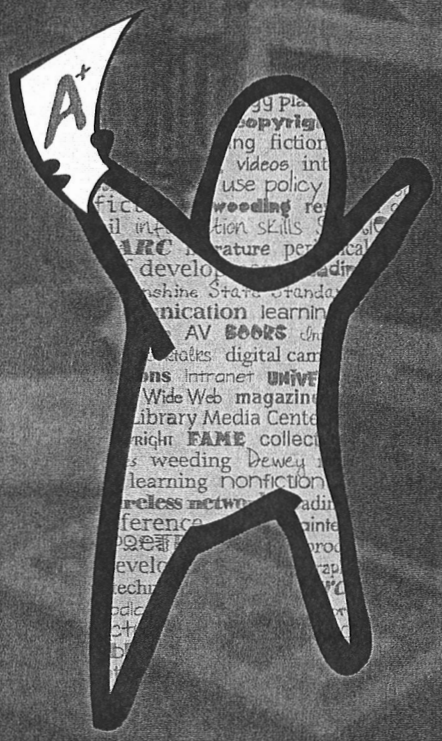
Making the Grade

The Status of School Library Media Centers in the Sunshine State and How They Contribute to Student Achievement



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Can You Make the Grade?

Take this quiz to see what you know about Florida's K–12 school library media programs!

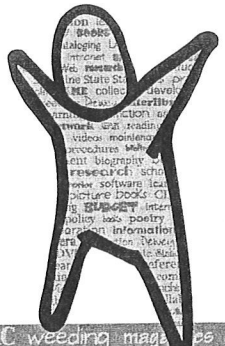
1. What portion of Florida high schools have at least one university-trained, certified school library media specialist?
   a. 78%
   b. 88%
   c. 98%
   d. 100%

2. What percentage of Florida's K–12 school library media specialists are in the DROP program, indicating that they will retire in the next few years?
   a. 6%
   b. 13%
   c. 18%
   d. 25%

3. Florida's K–12 elementary school library staff spend ¼ the time planning with teachers as they spend on
   a. shelving books
   b. assisting students
   c. ordering and cataloging materials
   d. non-media related duties such as bus duty, lunchroom monitoring, etc.

4. 83% of school library media specialists say they use SUNLINK on a regular basis. How many teachers use SUNLINK?
   a. 15%
   b. 29%
   c. 54%
   d. 87%

5. In schools with university-trained, certified library media specialists
   a. There are more books per student
   b. There are more computers in the library media center per 100 students
   c. Students visit the library media center more often
   d. Circulation is higher
   e. All of the above



6. In Florida's schools, FCAT scores are higher where:
   a. The total number of paid staff is higher and there are more hours per week of staffing
   b. Circulation is higher
   c. Schools have access to the library media center catalog through the school's computer network
   d. There are more books and videos
   e. There are more computers in the library media center and those computers provide Internet access
   f. All of the above

7. Florida's "A" elementary schools
   a. Are more likely to have an information skills curriculum in place
   b. Are more likely to have a school website
   c. Are more likely to have a main web page or media center web page that links to SUNLINK
   d. Have significantly larger book collections and subscribe to more periodicals
   e. All of the above

8. True or False: The more students with disabilities a school has, the less technology to accommodate their needs is found in the library media center.

9. True or False: Most school library media specialists feel their collections are thoroughly weeded.

10. True or False: Florida schools spend less per pupil on books and non-print resources each year than the national averages.

11. True or False: Most school library media specialists must depend upon bookfairs, candy sales, profits from a school store and/or PTAs, grants and gifts to begin to meet the needs of their students and teachers.

Answers on page 12

Making the Grade:
The Florida School Library Media Study

What is the status of collections, services, staff and programs in Florida's K–12 public school library media centers? Do school library media programs and school library media specialists contribute to student achievement in today's assessment-driven learning environments? And if so, what factors are most likely to contribute to student success?

The purpose of the Florida School Library Media Study was 1) to examine the library media resources, services and usage to capture an accurate picture of the status of Florida's school library media programs and 2) to determine the role of media programs and media specialists on student achievement. The study was designed to replicate and expand existing studies in other states that have examined the role library media programs play in today's teaching and learning environments and to examine several variables and relationships unique to Florida's K–12 public schools.

All Florida K–12 public schools received a survey form early in 2002. 1715 usable surveys were returned (60%). Additional data were received from the Florida Department of Education related to test scores, student population, school budget, qualifications of instructional staff, and other demographic data.

What was learned?

What is the status of Florida's school library media specialists, programs and resources?

School Library Media Centers and School Library Media Specialists

Most Florida K–12 public schools have a library media center, but only 84% have a university-trained, certified library media specialist. 98% of high schools have university-trained, certified library media specialists, but only 80% of elementary schools do.

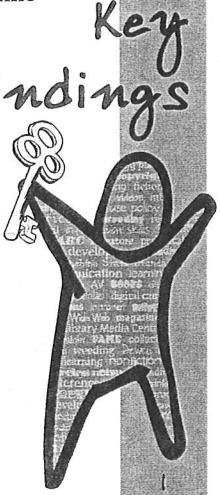
62% of elementary library media specialists have a master's degree or higher with certification in educational media compared with 75% at the middle school and 84% at the high school level.

Schools at all levels with a university-trained, certified library media specialist and better staffing (more than 60 hours per week) have higher FCAT scores.

In Florida's public school schools where there is a university-trained, certified library media specialist:

- There are more total library staff hours per week.
- There are more books per student.
- There are more subscriptions to newspapers and periodicals.
- There are more computers in the library media center per 100 students.
- There are more computers in the school per 100 students.
- The library media budget per student is higher.
- Students visit the library media center more often.
- Circulation is higher.

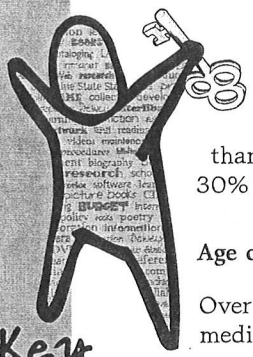
Each of these contributes to higher academic achievement as measured by the FCAT.



Professional Activities

Over 75% of school library media specialists are active members of a local professional association. 61% are members of FAME, the state professional association for school library media specialists. 16% report no professional memberships.

About ½ of all Florida library media specialists attend the annual FAME conference or the Florida Educational Technology Conference (FETC), two



Key Findings

primary professional development opportunities for Florida's school library media specialists. More than 30% attend both conferences, but 30% attend neither conference.

Age of the Profession

Over 25% of Florida school library media specialists are in the DROP program, indicating they will retire within the next several years.

Over 40% of high school library media specialists are in DROP.

Staff Activities

Library media specialists at the middle and high school level are twice as likely to report flexible access programs as are those in elementary schools.

School library media staff spend about ⅕ of their time each week on teaching and learning activities, ⅖ on information access and delivery, and ⅖ on program administration.

Elementary library media specialists spend ⅔ of the time on teaching and learning activities as their middle and high school counterparts. Elementary library media staff also report spending 4 times as much time on duties unrelated to the school library media program such as bus duty and lunchroom monitoring as they do in planning with teachers.

Performing basic library media center activities takes about ½ of a library media staff's time each week. Since most tasks in this area (checking books in and out, reshelving books, barcoding, etc.) might be performed by paraprofessionals or volunteers where the media center is adequately staffed, it is an area from which time might be reallocated to allow more collaborative efforts with teachers or more instructional activities with students.

Elementary school library media specialists spend twice as much time providing reading incentive programs as high school library media specialists, but only ½ the time in electronic program administration.

While managing library media technology consumes a great deal of time at the elementary level, larger numbers of students, school staff, and technology result in middle school library media staff reporting 50% more time on this task, and high school library media staff reporting 100% more time working with technology in the school library media center than elementary library media staff.

Policies and Procedures

Less than ½ of school library media specialists prepare and submit an annual budget.

Only 57% of schools report having a specific information skills curriculum. 46% of those report that information skills are integrated throughout the curriculum and taught with other teachers. However, 41% of those who said they had an information skills curriculum did not answer the question about how information literacy skills are taught.

School library media centers contain huge amounts of non-print resources, digital information and a wide variety of technologies, yet are not consistently included in school technology plans.

Fewer schools have collection development policies than copyright policies.

Over 90% of school library media specialists feel the library media program is very important to school reading programs. Of those who do not feel it is important, over 80% are not certified in educational media.

Library Media Collections and Technology Resources

Over 83% of Florida's K–12 schools are SUNLINK schools and 83% say they use the state-funded union database and its resources in a wide variety of ways including technical processing and interlibrary loans. Only 29% of teachers and 27% of students use SUNLINK on a regular basis.

There is a negative correlation between the number of students with disabilities in a school and the number of computers

in a school library media center with accommodations for students with special needs, meaning many students with disabilities are not able to fully benefit from the school library media center and its resources.

Most schools have automated circulation systems; fewer have automated catalog systems. Less than 40% report having a catalog that is Internet accessible. Less than ½ of Florida schools have a district catalog that is Internet accessible. Schools report using SUNLINK as their school and district automated catalogs where they do not have their own, a cost-effective solution.

Other than computers, the most common technologies in the library media center are telephones, CD-ROM drives, and email for school library media specialists, with over 90% of schools reporting these are available. Least common are newer technologies such as keyboarding devices (19%), handheld computers (12%) and MP3 players (6%).

Almost 80% of all schools have a school website. However, only about 42% of those link to a school library media center page or resources. Only 35% of school library media specialists report web pages designed and/or maintained by the school library media specialist. Less than 20% of school web pages or library media center pages link to SUNLINK.

Less than ⅓ of school library media specialists feel their collections are thoroughly weeded.

Florida schools spend less than the national average for books each year and far less per pupil. Per pupil spending for books is only ¼ to ⅓ the cost of a new book. The result is that each student can expect a new library book only every 3 to 4 years.

Florida purchases more books and weeds more books annually than the national average. However, while Florida has more books per school than the national average, it has far less books per student, and books per student are predictors of academic achievement.

Almost 60% of books in Florida school library media centers have publication dates before 1990. The average age of an item in Florida school library media collections is 1983.

Florida schools spend a small fraction of the national average on software, Web-resources, and other non-print resources.

