Your librarian can assist by teaching the data gathering process and assisting students with gathering data.

Your librarian is an information specialist who can help you by providing access to quality resources from printed books to personal conversations with experts.

Your librarian is a certified teacher who has a repertoire of successful strategies with a wide variety of teachers and students. The librarian has an overview of curriculum sequencing and can make connections between various subject areas thereby providing a unique perspective on educational strategies and their implementation.

Your library provides a different environment, a wealth of information in a variety of formats, and a variety of tools to stimulate students.

Your librarian is an experienced user of technology and can both provide assistance in using technology and help with the integration of technology into the instructional process.

Identify with any of these questions?

Do you need more time to teach a specific SOL?

Are resources to support this SOL scarce or inadequate?

Would you benefit from the help of another professional teacher?

Do your students lack motivation?

Would technology help?

Then your Librarian has an answer for you!

For additional resources visit our Web site at http://www.pen.k12.va.us
Dear Social Studies Teacher,

Are you lost in time? Librarians are the compasses to help you chart your way through the maze of the Social Studies curriculum. We provide instruction and guidance on the use of the library and resources available to you and your students. We teach how to locate appropriate sources, distinguish between historical facts and historical interpretations, and use materials to select and defend positions, solutions, and decisions.

Lessons for yesterday, today and tomorrow are available when you team with your librarian.

HISTORY
Don’t Get Lost in the Past
To understand the future, students must know the past. Let libraries provide the crucial link between yesterday, today, and tomorrow. Librarians can teach students to use timelines, almanacs, maps, encyclopedias and history books to not only explore chronological facts but also to uncover the cause and effects of people and occurrences. The library’s biography collection can introduce students to those individuals who actions shaped the past and still influence us today, while historical fiction novels provide action-filled stories that bring the past to life. Diaries, journals, letters, and documents offer first hand accounts of events. Librarians can work with teachers to enliven classroom instruction and make curricular connections by using videos, slides, art prints, music, software, and web sites.

SOCIAL STUDIES
Where in the World Is____? The library’s atlas and globe collection provides a variety of sources to view the world using maps, charts, pictures, and tables for geography instruction. Our book collection provides information on world cultures and environments and facilitates cross-curricular connections. We can instruct your students on the use of technology, how to access and assess information gathered from electronic sources, such as databases, CD-ROMs, and the Internet.

CIVICS
Need to form a more perfect citizen? Our collection of newspapers and magazines provide up to date information and analysis of global politics and government. Interactive technology, such as CU-SeeMe and Internet Relay Chat, allow your students to communicate with peers throughout the state, nation, and world and explore the roles students play as citizens in our society. Web sites and databases allow students to follow the progress of legislation from bills to laws and to learn how legislation will relate to real life circumstances. Librarians can teach students to evaluate information and form their own opinions on issues to become active members of society and informed future voters.

ECONOMICS
Buy, sell or trade? In the library students can learn everything from basic economics to the nuances of supply and demand systems to (the workings of) currency and its affect on world markets to following the stock markets. Using a variety of resources, librarians can reinforce basic tenets of economics and help students grasp ideas of a rapidly changing global market. Libraries contain almanacs filled with charts and graphs, newspapers and web sites to provide information and analysis, and nonfiction materials on countries and economic concepts.

Areas of the SOL where we can assist you

Geography
Atlases and globes
Fiction and nonfiction reading material
Variety of sources with charts & graphs

History
Primary sources (diaries, letters, photographs, and virtual field trips)
Literature connections to the curriculum through historical fiction and biographies
Timelines

Civics & Economics
Newspapers and magazines
Access to government documents and statistics
Real life applications

Information Processing
Provide and teach how to locate information in print & electronic sources
Locate and evaluate web sites
Make use of appropriate software
Teach research skills
Teach evaluation of sources for bias, relevancy, and fact from opinion
Teach how to use technology to gain, communicate, and present information.
Dear English Teacher,

Just down the hall in the library, find a wealth of books, software, databases, and equipment that support English instruction. Collaboration with librarians will implement core practices and design new approaches to teaching and learning. Make efficient use of instructional time and library information to help students excel in the language arts, reading, writing, and research. In the library, the state technology requirements of students and teachers are achieved.

**Practice your test taking skills and learn how students would benefit from the teaming of an English teacher and a Librarian**

**PART A:**

Be sure to answer all questions to the best of your ability before moving on to the next part of the exam.

1. **Ibuprofen: SOL headache as**
   a) apples : Johnny Appleseed
   b) librarian : teacher
   c) pneumatic drill : hammer
   d) peanut butter : jelly

   The correct answer is b) librarian : teacher.

   Librarians relieve teacher's stress and worry about student achievement. Librarians have the information, the technology solutions, and the teaching experience to support curriculum standards.

2. **Ms. Spelling wants her students to create a brochure about their favorite hero. She and the librarian organize a class visit where students research, write and produce their brochure. They are able to use all the library’s varied resources. This a good example of**

   a) teacher/librarian collaboration
   b) technology integration
   c) synthesis of information
   d) all of the above

   The correct answer is d. all of the above.

   Working together, the teacher and librarian provide meaningful instruction. Students utilize higher levels of thinking in their research and summarize information by producing a brochure using technology.

3. **Mr. Rogers is overheard in the teacher's workroom saying, “With all my responsibilities, I know I could save _____ if I work with the librarian.”**

   a) time
   b) technology
   c) money
   d) paper

   The correct answer is a) time.

   Teaching responsibilities like technology integration, test mastery, student motivation and instructional resources can be shared with the librarian. The librarian will have the resources and methods to help you and the students achieve success.

