grade language arts classes prepare books and presentations on their cultural heritage with the Big6 emphasis on how to choose and use web sources. Most social studies classes will have skills 1-3 reinforced throughout the year. All 8th grade language arts classes use the Big6 skills 1-5 for a yearlong social issues research investigation. All 7th grade science classes use two different online simulations and students who write description and	Two years ago we presented Big6 skills 1 and 2 in overheads and teacher discussion/lecture to about half the 7th grade and online simulations to the other half. In a short quiz one week later, those who used online simulations scored 12.5% better (on average) than the students who attended the lecture. No further studies were done. Observation has shown that many more students are able to function independently and successfully in the media center since we have been systematically teaching and reinforcing these skills. Each year the 8th grade class seems to	

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			summary essays use the Big6 skills, 2, 3, 4, and 5.	catch on more quickly and efficiently and reduces their library time.	
<p><b>Mankato Area Public Schools</b>  <b>10 Civic Center Plaza, Suite Two,</b>  <b>PO Box 8741</b>  <b>Mankato, MN 56002-8741</b>  <b>djohns1@isd77.k12.mn.us</b></p>	<p>100% of our K-6 students engage in at least two projects each year that use all or most of the Big6 process.</p> <p>Representatives for all elementary grades have attended inservice workshops on the Big6 and work with media specialists to implement the Big6.</p> <p>At the secondary level, our state graduation standards ask for a wide-range of research (inquiry) tasks and we follow a state designed model that ties these tasks to the Big6. About half our secondary students now have used the Big6 to complete some element of the graduation standards. This is an evolving area of our curriculum.</p>	<p>Our projects are imbedded in a variety of curriculum areas. Our technology instruction is integrated within the Big6 process. The state requires that technology is used for project completion in speaking, writing, inquiry and math instructional areas. Social studies, health, and science units all have inquiry standards within them that use the Big6 process. As the elementary curriculum changes, so do the units and projects in which the Big6 is used. Our focus has been to find areas of curricular weakness and improve them through information literacy projects.</p> <p>As an example, one of our high school media specialists writes: "At East, all sophomores are introduced to the Big6-- again-- as part of their required Grad Standard Research Report. Media specialists actually co-</p>	<p>The Big6 is primarily used as a research process to complete projects. We have written an information literacy curriculum with benchmarks for grades K-12. All students must demonstrate that they can meet this benchmark. This curriculum can be found at:  <a href="http://www.isd77.k12.mn.us/resources/infocurr/infolit.html">http://www.isd77.k12.mn.us/resources/infocurr/infolit.html</a>. Our elementary media specialists prepare 4<sup>th</sup> grade students to use the Big6 in a graduation rule project.</p> <p>Our students use a variety of technologies to complete projects. While we still value and teach print resources, we increasingly use digital sources of information. Students also report the results of their problem-solving through multi-media presentations, desktop published items, and webpages. The Big6 is our primary way of</p>	<p>All elementary students are assessed each year on benchmark information literacy standards based on the Big6.</p> <p>We also have anecdotal evidence that supports the Big6's impact on learning. For example, one of our media specialists reports "...teachers tell me that the note taking lesson from the website made a huge difference in the quality of student research and presentations. It saved time, eliminated much plagiarism, and gave them a structure for giving credit to sources."</p> <p>At the secondary level, our teachers and media specialists score graduation rule projects that include the Big6 skills on a 1 to 4 scale. Parents receive project grade reports, and students cannot graduate until all projects are complete. One high school collects</p>	

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		<p>teach with all English 10 teachers when this unit is introduced. The Big6 is the focus of the first one to two weeks of the process and the examples, steps and requirements of the project are tied to specific steps in Big6. At the end of the project, we do an evaluation of the process, both the teaching and the student process as a self-evaluation."</p> <p>He adds: "I have been teaching the Big6 to sophomores for 3 years. This year is the first year that I really notice English teachers using Big6 terminology. It takes time."</p>	making sure that our students use technology in a meaningful way.	data concerning points given to students for meeting deadlines. The teacher and the media specialist assign bonus points to relevant Big6 Steps. The total number of points earned vs. the total points possible helps students evaluate in which steps they had the best time management skills. This information is more useful on steps 1-4, than on 5 and 6, because of the tighter time frames.	