Most school library media specialists must depend upon bookfairs, candy sales, profits from a school store and/or PTAs, grants and gifts to begin to meet the needs of their students and teachers; approximately 45% of their budgets are from these "extra" sources. Local and state budgets are simply not adequate.

District Library Media Supervisors

The presence of a district level school library media supervisor or coordinator makes a significant difference in collections, technology, budgets, staffing, policies, and activities of building level school library media programs and therefore on student achievement.

Professional Development

The study indicates that Florida's school library media specialists may benefit from professional development opportunities in a number of areas: budgeting; information skills curriculum, instruction and integration; time management and task delegation; flexible access benefits and methods; collection development policies and procedures; weeding; distance learning technologies and opportunities; new and emerging technologies; research-based reading strategies and Florida reading initiatives; developing and maintaining school library media center web pages and resources; working with school webmasters; SUNLINK (for non-SUNLINK schools) and how SUNLINK can be used (for all schools); teaching students and teachers to use SUNLINK; working with technology coordinators; technology for special needs and universal access; leadership and public relations.

How do school library media programs, resources and services contribute to student achievement?

Elementary Schools

In elementary schools where library media programs are staffed 60 hours per week or more, there is a 9% improvement in test scores over those staffed less than 60 hours.

In elementary schools where library media programs are staffed 80 hours per week or more, there is a 8.3% improvement in test scores over those staffed less than 80 hours.

Test scores are more than 20% higher in elementary schools where library media staffing is at 80 hours per week or more than in schools with less than 60 hours per week.

Among the higher scoring elementary schools:

- 63.2% of elementary schools with 80+ hours per wek (HPW) of library media staffing scored at grade level or better.
- 56.4% of elementary schools with 60–79 HPW of library staffing scored at grade level or better.
- 42.6% of elementary schools with less than 60 HPW of library staffing scored at grade level or better.

In Florida's elementary schools, FCAT scores are higher where:

- There is a certified, university-trained library media specialist.
- The total number of paid staff is higher and there are more hours per week of staffing.
- Circulation is higher.
- Schools have access to the library media center catalog through the school's computer network.
- There are more books and videos.
- There are more computers in the library media center and those computers provide Internet access.
- There are more non-print materials purchased from the school budget.

In elementary schools that scored in the top one-third on the FCAT:

- Library media centers were staffed for at least 10% more hours per week.
- Circulation was 45% higher.
- There were 23% more videos in the collection.
- 41% more was spent for non-print materials.

"Our volunteer program is wonderful! We could not do the things we do without our volunteers."

Middle Schools

In middle schools where library media programs are staffed 60 hours per week or more, there is a 3.3% improvement in test scores over those staffed less than 60 hours.

In middle schools where library media programs are staffed 80 hours per week or more, there is a 4.5% improvement in test scores over those staffed less than 80 hours.

At the middle school level, in higher scoring schools 53.9% of middle schools with more than 80 HPW of library staffing scored at grade level or better while only 46.1% passed in schools with poorer staffing.

In the middle schools, FCAT scores are higher where:

- There are more certified, university-trained school library media specialists and the library media center is staffed more hours per week.
- More materials are circulated.
- There are more videos in the collection and more reference materials on CD-ROM.

- More computers in the library media center provide access to the Internet.

In middle schools that scored in the top one-third on the FCAT:

- Library media centers were staffed an average of 17% more hours per week.
- There were 34.8% more videos in the collection.

"Last year when I weeded 2000 books, I received money from school and PTA funds to purchase 2500 new books without even asking. We and what we do in the library information center are respected as vital parts of this school."

High Schools

High schools showed even larger differences in test scores where there was better staffing:

- 55.1% of students passed the FCAT reading test in higher scoring schools with library media staffing of 80 HPW or more, while only 37% passed in schools with poorer staffing.

In high schools where library media programs are staffed 60 hours per week or more, there is a 22.2% improvement in test scores over those staffed less than 60 hours.

In high schools where library media programs are staffed 80 hours per week or more, there is a 20% improvement in test scores over those staffed less than 80 hours.

In Florida high schools, FCAT scores are higher where:

- The library media center is staffed more hours per week.
- There are more certified library media specialists.
- There are more paid library media staff members.
- There are more interlibrary loans provided to other schools in the district.
- There are more visits to the library media center to use technology.
- There are more networked computers in the school and more computers with Internet access.
- There are more computers in the library media center and more computers have Internet access.

In high schools scoring in the top-third on the FCAT:

- Certified, university-trained library media specialists provided an average of 20% more hours of professional staffing per week.
- There are 34% more paid library media staff and 31% more hours of total staffing per week.
- There are 66% more interlibrary loans provided to other schools in the district.
- There are 50% more computers in the library media center and 42% more library media center computers were connected to the Internet.

Both high school FCAT and ACT scores are significantly higher where there is increased library usage (visits by individuals to the library media center).

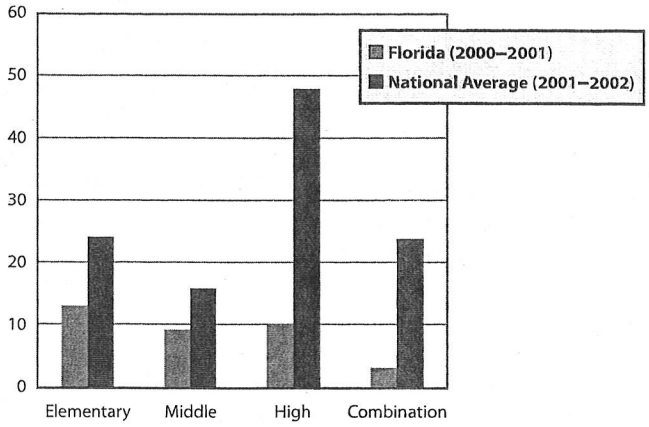
Library usage at the high school level increases with:

- The number of certified, university-trained library media specialist hours per student.
- The total library staff hours per student.
- The number of networked school computers per student.
- The number of books per student.
- The number of subscriptions, videos and software packages per student.
- The library expenditures per student.

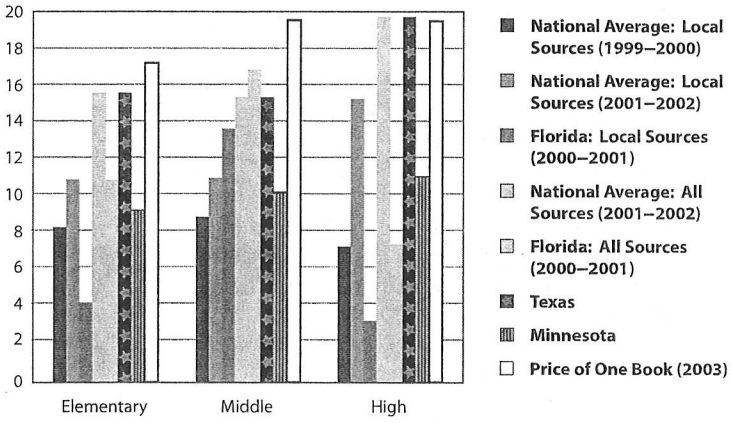
Strong high school library media programs—those with more certified, university-trained staff and staff hours, technology, and books—have more usage by high schools students, and increased usage leads to higher academic achievement as measured by both the FCAT and the ACT.

"SUNLINK has been a way for this media center to connect with the community. Our resources have multiplied!"

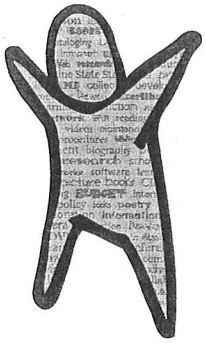
Book Collections per Pupil in Florida School Library Media Centers Compared with National Averages



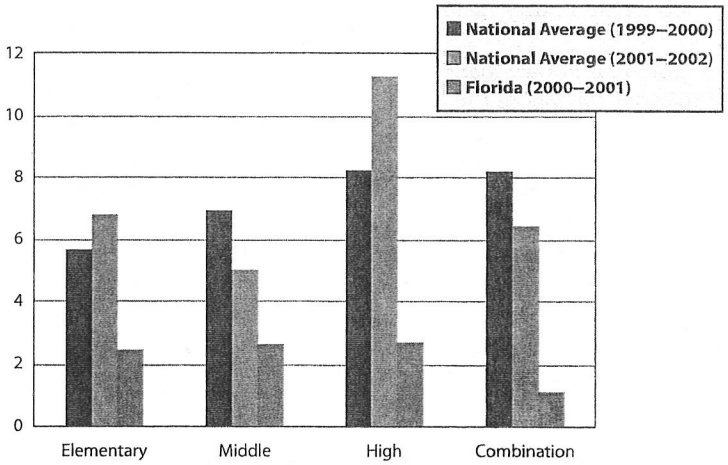
National Averages per Pupil Expenditures for Books Compared with Florida's Schools' per Pupil Expenditures



"We have a poor, inadequate 45 year old building with no renovation and an aging collection. It died around 1980!"



National Averages per Pupil Expenditures for Non-print (Audiovisual, Software, and Web-based Products) Compared with Florida's Schools' per Pupil Expenditures



What school library media factors may be related to school grades in Florida's School Accountability Reports?

Florida's "A" elementary schools:

- Are more likely to have an information skills curriculum in place.
- Are more likely to have a school website.
- Are more likely to have a main web page or media center web page that links to SUNLINK.
- Have significantly larger book collections.
- Subscribe to more periodicals.

School library media specialists in "A" elementary schools

- Are more likely to work with individuals visiting the media center than with groups.
- Spend more time planning for lessons taught independently of teachers.
- Spend more time working collaboratively and teaching with teachers.
- Spend more time involved in reading incentive activities and programs.

"Non-A" elementary schools in Florida are more likely to improve their school grade when they report:

- Having an information skills curriculum in place.
- Having a school website.
- Having a link from the main school web page or the media center web page to SUNLINK.
- Having more encyclopedias and reference materials on CD-ROM.
- Spending more time teaching with teachers.