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**Areas of the SOL where we can assist you**

**Oral Language**
- Communication by formulating reference questions
- Oral presentation using appropriate visuals
- Storytelling by the librarian
- Following instructions through use of databases
- Listening and responding to a variety of library media
- Vocabulary building with dictionary activities

**Reading/Literature**
- Contemporary and classic authors in books
- Interpretation of ideas from current events
- Variety of genres and literary forms in books and other sources
- Encouraging a lifelong love of reading

**Writing**
- Persuasive writing by analyzing letters to the editor
- Drafting and revising using style manuals
- Technology skills using databases and software

**Research**
- Information from a variety of primary sources
- Documentation and citation of information
- Validity of information gathered from the Internet
- Organization of information
Dear Mathematics Teacher,

Are you looking for a way to make mathematics come alive for your students? Are you tired of answering, “why do we have to learn this?” Your library is an invaluable resource to show the real life connection between math skills and daily life. The library brings math to life and helps to explain the concepts studied in your curriculum. We help you find examples of mathematics in daily life using the vocabulary that you are teaching your students (dollar signs, percents, addition, decimals, fractions). We are a source of many supplemental materials, web sites, manipulatives AND if we don’t have it, we will find it for you!

Looking for a different angle for teaching mathematics?

Tired of creating examples of how databases are used? Did you know that the card catalog and CD-ROM encyclopedias are really just databases? Did you realize that Boolean logic is the technique used in effective searching on the Internet?

We have video cameras, digital cameras available for your use and we will be happy to work with you on integrating these technologies into your classroom.

Use the almanac to create and solve word problems—we would be happy to teach your class a lesson on almanacs to reinforce your lessons on interpreting graphs, tables, and charts.

Looking for examples of geometric shapes—architecture books, art books, we will be happy to gather these resources for you.

Looking for information about an obscure, yet famous mathematician? Let us check our reference sources and biographies for you.

Need multiple copies or various examples of a concept? We can pull our resources to use in your classroom.

We can record instructional television programs for you to use later, or at your convenience - we also have the ITV listings and program guides.

Looking for examples of fractions—recipe books, craft books, home repair books, landscaping, architecture books.

Areas of the SOL where we can assist you

Literature connections to mathematics—stories, counting books, patterns,

- Book resources that supplement the classroom instruction of math skills
- Source of catalogs to use to make math realistic
- Source of periodicals to show math in real life
- Biographies of famous mathematicians
- Almanacs as a source of data

Newspapers

- A source for graphs
- Examples of fractions and percentages
- Measurements, distance and mapping skills
- Charting changes is temperature
- Statistics and probability problems

Web sites that guarantee student success in an efficient manner

Software for instruction

Real Life Applications of Mathematics
Dear Science Teacher,

What does the library have to do with science? Why should a science teacher ever talk to the librarian? Can a science class truly derive any benefit from a session in the library? How? The library has sources of information from picture books dealing with size and shape of objects to journals dealing with the latest in scientific research. There are online web sites to provide sources as simple as encyclopedias, as complex as dissection, or as current as your subject demands. The librarian is ready to help students with classification, organization strategies, investigative techniques, selection of appropriate sources, and the evaluation of sources and data.

The Scientific Method of Using the Library:

Step 1: State the problem

Students need to investigate and understand the science Standards of Learning for their grade level.

Step 2: Research the problem

There are a variety of places to teach the SOL, including the classroom, the science lab, the computer lab, the library media center, or the students could be taken on a field trip. A change in environment often stimulates learning. The resources of the science lab and the computer lab are limited. Field trips are often expensive, time consuming, and disruptive. Observation has shown that classes that use a variety of resources understand the science SOL.

Step 3: Hypothesis

Use of library media center resources can help students excel in their investigation and understanding of the science Standards of Learning.

Step 4: Test the hypothesis

Experimental Design - The students visit the library media center and use a variety of print, non-print and electronic resources, including: almanacs, atlases, maps, globes, encyclopedias, non-fiction books, magazines, newspapers, journals, websites, application software and library staff. The teacher/librarian teaches the research process; the librarian teaches advanced (Boolean) search strategies; the teacher/librarian assists students with application software. The students develop a product that shows investigation and understanding of science Standards of Learning. The teacher observes and evaluates the students’ progress and products.

Collect Data - When students came to the library media center, they each used three or more resources. Students used application software such as spreadsheets, word processors, databases, and graphic or presentation programs to communicate their understanding of the science SOL. Having a second certified professional available allows more students to be assisted. Use of the research process provided more coverage of the SOL than could have been covered with other strategies. Students produced a variety of products that demonstrated a high level of investigative techniques and showed understanding of the science SOL.

Step 5: Conclusion

By utilizing advanced (Boolean) search strategies, a logical research process, and a variety of library resources, students can achieve a high level of learning in the science Standards of Learning.

Areas of the SOL where we can assist you

Literature connections to science
- Picture books on shapes, color, weather, etc.
- Biographies of famous scientists and inventors
- Books to investigate and understand science topics.
- Almanacs to gather and analyze data from tables
- Specialized atlases
- Science fiction books to explore possibilities of the future

Newspapers and magazines
- Magazines to find background information and to validate an hypothesis
- Newspapers to gather data and current events
- Journals to conduct literature reviews

Web sites
- Specific web sites to conduct experiments and investigations

Software for instruction
- Videos, laser disks, and CDs
- Spreadsheets and databases to store and manipulate data and to create graphs
- Presentation software to design multimedia projects

Real life applications
- Dewey Decimal System to teach classification concepts