<p><b>Truman High School</b>  <b>3301 S. Noland Rd.</b>  <b>Independence, MO 64055</b>  <b>mjeffers@indep.k12.mo.us</b></p>	Big6 is integrated at the freshman level. In our school of 1700 students, approximately 450 students yearly are exposed to and use Big6 in their classes.	Freshman subject areas include the core (math, science, social studies and language arts), as well as health, foreign language, and industrial tech courses. Some teachers use the Big6 occasionally, while others internalize and regularly utilize the process.	Big6 is used with all types of assignments, from worksheets to research projects to electronic research. The classroom teacher and the library media specialist (LMS) work together to plan appropriate projects. Students often complete the Big6 Assignment Organizer in class at the start of an assignment so that all students are on the "same page" at	A spreadsheet with our pre- and post-survey data is available upon request.	

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			the beginning of the assignment or project. This provides opportunities for clarification and questions. During the work time (if during class time), the LMS is available for process questions, and the classroom teacher is available for content questions. This cooperative teaching style is used primarily with projects rather than simple assignments.		
<b>Kindred Public School</b> <b>55 1st Ave S</b> <b>Kindred, ND 58051</b> <b>vlabounty@mail.kindred.k12.nd.us and</b> <b>phall@mail.kindred.k12.nd.us</b>	<p>In the library, the Big6 process is introduced in grade 2, reviewed and practiced (oral run throughs with every life situations) in grade 3. Students in grade 4 and grade 5 explore topics such as Apartment Pet, Animal Safari, and Museum Display. These research-based units use Big6 to consider all kinds of information resources. Problems are posed and students choose the best resource, locate it, review its features and uses, and find the information needed. Posters are displayed in the library with bulletin board tie-ins; each</p>	<p>We do not ask "Are you doing the Big6?" just as we do not ask "Are you doing technology?" Rather information problem solving, the writing process, and technology are viewed as tools to use in achieving curriculum goals in all subjects. Students and teachers use process methodology many times without specifying Step #4 or saying Task Definition. In the LMC, the Big6 steps 1, 2, 3 help students focus on their reason for being in the library. The librarian uses these steps and this terminology to get a student started on his or her research topic.</p>	<p>Others units of study include presidents, Native American homes, rainforest, and regional people. This first semester, our school has served as a pilot school for phase II of a state initiative, Teaching with Technology (TWT). The requirements include selecting a problem, matching subject area and technology standards, and creating rubrics. Each participant prepares a portfolio and many of these projects will be posted on our web site.</p>	<p>To this point, we have no documentation about the effect on student performance.</p>	

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	<p>student receives a Big6 bookmark sometime during the school year. Grade 6 social studies teacher (invention study) and Grade 6 language arts teacher (whales study) develop their units with a Big6 organizer. As all the students progress through the school system, they are exposed to the Big6 process.</p>				
<p><b>Elaine Wynn Elem. School</b>  <b>5655 Edna Ave.</b>  <b>Las Vegas, NV 89146</b>  <b>marilyn_loop@interact.ccsd.net</b></p>	<p>The Big6 is used in several schools within the Clark County School District. Elaine Wynn ES uses the Big6 program in the library and the librarian instructs teachers how to implement it in the classroom. This program is used with nearly 450 third, fourth and fifth grade students in a school with a population of 900.</p>	<p>The Big6 is integrated with research and project skills through collaboration with classroom teachers and the librarian. The Big6 will be integrated across all curricular areas.</p>	<p>Through implementation we provide our students with skills for everyday organizational skills.</p>	<p>No documentation or data is available at this time.</p>	
<p><b>Bardonia Elem. School</b>  <b>31 Bardonia Road</b>  <b>Bardonia, NY 10954-2157</b>  <b>mfrerich@ccsd.edu</b></p>	<p>Our district adopted the Big6 process two years ago. In our school, I have used it in conjunction with the webquest format to encourage students to retrieve information from a variety of sources. Currently our third grade class is working on a Native</p>				

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	<p>American research project (<a href="http://www.ccsd.edu/bardonia/4thwebquests/nativeamerican/index.htm">http://www.ccsd.edu/bardonia/4thwebquests/nativeamerican/index.htm</a>). First the students were shown some old arrowheads. Then they brainstormed questions about the arrowheads and possible sources of information.</p>				