Additional factors in improving a school's grade include:

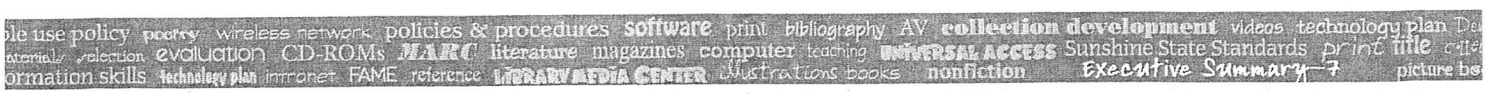
- Having a link from the school website to a library media center web page.
- Working collaboratively with the public library on summer reading programs.
- Reporting that the school library media specialist participates in professional development by attending the annual conference of the Florida Association for Media in Education.

School library media specialists in "Non-A" elementary schools, however, continue their efforts toward improved student achievement and report:

- A significantly larger budget for books, a larger budget for books per student, and more total volumes (total and per student) purchased in the 2000–2001 school year.
- A larger budget for electronic access to information (total and per 100 students).
- A larger budget for other operating expenditures from sources other than the school budget (total and per 100 students).
- A significantly larger overall budget (total and per student).
- More time assisting teachers with state initiatives (such as FCAT, Sunshine State Standards, etc.) per 100 students.
- More visits by groups to the library media center for information skills instruction.
- More time in meetings with district staff.

Schools are less likely to lower their standing (school grade) when they have:

- More computers with access to SUNLINK in the library media center.
- More networked computers in the library media center.
- More networked computers in the library media center with Internet access.
- Use of encyclopedias and other reference materials on CD-ROM.
- More total staff hours.
- More visits to the media center by individuals for information skills instruction and assistance.
- A copyright policy in place.
- Funding from of the school budget for other operating expenses.



Conclusions

Florida's school library media programs are active, vital contributors to teaching and learning in Florida's K–12 schools. Findings of this Florida library media study parallel those from numerous research studies on the impact of school library media centers. School library media programs positively impact student achievement when:

- **A professionally trained, full-time certified library media specialist leads the program.** Where school library media specialists have the educational background and training necessary to provide school library media services, to coordinate paid staff and volunteers, to work collaboratively with teachers, and to communicate effectively with administrators, to provide instruction and research assistance to students, and to manage collections, information, technology and fiscal resources, students learn and achieve.

- **Adequate support staff is present.** Test scores rise incrementally with more hours of staffing. Competent support staff can provide time for the school library media specialist to engage in more instructional activities with students and teachers and to provide assistance to more individuals and groups each day.

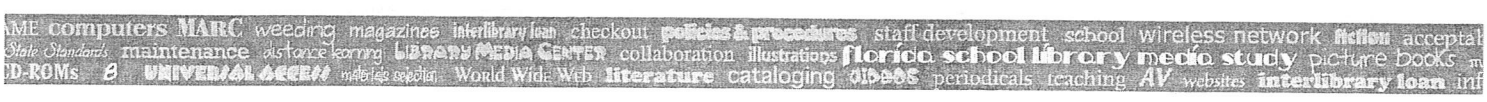
- **School library media collections are strong both in quantity, in quality, and in variety.** Test scores were higher in schools with more books, periodicals and newspapers, videos, electronic subscriptions, non-print materials, technology, Internet connections, and adequate budgets for building and maintaining collections.

- **Students have access to resources beyond the library media center.** More computers, more networked computers, and more computers with Internet access in the school library media center and throughout the school with access to media resources lead to higher student achievement. Schools with websites, links to selected school library media resources and to SUNLINK, and subscriptions to high quality online databases integrate technology tools that appeal to students, help them access information, and help them use information from the library shelves and beyond the library media center walls. The use of interlibrary loan through SUNLINK is beneficial to students and teachers and highly cost-effective.

- **Literacy, information literacy, and technology literacy are taught.** School library media specialists provide students with skills that will last a lifetime: learning to locate, evaluate and use information; to read, listen, view and think critically and creatively; to understand the research process; to read fluently and to value reading; to use technology effectively as a tool for accessing, organizing, analyzing and presenting information. These skills are integrated throughout the school curriculum and support the Sunshine State Standards.

- **Students use the library media center and its resources.** Where media resources are valued and used, academic achievement increases. Usage increases with the size and quality of the collection, staffing, technology, electronic and non-print resources, and the school library media center budget.

- **Technology is available.** Computer technology and online resources are common tools to today's students, and online databases and the World Wide Web give new meaning to "current" information resources. Technology resources extend library media resources to classrooms, homes and other public spaces and increase usage of other traditional print and non-print resources.



Recommendation #1

All schools deserve a competent, university-trained, certified school library media specialist, and each school and every community must ensure they have qualified leaders for their school library media programs.

Qualified, certified school library media specialists have substantial specialized coursework and experience in a school library media center, including an internship or working with experienced mentor. Not all school library media centers in Florida have a university-trained, certified school library media specialist. In addition, many Florida schools have large student populations, and as schools increase in size, the number of certified school library media specialists must also increase. Without qualified staff, significant investments in collections and technology resources may be lost. Without competent library media specialists, reading programs are not supported, and information and technology skills are not integrated into the curriculum where they are best taught. Special attention should be given to elementary school library media programs where there is the greatest lack of university-trained, certified library media specialists and where many programs do not yet have flexible schedules. The effects of this will be cumulative on those elementary students, and will most certainly be felt as they enter middle and high schools without the foundation in reading and information skills that they will need to succeed.

Recommendation #2

Quantitative and qualitative guidelines should be established for Florida's school library media programs.

School library media specialists and other members of the school community need criteria and benchmarks by which to measure many elements of their programs: resources, facilities, technology, usage, collaboration, communication, services, and budgets. Clear, concise quantitative guidelines would be helpful in assessing strengths and weaknesses, in setting goals and in measuring improvement. Florida guidelines, both quantitative and qualitative, should reflect research findings, Sunshine State Standards and other state initiatives as well as national standards guidelines for media programs and school library media specialists.

Recommendation #3

Funding and collections must be improved to a *minimum* of the national average.

If Florida is serious about improving student achievement and producing information and technology literate citizens, findings from this and previous studies cannot be ignored.

In studies in six states where library media programs are better staffed, better stocked and better funded, academic achievement tends to be higher. Increases in per pupil expenditures in school library media centers positively influence test scores, while overall school expenditures do not. School libraries have been shown to influence reading scores while classroom libraries do not, and print-rich environments, like the library media center with a wide variety of fiction and non-fiction books, electronic and digital resources, encourage voluntary reading, the best predictor of literacy.

To bring local spending and books per student in Florida's school library media centers up to *the minimum* of the national average should be an immediate and primary goal.

"We are very fortunate to have an extremely supportive administration that has continued to support our staffing which reflects the Southern Association standards of 3 professionals and a full-time secretary. With our current staffing, we are able to provide optimum service and support to our students, faculty and staff."

Budgets for non-print, electronic resources and online databases should also equal or exceed national averages. Research indicates there would be an immediate return on the investment in terms of student achievement. To go beyond the national average would demonstrate an understanding of what it takes not only to raise test scores, but also to create readers who enjoy books and who know how to use information resources to solve problems and increase understanding of our complex world, skills that will endure throughout life.

Recommendation #4

Address equity issues.

Assist schools in lower socio-economic areas. All students need access to information resources, quality literature, literacy instruction, high quality databases, interlibrary loan services, and research assistance. Schools with strong library media programs have higher test scores; but students in schools with lower test scores have an equal or greater need for quality resources and services. Students in poorer schools and from poorer homes may find that the school library media program provides their best access to books, technology, online databases, and non-print materials. For those students, strong library media programs are even more critical.

Provide district level staffing. Collections are stronger and budgets are larger in schools in districts with library media supervisors or coordinators.

Enable students with disabilities. The negative correlation between technology accommodations for students with special needs and the numbers of students with disabilities in our schools means those students do no have equitable access to digital and electronic information sources. All school library media centers should have at least one universal access workstation with appropriate technology accommodations to meet the diverse needs of all learners.

Make SUNLINK membership and participation a priority. Schools not yet in SUNLINK should be provided with incentives to meet criteria for acceptance within a reasonable time frame. All schools should be provided with minimal budgets to cover the cost of interlibrary loans beyond the school district, the value of which would far exceed any costs. Schools must fully participate in resource sharing, at least until equity can be achieved.

Provide statewide licenses to high quality online databases. In addition to substantial per pupil cost-savings, online databases including full text magazines, newspapers and reference materials, guarantee access to students no matter the size or location of their school. They may also provide access to information resources from the classroom or from home.

Recommendation #5

The new information skills document, *Information Literacy: Florida's Library Media Curriculum Connections*, should be widely publicized and disseminated to schools and integrated into a comprehensive Florida information literacy guide, developed in conjunction with other professional organizations and groups.

The new document clearly identifies Florida's Student Information Literacy Descriptors K–12 and provides correlations to national information literacy standards and to Sunshine Standards, benchmarks and grade level expectations. A document developed collaboratively with other professional groups describing collaborative goals, exemplary

"We are in the process of developing a non-fiction collection aimed at students in grades K-2. We feel this is necessary to help improve reading achievement. We also have an established Spanish collection to help meet the needs of our Hispanic parents who use these materials at home with their children."

activities, and assessments between school library media specialists and teachers across the curriculum would be of great benefit to Florida students, teachers and school library media specialists.

"Don't be afraid to dream. Hold the vision and work toward it. Make your library media center the place everyone wants to come."

Recommendation #6

Each school library media program should undertake a self-evaluation and create an action plan for improvement.

School library media specialists are the best change agents within their own programs. Begin the change process with a program assessment. Identify areas needing change, establish priorities, set goals, identify strategies, involve others, keep and use data, and celebrate success.

Recommendation #7

School library media specialists must become active advocates for school library media programs.

That school library media programs impact student learning is clear, but we must communicate that clearly and effectively to parents, administrators, boards of education, and legislators. We must find ways to convince them that staffing, facilities, collections, resources, budget, activities and technology in our library media centers make a difference.

We need success stories we can share from throughout the state. We need to use data with stories and stories with data to convince administrators that school library media programs are good investments in attaining overall school goals, and are not just expensive collections of books and technology. Requests for funding should be framed in terms of student outcomes and how the new books, staff, databases, or services will help students reach and exceed standards.

We must leverage success. Team with teachers and administrators to present at *their* conferences and to publish in *their* publications about collaborative efforts, team goals that have been reached, how their instruction has changed with the help of the school library media center and its resources, and how school library media programs enhance student achievement.