<p><b>Stetson Middle School</b>  <b>1060 Wilmington Pike</b>  <b>West Chester, PA 19382</b>  <b>lmarkiewicz@wcasd.k12.pa.us</b></p>	<p>All students (~890) learn Big6 research skills model.</p>	<p>Social studies uses Big6 extensively, reinforcing what has been taught in the library (Super3 in 6th grade, Big6 in 7th, 8th grade teachers review Big6 skills with their students.)  Students in 7th grade science classes learn to use Big6 before their first project of the year.</p>	<p>Every internet-based research project begins with the librarian explaining Internet Research Skills based on the Big6. Most library-based research projects include a review of the Big6 steps, and students stay focused by checking which Big6 step they should be working on at the time. (This has worked particularly well with 6<sup>th</sup> grade reading classes doing Ancient Egypt research).</p>	<p>Big6 has been used for two years. Historically, Stetson has excellent assessment scores. The students can utilize information ON THEIR OWN when they follow the model.</p>	
<p><b>Howsman Elem. School</b>  <b>11431 Vance Jackson</b>  <b>San Antonio, TX 78230</b>  <b>lindamailler@nisd.net</b></p>	<p>Students in grades 2 through 5 use the Big6 at Howsman--- approximately 480 out of 750 students.</p>	<p>Grade levels integrate Big6 into units of study in language arts, social studies and science. Classroom teachers collaborate with the librarian and classes visit the library to explore resources that will support their research. Library reference skills are</p>	<p>Big6 is used to extend and expand the students' knowledge of curriculum concepts and is integrated into content areas. Students present projects (generally of the student's choice) as a culmination of the unit.</p>	<p>The Big6 is introduced in second grade. As students progress, their expertise increases and is evident in the quality of their research as well as the quality of their products. Student use of technology is increasing, as well as the ease with which students use</p>	

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		introduced at the point of student need, and students use resources that relate to the area of study (i.e. biographical dictionary when students study human personalities). The librarian teaches students Internet searching skills; she also develops resources on the library web page for every unit of study.		technology. Presentation skills are increasingly polished. Students in grades 3 - 5 show increased scores on state testing (the school is a "TAAS Recognized School"). Howsman received the National Blue Ribbon award for 2000-2001, and the library media program received very favorable comments from the evaluator (who observed a Big6 in action).	
<p><b>Pleasanton Elem. School</b>  <b>831 Stadium Drive</b>  <b>Pleasanton, TX 78064</b>  <b>mpilgrim@pleasanton.isd.tenet.edu</b></p>	<p>In our district, the elementary and middle schools use the Big6. In our junior high and high school, students use another literacy model.</p> <p>On our third and fourth grade campus of approximately 500 students, all fourth grade classes (13) and several third grade classes use the Big6 for library research--about 75% of our students.</p>	<p>Information problem solving is one of the main elements in our state curriculum, the TEKS--Texas Essential Knowledge and Skills. The following is an excerpt from the TEKS for 4th grade language arts:</p> <p><b>(4.13) Reading/inquiry/research.</b> The student inquires and conducts research using a variety of sources. The student is expected to:</p> <p>(A) form and revise questions for investigations, including questions arising from interests and units of study (4-5);</p> <p>(B) use text</p>	<p>When classes do research, the students use Big6 #5 -- Synthesis, to put together a product, report, project, or something else that the teacher and students have preplanned.</p>	<p>We think it does! I consulted with our principal, Ms. Billie Maderer, and with our Instructional Specialist, Mrs. Brenda Samson, to answer this and the other questions on the survey. The Big6 is one of the literacy components we use to improve students' reading skills. This is based on data taken from the Pleasanton ISD Academic Excellence Indicator System Report for 2000-2001. This report shows an increase in reading scores for a cohort group of students in grade three and in grade four. We feel that the Big6 is one factor that contributes</p>	<p>My principal, Ms. Billie Maderer, and our Instructional Specialist, Mrs. Brenda Samson provided a lot of help in answering the questions.</p>

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		<p>organizers, including headings, graphic features, and tables of contents, to locate and organize information (4-8);</p> <p>(C) use multiple sources, including electronic texts, experts, and print resources, to locate information relevant to research questions (4-8);</p> <p>(D) interpret and use graphic sources of information such as maps, graphs, timelines, tables, and diagrams to address research questions (4-5);</p> <p>(E) summarize and organize information from multiple sources by taking notes, outlining ideas, or making charts (4-8);</p> <p>(F) produce research projects and reports in effective formats using visuals to support meaning, as appropriate (4-5);</p> <p>(G) draw conclusions from information gathered from multiple sources (4-8);</p> <p>and</p> <p>(H) use compiled information and knowledge to raise additional, unanswered</p>		to improved student performance.	