Recommendation #8

Create professional development opportunities for administrators and teachers, both preservice and inservice, to learn about the role of the school library media program and its resources.

We need to be sure opportunities are in place to allow administrators and teachers to learn more about the school library media center and how to benefit from its resources. Preservice experiences for teachers should include opportunities to work with school library media specialists from their first observations through internships and into the first years of teaching. Those formative experiences must show how library media specialists help develop and deliver instruction and how school library media centers create avid readers, skilled users of information and technology, critical thinkers and effective communicators.

School administrators and administrators-in-training also need experience in evaluating school media programs, empowering collaboration, and bringing library media resources to bear on school improvement efforts. Checklists, case studies, research findings and practical experiences should be included.

District staff can help provide these experiences and resources for experienced teachers and administrators through collaborative efforts with other district staff, involvement in development of workshops, courses, and other district efforts. Current efforts to improve reading, math and science performance must be tied to school library media resources and services, and school and district library media staff must be involved in these efforts.

Continued on back cover

Can You Make the Grade?

Take this quiz to see what you know about Florida's K–12 school library media programs!

1. What portion of Florida high schools have at least one university-trained, certified school library media specialist?
   a. 78%
   b. 88%
   c. 98%
   d. 100%

However only 80% of Florida's elementary schools have a university-trained, certified school library media specialist.

2. What percentage of Florida's K–12 school library media specialists are in the DROP program, indicating that they will retire in the next few years?
   a. 6%
   b. 13%
   c. 18%
   d. 25%

...and over 40% of high school library media specialists are in DROP!

3. Florida's K–12 elementary school library staff spend ¼ the time planning with teachers as they spend on
   a. shelving books
   b. assisting students
   c. ordering and cataloging materials
   d. non-media related duties such as bus duty, lunchroom monitoring, etc.

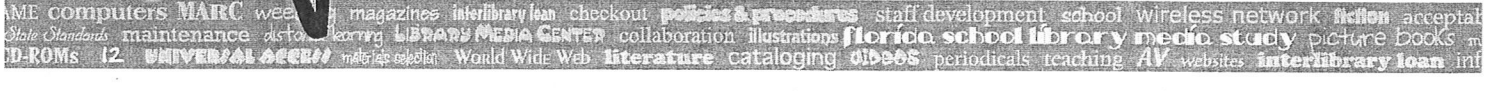
Non-media related duties!

4. 83% of school library media specialists say they use SUNLINK on a regular basis. How many teachers use SUNLINK?
   a. 15%
   b. 29%
   c. 54%
   d. 87%

We must get SUNLINK into the hands of teachers and students. SUNLINK is free, it provides equitable access to school library media materials throughout the state, and it serves as an online catalog for many schools and districts.

5. In schools with university-trained, certified library media specialists
   a. There are more books per student
   b. There are more computers in the library media center per 100 students
   c. Students visit the library media center more often
   d. Circulation is higher
   e. All of the above

All of these! And all are positively correlated with student achievement!



6. In Florida's schools, FCAT scores are higher where:
   a. The total number of paid staff is higher and there are more hours per week of staffing
   b. Circulation is higher
   c. Schools have access to the library media center catalog through the school's computer network
   d. There are more books and videos
   e. There are more computers in the library media center and those computers provide Internet access
   f. All of the above

7. Florida's "A" elementary schools
   a. Are more likely to have an information skills curriculum in place
   b. Are more likely to have a school website
   c. Are more likely to have a main web page or media center web page that links to SUNLINK
   d. Have significantly larger book collections and subscribe to more periodicals
   e. All of the above

8. True or False: The more students with disabilities a school has, the less technology to accommodate their needs is found in the library media center.

9. True or False: Most school library media specialists feel their collections are thoroughly weeded.

10. True or False: Florida schools spend less per pupil on books and non-print resources each year than the national averages.

11. True or False: Most school library media specialists must depend upon bookfairs, candy sales, profits from a school store and/or PTAs, grants and gifts to begin to meet the needs of their students and teachers.

Unfortunately it's true. All schools need computers that can provide accommodations for students with physical and cognitive disabilities. Universal access workstations can make the difference in providing access to digital information and curriculum resources.

Less than 30% of school library media specialists feel their collections are adequately weeded. The average age of Florida's school library media collections is 1983; there is a fear that funds to replace weeded materials will not be provided.

Elementary and middle schools have about ½ the number of books per student as the national average; high schools have about ⅕ of the national average; and combination schools, a startling ⅛. Florida's mean expenditure for books from the local school budget was $4.18 at the elementary level, $13.89 at the middle school level, and $3.28 at the high school level per student. Combination schools reported a paltry $1.23 per student for book purchases. National averages for books per student 2001-2002 were $11.17 at the elementary level, $11.11 at the middle school level, and $15.44 at the high school level. Florida's non-print expenditures per pupil were similarly low compared to national averages.

45% of spending for school library media resources and programs comes from sources other than the school budget.

Continued from page 11

Recommendation #9

Develop and deliver quality ongoing professional development opportunities for school library media specialists.

This study revealed a number of areas in which school library media specialists could benefit from ongoing professional development. While many of these topics are addressed by sessions at FAME and FETC, more intensive opportunities are needed and can be addressed through workshops, online courses, university coursework, summer institutes, listservs, and directed self-study. Every school library media specialist should create and implement an annual professional development plan to address these and other areas for professional growth.

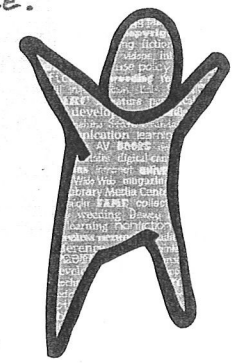
Recommendation #10

Statewide data collection should be continued.

In order to ensure continued progress, monitor change, and document successes, data collection related to school library media programs and resources needs to be continued. Data can be easily collected online, and results can be disseminated the same way. Priority should be given to collecting data related to factors that contribute to student achievement and, when qualitative and quantitative guidelines are created, to measuring those elements of quality programs. Progress and accomplishments should be widely publicized and celebrated, and assistance and resources should be targeted to areas of continued need.

"The secret of joy in work is contained in one word—excellence. To know how to do something well is to enjoy it."

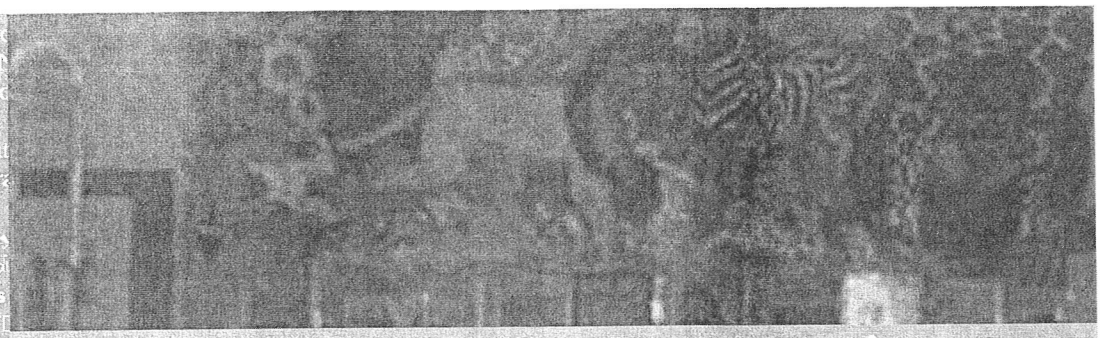
— Pearl Buck



This study was conducted by
Donna J. Baumbach
University of Central Florida

with assistance from Judy Lee, Tom Hart, Keith Curry Lance, Marcia Rodney, Morgan Wang, and Ying Zhang.

Thanks to the Florida Association for Media in Education for financial assistance in publishing the final report and this executive summary.



Making the Grade

The Status of School Library Media Centers in the Sunshine State and How They Contribute to Student Achievement

Donna J. Baumbach
University of Central Florida

Making the Grade

The Status of School Library Media Centers in the Sunshine State and How They Contribute to Student Achievement

Florida School Library Media Study

October 2003

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Morgan Wang, and Ying Zhang

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Thanks to Dr. Ester Smith of EGS Research & Consulting, Christine McNew of the Texas State Library, and Dr. Keith Curry Lance of the Colorado State Library for generously sharing their research protocol and material, and for offering advice and encouragement. Keith Curry Lance and Marcia Rodney, Library Research Services, "went for the gold" in examining the data, spent countless hours with the files, gave credibility to the results by applying their considerable expertise and experience to the statistical tests and results, and strongly encouraged the publication of technical data.

Dr. Lea Witta and Dr. Morgan Wang, research statisticians at the University of Central Florida, and Ying Zhang, graduate student, provided assistance with survey construction, calculations of descriptive data, and recommendations of appropriate statistical tests and techniques for data analysis. Dr. Wang and Ying Zhang conducted and refined the data analysis related to school grades.

Central Florida Library Media Supervisors reviewed the draft survey and recommended changes that made it a better instrument for data collection.

Dr. Judy Lee, University of Central Florida, and Dr. Tom Hart, Florida State University, each graciously reviewed the data to provide broader, richer perspectives from which to interpret the findings.

Dr. Marilyn Schontz of Rowan University graciously shared 2001–2002 findings related to school library media collections and budgets before they were published in order to make the most recent data available for comparisons. She and Dr. Marilyn Miller have been tracking trends and statistics in school library media programs biennially since 1983.

The UCF Office of Research (OOR) assisted in coordinating approval of the research protocol by the Institutional Research Board. The OOR also provided funding for the project through careful maintenance of my principal investigator overhead account throughout the years. UCF and the College of Education granted me a sabbatical leave to work on the project.

Although not a project of SUNLINK or the Instructional Technology Resource Center (ITRC) staff at UCF, the study was conducted from that office and as a result most staff became involved whether they wanted to or not. Linda Miller, Carol McWilliams and John Prevosk reviewed the survey form and offered suggestions for improvement. Kathy Katz created the Florida School Library Media Study logo and reviewed the form and cover letter. She also created the design and layout of this report and the executive summary, making it unique and user-friendly as only she can. Karissa Yahn, Teresa Dahl, and Debbie Culp provided oversight for the preparation, printing and mailing of the surveys and did a superb job of organizing the forms as they were returned. Matt Renfroe set up the online survey form, creating a mechanism for collecting all data electronically. Katie Tindell spent months carefully inputting the data from the paper forms. Without complaint, all staff members fielded questions from school library media specialists about the survey. It is a pleasure to work with such a dedicated group of individuals, and, as usual, I am indebted to each of them.