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		<p>questions (3-8).            In order to comply with the state curriculum, we use the Big6 as our literacy model of choice. Our gifted/talented teacher uses the model throughout the year with her students. Our teachers use the Big6 for research in science, social studies, and language arts; however, we do not limit its use to these subjects.</p>			
<p><b>Slaton High School</b>  <b>105 N. 20th Street</b>  <b>Slaton, TX 79364</b>  <b>jflusche@slaton.esc17.net</b></p>	<p>On the high school level, I am working with the teachers in all content areas so that (1) we can have an interactive curriculum and (2) the tasks will align with our new curriculum. I offer staff development and we practice by taking a research topic through the Big6 process. I orient the students to what is expected as they progress in the research process, and help them use the computers as well as with the materials. I use my background as a Master Reading Teacher to assist them with synthesizing (Big6 #5) and evaluating (Big6 #6) information.</p>	<p>We believe in curriculum integration and the teachers and I work on this all the time. All content areas use the process.</p>	<p>We go through the Big6 steps. The process begins at the high school because we only have aids on the other campus libraries. The staff members on these campuses have not learned the Big6 process.</p> <p>We have an active technology program and we encourage the use of <i>PowerPoint</i> and other media. We have a NETTV, which will display a computer screen to a large screen. The NETTV includes a DVD/CD player. We aim to meet all learning styles.</p>	<p>The Big6 has an influence for those who use it adequately. When students come into the library to do research, they don't have the panic look on their face if they have gone through the Big6 sequence in another content area.</p> <p>Teachers feel research is much less stressful for students who use of Big6.</p>	

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	All students do research in the library and use the Big6.				
<b>St. Andrews Episcopal HS</b> <b>5901 Southwest Parkway</b> <b>Austin, TX 78735</b> <b>bjansen@standrews.austin.tx.us</b>	<p>All students are introduced to the Big6 through the Assignment Organizer, the Research Paper Organizer, and the Research Assistant.</p> <p><a href="http://www.standrews.austin.tx.us/library/Assignment%20Organizer.htm">http://www.standrews.austin.tx.us/library/Assignment%20Organizer.htm</a></p> <p><a href="http://www.standrews.austin.tx.us/library/ResearchPaperOrganizer.htm">http://www.standrews.austin.tx.us/library/ResearchPaperOrganizer.htm</a></p> <p><a href="http://www.standrews.austin.tx.us/library/ResearchAssistant.htm">http://www.standrews.austin.tx.us/library/ResearchAssistant.htm</a></p>	<p>100% of the students learn to use the Big6 (235 students).</p> <p>Five to six subject areas include the Big6 skills. Big6 is introduced through the 9th grade Humanities classes. I integrate components of it in many other classes including Humanities 10, Humanities 11, physics, Spanish, and Latin.</p>	<p>Big6 is used to help students organize projects, papers, and Web Quests.</p>	<p>Some students report that the Organizers help them plan and stay focused on projects and papers.</p>	
<b>Dixon Middle School</b> <b>750 West 200 North Provo, UT 84601</b> <b>BobG@provo.k12.ut.us</b>	<p>This year all 7th grade students will be on a team where the teachers have been trained on the use of Big6. Next year, possibly all of the students in the school could have the Big6 research method taught to them and used as part of an ongoing research strategy. Not all teachers implement the Big6 research process equally in the classroom, but most do to some degree. Some teachers reserve Big6 for a single research</p>	<p>Since most of the core subject teachers have been trained in using Big6, the Big6 terminology is part of the schema of the curriculum. Most classrooms display a large poster of the Big6 steps. The poster is referred to in the course of daily teaching.</p> <p>In the library there is a Big6 poster as well. The Research Computer Lab, which is part of the library, also has the Big6 research steps posted at the 32</p>	<p>One of the teams has presented their Big6 unit multiple times to multiple state education conferences and at the Big6 national conference in San Jose, CA, 2001. Other teachers are considering presenting their Big6 materials at conferences in the future.</p>	<p>Teachers report that the students more easily shift in to a research mode when the Big6 is an ongoing part of the curriculum. The Big6 skills eventually carry over to other assignments.</p> <p>Research projects are complete and have much higher quality when students receive Big6 instruction.</p>	

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	<p>unit, some implement it as part of any learning gathering process throughout the year. The Big6 research method is part of the State Core of Instruction. As such, all students should be taught it and should have to use it when doing research.</p>	<p>computer carrels in the lab. The library media teacher (LMT) has received training in the use of Big6. When a classroom teacher uses the library or the library computer lab, the LMT works with the classroom teacher and reinforces the Big6 research steps as the two teachers work with students who are doing research projects. On occasion the LMT will prepare handouts and other curriculum materials for the classroom teacher that guide the student in using Big6 to complete his or her research.</p>			
<p><b>Layton High School</b>  <b>440 Lancer Lane</b>  <b>Layton, UT 84041</b>  <b>fmorgan@admin.lhs.d</b>  <b>avis.k12.ut.us</b></p>	<p>All students are taught Big6 skills at the beginning of his or her sophomore year. Skills are reinforced in the context of individual research projects assigned by teachers across the curriculum during the next three years. During the last three years all students have completed at least one project each year, and some students complete multiple projects. Forty-seven teachers assigned projects requiring Big6 skills.</p>	<p>Big6 steps are integrated into most core curriculum areas on a district, and therefore, school level.</p> <p>Forty-seven teachers participated in the 3-year grant that included Big6 research in all curricular departments except the mechanic shops, drama, math and PE.</p> <p>Participating subject areas include health, social studies, English, business, science, psychology, orchestra, family and home Ec.</p>	<p>Most teachers who integrate the Big6 steps use a library-developed or self-developed worksheet or graphic organizer. Students either use an organizer to complete Big6 pre-search steps 1, 2 and 3 or use guide sheets to help them evaluate information for use in Big6 step 4.</p> <p>Students use guide sheets to facilitate the collection of bibliographic information in order to cite sources ethically.</p>	<p>Anecdotal evidence: Teachers report that when they use the Big6 steps on worksheets and graphic organizers, the research process runs much more smoothly. As part of our school grant we documented student improvement based upon written projects graded from a rubric. Over three years we were able to document improvement.</p>	

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	<p>Big6 research skills have been taught to all 95 teachers and the administration. During the last three years most teachers have attended at least one review class. The district is in the process of integrating Big6 into all core curriculums. Big6 is the standard for all of our primary and secondary core library media programs and core standards. My colleague and I taught the Big6 steps to all secondary and elementary librarians as well as junior high and high school social study department heads. The district supervisor taught the Big6 skills to the English department heads.</p>	<p>departments. Many different courses are offered within each department.</p>	<p>Students in classes that use the library receive individual help in using indexes, keywords and search phrasing techniques, and learn how to evaluate sources. A few teachers require evidence that students have performed all Big6 steps while the majority of teachers emphasize various aspects of the Big6 as part of various assignments.</p>		
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<p><b>Sunrise Elementary</b>  <b>255 South 455 East</b>  <b>Smithfield, UT 84335</b>  <b>nancy.bartelt@cache.k12.ut.us</b>  <b>ja@mtwest.net</b></p>	<p>In Utah the Big6 is included in the State Core Curriculum in the School Library/Media area. Cache County School District also includes the Big6 in the District Core Curriculum.</p> <p>At Sunrise Elementary school the Big6 is used extensively with all regular education children. Our library/media teacher provides leadership for this effort. She introduces the concepts, facilitates Big6 projects, and collaborates weekly with classroom teachers to assure understanding and success. Big6 activities are posted in the public areas of the school. This display assures that the children receive daily, gentle reminders of the Big6 steps.