Members of the Florida Association of Supervisors of Media (FASM) and Sandy Ulm, School Library Media Services Program Specialist at the Florida Department of Education (DOE), now retired, provided encouragement and support during each phase of the study. Dr. Nancy Teger, new to the DOE position continued the spirit of optimism, provided a sounding board for ideas, and encouraged dissemination.

I am also grateful to the contributions of the Florida Association for Media in Education (FAME), the Board of Directors, and Presidents Vic Burke and Ginger Klega for their ongoing interest in and support of the work, for providing a forum in which to present the results, and for contributing financially toward the publication of this document.

A very special thanks is extended to the hundreds of school library media specialists throughout the state of Florida who recognized the importance of the study and took their valuable time to participate. As the study indicates, they had enough to do without this additional task, but they accepted the challenge—as they do with so many challenges presented to them—in the hope that their efforts will benefit their students and teachers.

Finally, thanks to my husband, Bill, for his constant love and support. He now knows more about school library media centers in Florida than he ever wanted to know.

Dorothy J. Bumbach

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Making the Grade

The Status of K–12 Public School Library Media Centers in the Sunshine State and How They Contribute to Student Achievement

Florida School Library Media Study

"If you were setting out a balanced meal for a learner, the school library media program would be part of the main course, not the butter on the bread." (Lance, K., & Loertscher, D., 2002)

Part I: Purpose and Scope of the Study

What is the status of collections, services, staff and programs in Florida's K–12 public school library media centers? Do school library media programs and school library media specialists contribute to student achievement in today's assessment-driven learning environments? And if so, what factors are most likely to contribute to student success?

The purpose of the *Florida School Library Media Study* was 1) to examine the library media resources, services and usage to capture an accurate picture of the status of Florida's school library media programs and 2) to determine the role of media programs and media specialists on student achievement. The study was designed to replicate and expand existing studies in other states that have examined the role library media programs play in today's teaching and learning environments and to examine several variables and relationships unique to Florida's K–12 public schools.

Organization of This Report

A summary document and this final report have been prepared for distribution to members of the Florida Association for Media in Education (FAME) at the 2003 annual FAME conference. The document may also be published in some format for wider distribution at a later date.

This report is divided into several parts. First there is background on the study including a review of the findings from previous research studies and a description of the research methodology. Next, the descriptive data is presented and discussed. Keith Curry Lance and Marcia Rodney bring their expertise to the analysis in the third part, using statistical methods similar to those in other state studies to examine relationships between test scores (primarily the reading FCAT) and a variety of school library media factors. Using a different approach to determining the relationships between school library media specialists, programs and student achievement, in the fourth part of this report Morgan Wang and Ying Zhang contributed new data mining techniques to look at library media characteristics found in "A" elementary schools as well as in "Non-A" schools, and in schools that were able to improve their school grade in the annual *Florida School Accountability Report*. In the last section, findings and recommendations are summarized. A bibliography and appendices are included.

Previous Research Findings

Many publications have reviewed the literature on the impact of school libraries and media centers on student achievement. In *Powering Achievement: School Library Media Program Make a Difference* (2002), Keith Curry Lance and David Loertscher summarize the findings from studies in 9 states and over 3300 schools: "Strong school library media programs make a difference in academic achievement" (p. 3). Specifically:

- Reading scores tend to rise with levels of professional and support staff, size of the collection, spending

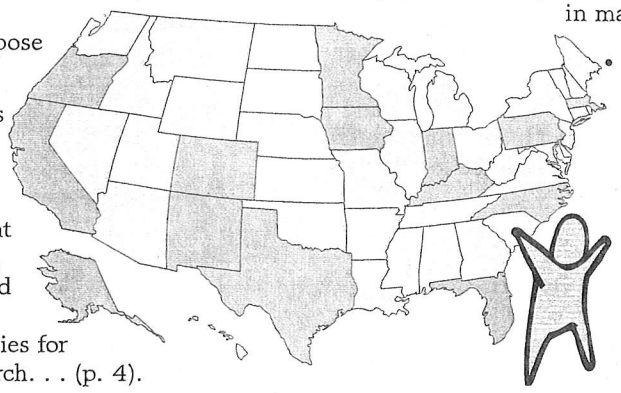
on the collection, and the extent of school-wide networks that extend access to collection resources.

- Higher levels of librarian staffing are associated with longer library media center hours, higher levels of staff activity, higher students usage and higher test scores.
- The impact of library media center programs on academic achievement cannot be explained away to other school or community conditions such as teacher–pupil ratio, per pupil spending, characteristics of teachers, poverty, race/ethnicity or low adult education levels in the community.

Michele Lonsdale (2003) prepared a comprehensive review of the research related to school library media centers' impact on student achievement for the Australian School Libraries Association. That report focuses on research since 1990 and, although designed for use in Australia, includes the best known works in the United States. Lonsdale's report is available online and serves as an excellent starting point for anyone wanting to review the scope and depth of related research literature. For that reason, only the findings of major studies, along with the findings of several studies not included in that report, will be reviewed here.

Lonsdale describes the purpose of her report:

> The main purpose of this review is to report on the nature and extent of the evidence linking school libraries to student achievement since 1990, identify the strengths and gaps in existing data. . . and suggest some strategies for developing further research. . . (p. 4).



She also describes the rationale for the report, citing trends equally evident in Florida's current K–12 environment:

> The context in which school librarians and teacher librarians operate today has changed noticeably in recent years, with consequent implications for student learning. In particular, the following trends suggest the need for a closer look at the potential role of school librarians in relation to student achievement in Australian schools: an apparent decline in the numbers of qualified teacher librarians employed in school libraries in public schools in Australia; an explosion in information production and the development of increasingly sophisticated information communication technologies; changes in evidence-based practice and school accountability; and changes in the nature and role of the teacher-librarian as a result of the above trends and developments (p. 5).

Lonsdale's review includes both state studies for Colorado (Lance, K., Welborn, L., & Hamilton-Pennell, C., 1993, and Lance, K., Rodney, M., & Hamilton- Pennell, C., 2000b), Alaska (Lance, K., Hamilton-Pennell, C., & Rodney, M., 2000), Pennsylvania (Lance, K., Rodney, M., & Hamilton-Pennell, C., 2000a), Massachusetts (Baughman, 2000), Oregon (Lance, K., Rodney, M., & Hamilton-Pennell, C., 2001), Texas (Smith, 2001), Iowa (Rodney, M., Lance, K., & Hamilton-Pennell, C., 2002), and other studies and literature reviews. The summary indicates that school library media programs do have a positive impact on reading, literacy and learning in many ways:

- A strong library program that is adequately staffed, resourced and funded can lead to higher student achievement regardless of the socio-economic or educational levels of the adults in the community;
- A strong computer network connecting the library's resources to the classroom and laboratories has an impact on student achievement;
- The quality of the collection has an impact on student learning;

- Test scores are higher when there is higher usage of the school library;
- Collaborative relationships between classroom teachers and school librarians have a significant impact on learning, particularly in relation to the planning of instructional units, resource collection development, and the provision of professional development for teachers;
- A print-rich environment leads to more reading and free voluntary reading is the best predictor of comprehension, vocabulary growth, spelling and grammatical ability and writing style;
- The extent to which books are borrowed from school libraries shows a strong relationship with reading achievement while borrowing from classroom libraries does not;
- Integrating information literacy into the curriculum can improve students' mastery of both content and information seeking skills;
- A positive difference can be made to student achievement when school libraries cooperate with public libraries;
- Libraries can make a positive difference to students' self-esteem, confidence, independence and sense of responsibility in regards to their own learning;
- The impact of school libraries appears strongest at primary and junior high school and weakest at the upper levels of secondary school, although more research is needed to show why this is the case at the senior level (Lonsdale, p. 32–33).

State studies not included in this review include those from Indiana, Kentucky, California, New Mexico, North Carolina, and Minnesota. Two additional states, Michigan and Missouri, have also researched the topic, but the results have not yet been published.

The North Central Regional Educational Laboratory (NCREL, 2000) completed a study of higher- and lower-performing Indiana schools in grades K–3 in reading and mathematics. Although not specifically looking for variables related to the school library media center, the first recommendation was to increase student access to instructional and print materials in lower-performing schools, including "regular and flexible access to a working library." The study recognizes that good readers need the wide variety of material that school library media centers can provide in addition to instruction in information literacy. They also need increased access to materials and instruction that flexible access can provide.

A Kentucky study (Allard, S., & White, J., 2000) revealed characteristics of top-scoring schools in the Kentucky Core Content Test, Commonwealth Accountability Testing System (CATS):

- Flexible scheduling for the Library Media program—students have more access to information and an information mediator (the library media specialist)
- Library Media Specialists who remain current with technology advances
- Library Media Specialists who are involved in professional associations
- Inclusion of the Library Media Program in the Consolidated Plan

A study in California (Siminitus, 2002) was conducted by SBC PacBell, indicating the level of influence technology has come to play in contemporary library media centers. The study surveyed curriculum leaders (associate superintendents of curriculum or district level library media specialists in California's 25 largest school districts representing 2 million, or ⅛ of California's students. The top three issues among them were 1) student achievement; and far behind, 2) funding/budget, and 3) staffing. For 20 years, California had no funding for school library media centers; however, with the California K–12 Public School Library Act of 1998, categorical funding was made available for print and non-print resources when districts submit acceptable library plans. Findings included the conclusion that the lack of a certified library media specialist or understaffing handicaps a school's efforts to increase student achievement (p. 7–8).

How School Libraries Improve Outcomes for Children: The New Mexico Study (Lance, K, Rodney, J., & Hamilton-Pennell, C., 2002) concluded that test scores rise with the

development of school library media programs and that "whatever the current level of development of the school library program, these findings indicate that incremental improvements in its staffing, collections, and funding will yield incremental increases in reading scores" (p 60). Strong library media programs are characterized by adequate staffing, collections and funding; staff who are school leaders in teaching and learning and who have collegial, collaborative relationships with classroom teachers; and where networked information technologies are integral to the program.