</p>	<p>Sunrise is a primary school with approximately 520 children in grades kindergarten through 2<sup>nd</sup> grade. We use steps one and six of the Big6 processes more extensively than the other steps because one and six steps are so appropriate for our young children.</p> <p>Teachers enjoy using Big6 in curriculum integration that involves science and social studies. Each year all children in each grade participate in school-wide Big6 projects – magnets in Kindergarten; weather and water in first grade; and school to careers and a study of Africa in second grade.</p> <p>Our library/media teacher uses Big6 extensively in the library/media center. If one observes her style of teaching, she cannot teach without using the Big6 steps. The children are very comfortable with the Big6 steps and think of the steps when they make decisions.</p>	<p>The Big6 is used extensively in major school projects. During the past 6 years, teachers have grown more confident in using the Big6 skills to teach their students how to make good decisions.</p> <p>Big6 instruction is versatile and can be applied to help children make decisions about a playground activity or using the Big6 evaluation language to help children self assess.</p>	<p>Teachers are very positive about Big6. Our district is requiring our teachers to use rubrics and scoring guides, so our teachers realize that the Big6 provides the tools to help in this area.</p>	
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<p><b>AEII/Decatur Elem. School</b>  <b>7711 43rd Avenue N. E.</b>  <b>Seattle, WA 98115</b>  <b>mcooper@seattleschools.org</b></p>	<p>Our school is a K-5 elementary school. Each school year, students in grades 3-5 use the print and electronic sources in the library to complete two or more in-depth Big6 resource-based projects.</p>	<p>The Big6 is included in all subjects through integrated thematic units.</p> <p>Three years ago, our school adopted a New American Schools reform model: Expeditionary Learning Outward Bound <a href="http://www.elob.org">http://www.elob.org</a>. In the Expeditionary Learning model, most of the subjects in the classroom curriculum are integrated into thematic units called "expeditions". Math is integrated into the expeditions as much as possible, but there are some aspects of the math curriculum taught as "stand-alone" units.</p> <p>Typically the classroom expeditions last 5-9 months. In the expeditions, students and teachers explore issues about topic related to questions. Classroom and library teachers collaborate to design inquiry-based library and information projects that relate to the expeditions.</p>	<p>The Big6 is used for the information-based projects and assignments. When embarking on information-based projects and assignments, classroom teachers typically sign up for the class to use the library daily for ten-fifteen sequential days. Each of these days, the class uses the library for an hour or more. At the beginning of each daily session, the teacher-librarian introduces the project and the "flow" of the project in the context of the Big6. In these introductions, the teacher-librarian and the students review which Big6 steps were covered in previous days, and plan which steps will be covered next.</p>	<p>We believe that the Big6 supports student achievement by establishing a common language and set of strategies that can be used to solve any type of information problem. The Big6 provides a framework for student self-evaluation at all stages of the problem-solving process.</p> <p>The students at our school score quite well on district- and state-mandated standardized tests. We believe that the Big6 and the Big6 projects that the students complete help the students develop skills that are useful in all academic endeavors. We have no documentation tying these Big6 projects directly to test scores. What we do have in terms of documentation, however, are the self-evaluations that students write in the context of Big6 projects.</p>	<p>For each information-based project or assignment, students write self-evaluations (Big6 #6). In these evaluations, students reflect on: what they did well; what they would do differently or better in future projects; and what specifically they learned about processing information.</p> <p>Self-evaluations occur in conjunction with end-of-trimester report cards</p> <p>In previous years, students wrote end-of-year self-evaluations about their progress in learning and using information skills. Beginning this year, students will write these self-evaluations in November, March and June. These self-evaluations are attached to the end-of-trimester report cards.</p> <p>A sample end-of-trimester self-evaluation is available on request.</p>

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<p><b>Nathan Hale</b>  <b>10750 30th Avenue NE</b>  <b>Seattle, WA 98125</b>  <b>nwinard@seattleschools.org</b></p>	<p>The Big6 is introduced in almost all elementary and middle schools in our district. The school teacher-librarians are fortunate to have frequent meetings during which we work with Mike Eisenberg, so we have time to discuss theories and methods with the master.</p>	<p>I teach the Big6 in two basic ways: (1) I introduce the concept during the formal lessons to 9th grade classes; and (2) I review the process each time a group comes to the library to begin a research project. The social studies, language arts, and science teachers use the school library more than other departments. I particularly see evidence that the Big6 influences these subject areas in Task Definition and Evaluation.</p>	<p>I have a wonderful opportunity to meet with the teachers in the early stages of their unit planning. I take advantage of that time to speak with them about the stages of the process. I have noticed this year that more teachers are using similar terminology when they speak about the stages of research.</p>	<p>I'm not sure I can qualify my answer, but I am certain that the process helps many students--especially students who may need material presented in a structured manner in order to internalize it.</p>	
<p><b>H.M. Jackson High School</b>  <b>1508 13th Street Mill Creek, WA 98012</b>  <b>ron_sidenquist@everett.wednet.edu</b></p>	<p>In my classes all students use the Big6 approach for research and as a general guiding tenet for problem resolution. I use it as the guide to the scientific method and use it for all types of problems.</p>	<p>I use Big6 for physics, chemistry and earth science</p>	<p>We use portions of Big6 for all assignments and the total program for all research assignments. I even have begun to use Big6 criteria for lab assessment.</p>	<p>Big6 definitely has provided the framework for all student-designed work in my class. The Big6 has made the students' research papers much more manageable. It provides a "proper pattern of attack" to get students started and a method of self-assessment at the end of the project. I now use Big6 as the framework for term projects in all three disciplines of science that I teach.</p>	

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<p><b>Whitman Middle School</b>  <b>9201 15th Avenue NW</b>  <b>Seattle, WA</b></p> <p><b>G.W. Kimball Elem. School</b>  <b>3200 23rd Ave. South</b>  <b>Seattle, WA</b></p> <p><b>Igrosvenor@earthlink.net &amp; bnielsen@seattleschools.org &amp; cgustafson@seattleschools.org</b></p>	<p>All libraries in Seattle Public Schools have been working with the Big6 Framework for the past six years. Big6 strategies and Project Zero's "Teaching for Understanding" were incorporated in the development of curricula for an after school program. Kimball school has begun an all-school emphasis this past year. In August 2001, the district's library supervisor was asked to speak at our pathway's ATLAS Summer Institute. In July 2001 the teacher/librarian attended the Big6 Conference in San Jose, CA and in August, fifteen teachers in grades 1-5, Special Ed and Comp Ed, and Technology specialist attended an all-day workshop presented by Mike Eisenberg. There has also been in-house professional development offered by the librarian. Approximately 70% of our 511 students have at least been exposed to Big6 curriculum. Big6 has become an</p>	<p>Our plan is to use Big6 strategies across the curriculum with special emphasis on research and performance assessment. Social studies, science and mathematics seem the most natural places to begin using the Big6 problem-solving approach, but familiarization with a standard vocabulary crosses all disciplines. Since this is our first year into the all-school model, we have not gone to great depth.</p> <p>---</p> <p>All library lessons are taught within the context of subject area curricula. I've probably used it with every subject area at one point or another in the library, but the fewest in math.</p> <p>-- Chris Gustafson</p>	<p>In primary grades, the Super3 approach is used with emphasis on strategies used before, during and after an assignment. This blends well with our ATLAS study group approach that stresses students should evaluate their own work prior to turning it in, and the professional development strategy of sharing student work with peers. In the intermediate grades, teachers assist students to develop their own essential questions around a particular unit and demonstrate how a project is completed using the Big6 strategies.