An Essential Connection: How Quality School Library Media Programs Improve Student Achievement in North Carolina (Burgin, R., & Bracy, P., 2003) was a research project designed to collect data on school library media programs in eight areas: staff activities; service hours; library usage; library technology; Internet access; operating expenditures; management; and school demographics. Scores on standardized reading and English tests in the schools included in this study tended to increase when libraries in the schools:

- Were staffed more hours during the school week
- Were open more hours during the school week
- Had newer books
- Spent more money per 100 students on books and other print materials like magazines and newspapers
- Spent more money per 100 students on electronic access to information (e.g., online database searching, Internet access)
- Were more likely to subscribe to online periodical services
- Were more likely to subscribe to CD-ROM services (p. 51)

The Minnesota study (Baxter, S., & Smalley, A., 2003) was somewhat unique in that it consisted of two parts: 1) a survey and analysis of the data and 2) site visits. Key findings included a significant positive correlation between library media center budgets for books and materials and elementary students' scores on the state comprehensive assessment test. "The larger the library budget is for books and electronic materials, the higher students' reading achievement is" (p. 11). The site visits confirmed findings from the survey, added other qualitative dimensions, and identified best practices in Minnesota school library media centers.

Methodology for the Florida School Library Media Study

While reviewing the research literature in preparation for this study, questions and methodologies were identified that would be critical to this study. The work of two researchers was particularly notable. Keith Curry Lance, author of the landmark Colorado Study, has with other colleagues conducted follow-up studies in that state and similar research in Pennsylvania, New Mexico, Alaska, Oregon and Idaho among others. Lance, with research associates, has also published numerous articles analyzing and synthesizing research related to the topic and had recently (June, 2001) been invited to present at the White House conference on School Libraries. The second researcher of note was Ester G. Smith, who had recently conducted a comprehensive study of Texas school libraries for the Texas State Library and Archives Commission and the report was published in April of 2001.

Permission was sought by the researcher and graciously granted by Keith Curry Lance and Christine McNew, Youth Services Consultant, Texas State Library, to use survey questions or other materials from their work for this Florida study. Both Keith Curry Lance and Ester Smith offered assistance with the project.

The Survey Instrument

A survey instrument was developed based on the Texas Library Study. Additional questions covered items included in other state studies conducted by Lance and others.

Florida-specific questions related to the Sunshine State Standards, FCAT, and

SUNLINK, the Florida K–12 union database or school library media holdings, were also included. Dr. Lea Witta, a University of Central Florida professor with expertise in survey construction and analysis, reviewed the instrument. Modifications were made to facilitate answering the questions as well as to make the data returned easier to analyze. Central Florida library media supervisors also reviewed the instrument, and several questions were added or revised based upon their feedback.

The survey consisted of ten sections with multiple measures in each section for a total of 264 measures:

- Identifying Information (17 measures)
- LMC Management (24)
- LMC Staff (45)
- Service Hours (4)
- Staff Activities (26)
- LMC Use (15)
- Technology (75)
- Collection (30)
- Budget (21)
- Open-ended questions (7)

An article was published in *Florida Media Quarterly* informing Florida school library media specialists that the survey instrument would be arriving in the early part of 2002, and encouraging them to participate. School library media supervisors and media specialists were alerted to the study through two listservs, FASM and FAME_NET. An announcement about the impending study and its importance was also made in @SUNLINK, a newsletter distributed by mail to every K–12 public school library media center in the state and electronically upon request through a free subscription.

In February 2002, a cover letter describing the purpose and importance of the study (Appendix A) and a survey instrument (Appendix B) were sent to every public school library media center in the state of Florida (N=2815). After the survey had been printed, an inconsistency in dates of the school year for which information had been requested was discovered, and a bright green errata sheet was inserted into each one to call attention to the correct dates (Appendix C). Data could be entered on the survey instrument and returned to the researcher by self-addressed postage-paid envelope, or it could be entered online.

The online version of the survey instrument was available through the World Wide Web and divided into the same sections as the paper instrument. Responses for each section were saved when clicking the submit button before the next section was presented.

Participation in this study was voluntary. To encourage participation, participants were entered in a drawing. Fifty registrations to the 2002 FAME conference in Daytona Beach and 10 handheld computers were awarded from those who submitted their completed surveys either by mail or online by April 15.

In May, a reminder in the form of a follow-up letter and duplicate instrument were sent to those schools that did not reply by April 1, 2002. Surveys were accepted online until June and by mail after that until mid-August when the last paper survey was entered.

Additional data were requested from the Florida Department of Education related to test scores, student population, school budget, instructional staff, and other demographic data. The Florida Department of Education provided the *2000–2001 School Indicators Report*, which consisted of data on 132 additional measures for each Florida public school including school population (number, free and reduced lunch, ESE, LEP, gifted, etc.), staff (number, educational level, years of experience, etc.) dropout rate, graduation rate, and test scores (FCAT, ACT, norm-referenced tests), per pupil expenditure, total school budget and more.

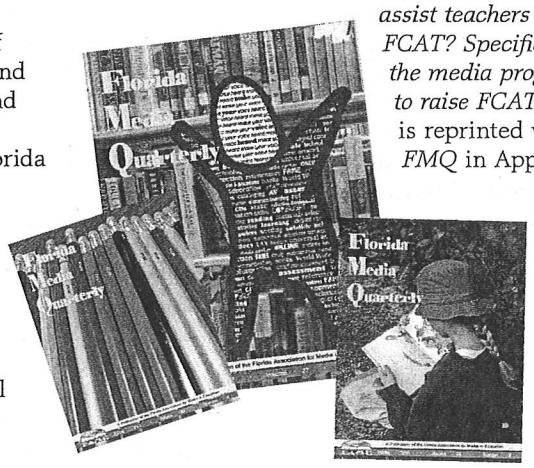
All survey responses were entered into a FileMaker Pro database, exported to a Microsoft Excel file and then converted to a SAS data set for analysis and statistical tests.

First Findings

Preliminary findings were presented at the 2002 annual conference of the Florida Association for Media in Education. Tables with initial findings have been published in issues of *Florida Media Quarterly (FMQ)*.

The fall (2002) issue of *FMQ* included the following tables:

- Survey Return Rate
- Numbers and Percentage of Total of National Schools and Florida Schools by Level and Number and Percentage of Schools Participating in Florida Media Survey by School Level
- Florida School Districts with District Library Media Supervisor/ Coordinator
- Florida Schools with School Library Media Centers and Media Specialist(s)



The winter (2003) issue of *FMQ* included these tables:

- Weeding Data
- Reasons for Not Weeding Thoroughly
- The Status of Library Media Policies and Procedures
- Primary Collection Development Tools

The spring (2003) issue of *FMQ* included:

- Membership of School Library Media Specialist in Professional Associations
- Attendance of School Library Media Specialists at State Professional Conferences
- How Information Skills Curriculum Is Taught
- The Importance of Library Media Program to the Reading Program of the School
- Reading Incentive Programs in Use in Florida Public Schools
- School Library Media Resources
- School Library Media Electronic Resources

The theme of the spring issue of *Florida Media Quarterly* was related to the Florida Comprehensive Assessment Test (FCAT), and a separate article was prepared and published in *FMQ* summarizing responses to open-ended survey questions: *What do you do to assist teachers and students with the FCAT? Specifically, what role does the media program play in the effort to raise FCAT scores?* The article is reprinted with permission of *FMQ* in Appendix D. Some of those answers as well as comments from other free-response questions are included and highlighted throughout this document to enhance the data with real-world examples.

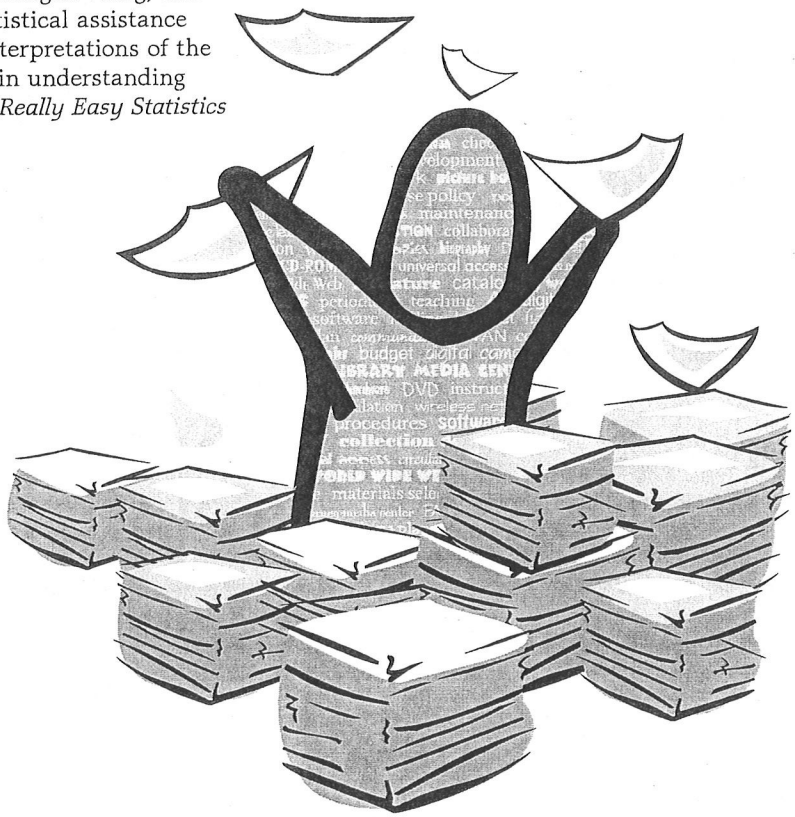
The summer (2003) issue of *FMQ* included:

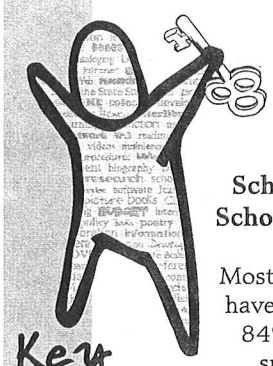
- Library Media Center Automation
- Circulation and Catalog Systems
- Types of Computers
- School Technology Resources
- Availability of Other Technologies in the School Library Media Center
- Budget Information

Preliminary data in these *FMQ* tables and articles may be different in this report due to data clean up and recalculation. Data clean up consisted of converting figures to a uniform measure, merging duplicate records, and eliminating figures that were clearly incorrect. For example, where the survey asked for "how many hours," some replied "45 minutes" or "¾" instead of ".75 hours." Sometimes media specialists replied multiple times, both online and by mail, or responded to the initial request for participation and also to the follow-up request with surveys crossing in the mail. Online surveys were sometimes completed more than once, or completed in several sittings and were recorded as separate surveys. Those were identified through sorts on school names and numbers and merged by hand wherever possible.

Data Analysis

A variety of statistical methods were used in analyzing the data in this study. Means were used in the descriptive data section unless otherwise indicated. To determine the impact of school library media programs on student achievement, several different statistical tests and techniques were used including cross tabulations and Chi-square, comparison of means and t-tests, factor analysis, regression analysis, and correlations. To determine the relationship between school library media variables and school grades, a two-stage data mining method was used. First, decision trees were used to reduce the number of variables related to each research question. Then a traditional regression model was used to determine predictive powers of individual variables and groups of variables for each question. In this technique, variables that may not be statistically significant independently become more powerful predictors when combined with other significant factors in a predictive model. The writer is indebted to Keith Curry Lance, Marcia Rodney, Morgan Wang, and Ying Zhang for their statistical assistance and for reviewing the interpretations of the findings. For assistance in understanding statistical tests, see the *Really Easy Statistics Site* (Deacon, 2003).





Key Findings

What is the status of Florida's school library media specialists, programs and resources?

School Library Media Centers and School Library Media Specialists

Most Florida K–12 public schools have a library media center, but only 84% have a certified library media specialist. 98% of high schools have certified library media specialists, but only 80% of elementary schools do.

62% of elementary library media specialists have a master's degree or higher with certification in educational media compared with 75% at the middle school and 84% at the high school level.

Professional Activities

Over 75% of school library media specialists are active members of a local professional association. 61% are members of FAME, the state professional association for school library media specialists. 16% report no professional memberships.

About ½ of all Florida library media specialists attend the annual FAME conference or the Florida Educational Technology Conference (FETC), two primary professional development opportunities for Florida's school library media specialists. More than 30% attend both conferences, but 30% attend neither conference.

Age of the Profession

Over 25% of Florida school library media specialists are in the DROP program, indicating they will retire within the next five years.

Over 40% of high school library media specialists are in DROP.

Staff Activities

Library media specialists at the middle and high school level are twice as likely to report flexible access programs as are those in elementary schools.

School library media staff spend about ⅕ of their time each week on teaching and learning activities, ⅖ on information access and delivery, and ⅖ on program administration.

Elementary library media specialists spend ⅔ of the time on teaching and learning activities as their middle and high school counterparts. Elementary library media staff also report spending 4 times as much time on duties unrelated to the school library media program such as bus duty and lunchroom monitoring as they do in planning with teachers.

Performing basic library media center activities takes about ½ of a library media staff's time each week. Since most tasks in this area (checking books in and out, reshelving books, barcoding, etc.) might be performed by paraprofessionals or volunteers where the media center is adequately staffed, it is an area from which time might be reallocated to allow more collaborative efforts with teachers or more instructional activities with students.

Elementary school library media specialists spend twice as much time providing reading incentive programs as high school library media specialists, but only ½ the time in electronic program administration.

While managing library media technology consumes a great deal of time at the elementary level, larger numbers of students, school staff and technology, result in middle school library media staff reporting 50% more time on this task, and high school library media staff reporting 100% more time working with technology in the school library media center than elementary library media staff do.

Policies and Procedures

Less than ½ of school library media specialists prepare and submit an annual budget.

Only 57% of schools report having a specific information skills curriculum. 46% of those report that information skills are integrated throughout the curriculum and taught with other teachers. However, 41% of those who said they had an information skills curriculum did not answer the question about how information literacy skills are taught.

School library media centers contain huge amounts of non-print resources, digital information and a wide variety of technologies, yet are not consistently included in school technology plans.

Fewer schools have collection development policies than copyright policies.

Over 90% of school library media specialists feel the library media program is very important to school reading programs. Of those who do not feel it is important, over 80% are not certified in educational media.

Library Media Collections and Technology Resources

Over 83% of Florida's K–12 schools are SUNLINK schools and 83% say they use the state-funded union database and its resources in a wide variety of ways including technical processing and interlibrary loans. Only 29% of teachers and 27% of students use SUNLINK on a regular basis.

There is a negative correlation between the number of students in a school with disabilities and the number of computers in a school library media center with accommodations for students with special needs, meaning many students with disabilities are not able to fully benefit from the school library media center and its resources.

Most schools have automated circulation systems; fewer have automated catalog systems. Less than 40% have a catalog that is Internet accessible. Less than ½ of Florida schools have a district catalog that is Internet accessible. Schools report using SUNLINK as their school and district automated catalogs where they do not have their own, a cost-effective solution.

Other than computers, the most common technologies in the library media center are telephones, CD-ROM drives, and email for school library media specialists, with over 90% of schools reporting these are available. Least common are newer technologies such as keyboarding devices (19%), handheld computers (12%), and MP3 players (6%).

Almost 80% of all schools have a school website. However, only about 42% of those link to a school library media center page or resources. Only 35% of school library media specialists report web pages designed and/or maintained by the school library media specialist. Less than 20% of school web pages or library media center pages link to SUNLINK.

Less than ⅓ of school library media specialists feel their collections are thoroughly weeded.

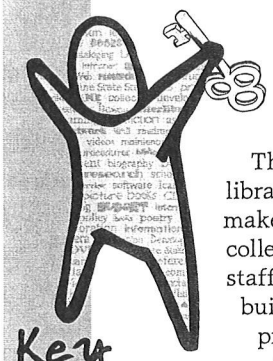
Florida schools spend less than the national average for books each year and far less per pupil. Per pupil spending for books is only ¼ to ⅓ the cost of a new book. The result is that each student can expect a new library book only every 3 to 4 years.

Florida purchases more books and weeds more books annually than the national average. However, while Florida generally has more books per school than the national average, it has far less books per student, and volumes per student are predictors of academic achievement.

Almost 50% of books in Florida school library media centers have publication dates before 1990. The average age of an item in Florida school library media collections is 1983.

Florida schools spend a small fraction of the national average on software, Web resources, and other non-print resources.

Most school library media specialists must depend upon bookfairs, candy sales, profits from a school store and/or PTAs, grants and gifts to begin to meet the needs of their students and teachers; approximately 45% of their budgets are from these "extra" sources. Local and state budgets are simply not adequate.



Key Findings

District Library Media Supervisors

The presence of a district level school library media supervisor or coordinator makes a significant difference in collections, technology, budgets, staffing, policies, and activities of building level school library media programs and therefore on student achievement.

Professional Development

The study indicates that Florida's school library media specialists may benefit from professional development opportunities in a number of areas: budgeting, information skills curriculum, instruction and integration; time management and task delegation; flexible access benefits and methods; collection development policies and procedures; weeding; distance learning technologies and opportunities; new and emerging technologies; research-based reading strategies and Florida reading initiatives; developing and maintaining school library media center web pages and resources; working with school webmasters; SUNLINK (for non-SUNLINK schools) and how SUNLINK can be used (for all schools); teaching students and teachers to use SUNLINK; working with technology coordinators; technology for special needs and universal access; leadership and public relations.

Part II: The Status of Florida's K-12 Public School Library Media Programs

This section of the report describes the current status of Florida's school library media centers: management, staff, service hours, staff activities, library media center usage, technology, collections and budget. Florida currently has no standards or quantitative guidelines for school library media programs or collections. Statistical means or averages are offered here for discussion as well as for possible baseline data for future research efforts. Using this data, schools can begin to evaluate their own programs and areas of strength and weakness. The data can be used in developing strategic and long-range plans and in local action research projects.

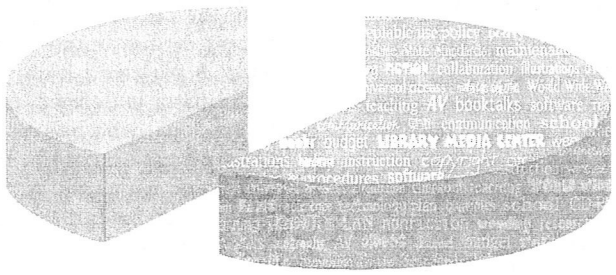
Where appropriate, data and results have been divided by school type/level: elementary, middle/junior high, high school and other/combination (grades K–12, K–8, etc.) Where comparative data were available and useful, for example, from Marilyn Miller and Marilyn Schontz's biennial national surveys, they have been included in the discussions.

Once preliminary data from the descriptive data were calculated and displayed in tables, the results were sent to Dr. Tom Hart, Florida State University, and Dr. Judy Lee, University of Central Florida, and Dr. James Carey, University of South Florida. Dr. Carey was unable to participate. Dr. Hart and Dr. Lee reviewed the data and provided comments that were shared with one another and the researchers. The discussion of the data, therefore, represents the thinking of several of the state's most experienced experts in Florida's library media programs.

Survey Return Rate

A total of 1749 surveys were returned. Surveys that did not include identifying information (to allow correlations to data from the Florida DOE *School Indictors Report*), substantially incomplete surveys or surveys that were submitted more than once with widely differing figures were discarded. 1715 usable surveys were returned by mail or online, a 60.43% rate (Figure 2.1). 67% of those were returned by mail in paper form and 33% were completed online.

Figure 2.1. Survey Return Rate for Florida Library Media Study



National School Census Compared to Florida School Census

Table 2.1 shows that the number of Florida schools participating in the study (n=1715) was roughly proportional to the total number of schools in Florida and in the nation at each level. Schools participating in the study are listed in Appendix E.