</p> <p>---</p> <p>One of my goals is to help students understand that the Big6 is not just for big projects; it's just as applicable if they're trying to decide what movie to see or where to go on vacation. And of course, it is used for major projects from science investigations to travel brochures.--  Chris Gustafson</p>	<p>The Big6 positively affects student performance by helping the teacher and students to break down the problem-solving process. The Big6 process enables all parties to see just where instruction is lacking or where more emphasis is needed. While it is difficult to tell exactly what factors affect achievement, both WASL (state test) and DWA (Direct Writing Assessment) scores continue to improve. One teacher suggested we need to spend more time teaching students to cite sources. This is a new expectation for our fifth graders, but several strategies were brainstormed that would provide students with more opportunities to practice the skill.</p> <p>---</p> <p>The biggest plus of the Big6 is that it helps students succeed in answering their questions. If I've taught the Big6 well, students move smoothly through the process of formulating a question to finding an</p>	
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	<p>integral part of our all-school Academic Achievement Plan.</p> <p>---</p> <p>It's the basis of all the teaching I do on research skills. I give new teachers information on Big6 at the start of every year, and huge posters in the library remind everyone of the Big6. I'm using them whenever I teach a research lesson, though I may not explicitly refer to them by number. -- Chris Gustafson</p>			<p>answer, with no frustrating gaps, or floundering and not knowing what to do next. -- Chris Gustafson</p>	
<p><b>Neveh Channah Torah HS for Girls Alon Shvut, Etzion Bloc, Israel</b>  <b>reuw@nevnet.etzion.k12.il</b></p>	<p>All 9th &amp; 10th Grade students undergo an extensive Information Literacy Program (50% of all students at one time.) 9th grade - 4hrs. per week; 10th Grade - 2 hrs. per week.</p> <p>These students carry out Big6 projects in subjects all across the curriculum.</p> <p>11th &amp; 12th Grade students all participate in an interdisciplinary program that utilizes alternative evaluation techniques as part of grading. These are carried out according to</p>	<p>The following subject areas use Big6: Bible, Talmud, history, geography, biology, chemistry, art, citizenship, Hebrew Language, English, ecology.</p> <p>Computer applications are an integral aspect of the Big6 program: Windows, Word, Excel, Powerpoint, Paint Shop Pro, MS Explorer, Outlook Express, Scanning software, Sapir (School Library catalogue) Internet &amp; CD-ROM search engines and indexes.</p>	<p>The Information Literacy program for 9-10th grades teaches the students how to use each of the Big6 steps in small specific assignments (ex. make a PowerPoint Presentation to tell about you, your family, your hobbies and friends, etc. The skills emphasized are Use of Information (Big6 #4), Synthesis (Big6 #5) and Evaluation (Big6 #6). As students learn and practice the Big6, more skills are used in complete projects.</p>	<p>We haven't carried out quantitative studies, however a number of our experienced teachers have remarked that students have done excellent work with the Big6. For example, we assigned an advanced group written report on different foci of Medieval Jewish History at the end of 10th grade. The students used all they had learned about the Big6 to produce excellent projects.</p> <p>Student groups have done PowerPoint presentations on Jerusalem</p>	<p>See the following articles for more detailed discussion.</p> <p><a href="http://www.nevnet.etzion.k12.il/iw97.htm">http://www.nevnet.etzion.k12.il/iw97.htm</a></p> <p><a href="http://www.big6.com/e-newsletter/archives/winter00/israel.html">http://www.big6.com/e-newsletter/archives/winter00/israel.html</a></p> <p><a href="http://www.big6.com/e-newsletter/archives/spring01/werber.shtml">http://www.big6.com/e-newsletter/archives/spring01/werber.shtml</a></p>

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	<p>the Big6.</p> <p>Between 10-15% of 11th grade students do an extensive written research project in one subject instead of doing the usual standardized National matriculation examination.</p>			<p>Neighborhoods, The Wars of Israel, Waterways and Aqueducts of Ancient &amp; Modern Israel.</p>	
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