Table 2.1. Number and Percentage of Total of National Schools and Florida Schools by Level & Number and Percentage of Schools Participating in Florida Media Survey by School Level

	National*		Florida**		Schools Participating in Florida Media Study	
	#	%	#	%	#	%
Elementary	52624	58%	1649	58%	930	54%
Middle	15408	17%	397	14%	312	18%
High	16912	19%	461	16%	269	16%
Combination/Other	4604	5%	334	12%	101	6%
Level Not Reported* **	—	—	—	—	103	6%
Total	88548	100%	2841	100%	1715	100%

* Source: National Center for Education Statistics, *Percentage of public elementary and secondary schools providing instruction and of students in membership, by specified level of instruction and by state: School year 1998–99* [Available online http://nces.ed.gov/pubs2000/quarterly/summer/2feat/q2-5.html#Table-2]

** Source: Florida Department of Education, *Florida School District Data, Number of Schools for 2002–03 School Year by Type* [Available online http://www.firn.edu/doe/eias/flmove/florida.htm#district] Note: Florida "Other" includes Combination Schools, Vocation Centers, and Charter Schools; not included in the survey were those considered "Juvenile Justice Schools" or "Other Types of Schools" in FDOE data.

*** Level Not Reported includes surveys returned without indicating school level or grade levels served. Reviewing names of schools not reporting level, most appeared to be charter, adult, or other types of schools, and when combined with "Combo/Other" schools reflect the same proportion of Combination/Other in Florida. None reported having a media center.

District Library Media Supervision/Coordination

One survey item asked participants to describe the role of their district library media supervisor as full-time, part-time or none. In districts where the survey's responses were not clear, for example, not all respondents in a district provided the same answer, or for districts that did not participate, the state program specialist for library media services at the Florida Department of Education was asked to clarify the information. In reality, many districts have more than one full-time media staff person while other full-time district media supervisors/coordinators also serve as the full-time district technology coordinator, but still are considered by their school media specialists to be full-time library media supervisors/coordinators.

Although both titles and responsibilities vary from district to district, for the purpose of this study a full-time library media supervisor/coordinator is defined as a professional employed at the district level with the primary responsibility for school library media centers and staff district-wide. A part-time library media supervisor/coordinator is defined as a district level professional who has responsibility for the library media program, but who also has additional, generally non-school library media related responsibilities. Table 2.2 indicates the numbers and percentages of districts by status of the district supervisor/coordinator: full-time, part-time or no identifiable district level library media supervisor/coordinator.

Table 2.2. Florida School Districts with District Library Media Supervisors/Coordinators

	Count	Percentage
Full-time Supervisor/Coordinator*	35	51%
Part-time Supervisor/Coordinator**	20	29%
No District Level Supervisor/Coordinator	14***	20%

* District level person who has full time responsibility for school library media programs

** District level person who has additional non-media responsibilities

*** Includes two state schools designated as districts (university lab schools, Florida School for the Deaf and Blind, etc.)

Only 51% of Florida school districts have a full-time library media supervisor or coordinator at the district level, while another 29% employ a part-time person at the district level with some responsibility for library media centers and staff. Although it might be assumed that the status district level staff (full-, part-, or no time) is related to district size, several of the smaller school districts do employ a full-time library media supervisor or coordinator. Two of those smaller districts, in fact, had a 100% return rate on the survey. In contrast, in one large district, school library media specialists were clearly uncertain about the district level staff. They reported in almost equal numbers a full-time person, a part-time person, and no district level staff. The confusion may have come from the term "supervisor," when the district staff person is designated "teacher on assignment" and has no supervisory role.

Table 2.3 indicates the return rate by time of the media supervisor/coordinator. There was a significantly higher rate of survey return from districts with full-time or part-time media supervisors/coordinators. Library media supervisors/coordinators were clearly interested in the results of the study and encouraged their schools to participate. Some reported providing data to the schools to assist them in completing the survey instrument; another visited each school, retrieved the surveys and delivered them to the researcher in person.

The difference in rate of return led to *ex post facto* examination of data to determine if the status of a district library media supervisor/coordinator might correlate positively with other factors, and to determine if significant differences might exist between any variables measured in the Florida library media study when district library media supervisors/coordinators, either full- or part-time, are present. Findings revealed significant differences between districts with full-time, part-time and no library media supervisor/coordinators. Although there is nothing to confirm a causal relationship, the data does point to areas for further study, and a separate paper on the topic has been prepared (Appendix F).

"I think our county media specialists suffer greatly because we have no county coordinator or supervisor."

Table 2.3. Return Rate by District Supervisor/Coordinator

	Not Returned	Returned	Total
Full-time Supervisor/Coordinator	880 (36.80%)	1511 (63.20%)	2391
Part-time Supervisor/Coordinator	78 (60.43%)	111 (39.57%)	189
No District Level Supervisor/Coordinator	142 (41.27%)	93 (51.83%)	235
Total	1100	1715	2815

- Hypothesis: "The rate of return was greater for district with full-time supervisor than with "part-time supervisor or no supervisor."

  The return rate is 1.85 times (with 95% confidence interval (1.50, 2.28)) higher for district with full-time supervisor than "with part-time supervisor or no supervisor."

- Hypothesis: "The rate of return was greater for district with full-time supervisor than without supervisor."

  The return rate is 2.62 times (with 95% confidence interval (1.99, 3.45)) higher for district with full-time supervisor than "without supervisor."

- Hypothesis: "The rate of return was greater for district with part-time supervisor than without supervisor."

  The return rate is 2.17 times (with 95% confidence interval (1.47, 3.21)) higher for district with part-time supervisor than "without supervisor."

- The rate of return is not significant different for district with full-time or part-time supervisor since the 95% confidence interval is (0.8, 1.63).

Findings indicate that the presence of a district library media supervisor/coordinator is positively correlated with the size of the collection. When a full-time district level school library media supervisor/coordinator is present:

- Schools have significantly more books in the collection.
- School library media programs have more reference materials on CD-ROM.
- The total number of books purchased annually for the school collection is higher.
- Significantly higher numbers of resources are purchased in areas that need to be kept current and have been pointed out as areas which need weeding and updating by SUNLINK's Weed-of-the-Month program (such as medicine and health, space, and government during the 2000–2001 school year.)

Significant differences in several areas of the school budget for school library media materials and equipment were also found when there is a district library media supervisor/coordinator. Where there is a district staff person compared schools in districts without a district library media supervisor/coordinator, the book budget from other sources is significantly higher, and the operating budget from both the school budget and other sources is higher. Among the findings:

- Where there full-time district library media supervisor/coordinator:
  - More money from other sources is spent on books;
  - More money from other sources is spent on newspapers and magazines;
  - More funds from other sources are spent on non-print (AV) materials;
  - More is spent for equipment from the school budget;
  - Both school budget and other sources for operating expenditures are higher;
  - Operating expenditures from both school budget and other sources are higher;

- Both capital purchases and capital outlay are greater than when there is no district level library media supervisor/coordinator, and the budget for other capital purchases from other sources is higher.

- When spending in districts with full-time library media supervisors/coordinators are compared to those with part-time supervisors/coordinators, more money is spent on periodicals, newspapers and non-print materials from other sources, supplementing the school budget.
- Where there are full-time library media coordinators/supervisors, there are significantly more technology resources-especially in other areas of the school-to access information and library media center resources.
- Where there is a full-time district library media supervisor/coordinator:
  - There are more standalone computers in the school library media center compared to those in schools with no district supervisor/coordinator.
  - There are more computers in the school.
  - More computers are connected to the LAN and WAN.
  - More computers have CD-ROM drives and access to networked CD-ROMs than in schools in districts with no library media supervisor/coordinator.
  - More computers in the school have access to the Internet.
  - More computers have access to the school's online catalog.
  - More computers have access to SUNLINK and other online databases.
  - There are more computers available in the school to accommodate learners with special needs.

The paper will be fully developed and submitted for publication.

Staff and Staffing in Florida's School Library Media Centers

Certification

Data in Table 2.4 indicate over 98% of Florida's public schools that returned a usable survey report having a library media center. However, only 84% responded that they have certified school library media specialists. An additional 11% reported staff currently seeking certification. The actual number of schools without a certified school library media specialist is may be much higher, however, because a large percentage of schools without knowledgeable library media specialists may not have returned the survey. It is likely that schools without certified school library media specialists might not return the survey because they did not understand the nature of the questions, didn't understand the importance of the survey, or did not have adequate data collection mechanisms in place to provide the information requested.

Table 2.4. Florida Public Schools with School Library Media Centers & Media Specialist(s)

Level	Have Media Center	Certified Media Specialist?		
		Yes	No, but Seeking Certification	No
Elementary	97.7%	80%	7%	13%
Middle	99.6%	90%	7%	3%
High	98.1%	93%	5%	1%
Combination/Other	97.0%	78%	8%	11%
Mean	98.2%	84%	11%	55%

Just as every child deserves a highly qualified teacher, every school deserves a certified library media specialist. Elementary and combination schools have fewer certified library media specialists, giving the impression that they are not as important or, perhaps, that accreditation, required for most secondary schools, has more influence with school boards and administrators than meeting student and teacher needs or maximizing the use of facilities and collections. Possibly as a result of school-based decision-making, data from this research project indicates a continued lack of commitment toward support for quality school library media programs through provision of qualified school library media specialists for library media centers. From the late 1970s on, there have been areas of the state where there were no professional library media specialists in schools large enough to support a full-time program, where unilateral decisions were made to eliminate the position of elementary library media specialist, for example, or to staff the library media center for only part of the day. In the past 10 years, there has been evidence that administrators have systematically misunderstood or outright rejected the importance of the library media program for their schools, culminating in the report by Mary Shanklin and Lori Horvitz in the *Orlando Sentinel* newspaper in November 2002, that

> A fifth of Florida's 67 school districts have cut library spending in the past five years. Almost a third have replaced media specialists with teachers and clerks. Not all schools improve their grades, but those with professionally staffed libraries are twice as likely to see reading scores improve as schools without certified librarians studies show (p. 1).

One of Florida's larger school districts has recommended that a certified teacher *oversee* the library media program in every school. Unfortunately, this policy has frequently been implemented by assigning a classroom teacher, who also retains classroom duties and who may have little or no knowledge of library media programs and collections, responsibility for the media center, much as they might be assigned lunch duty or club mentorship.

Selecting a certified teacher to work full-time in the media center is simply not adequate. Teachers "out of field" are generally not used in other programs and classrooms except on a temporary or emergency basis. Well intentioned as they may be, teachers with little or no training in the roles and responsibilities of a professional school library media program can cause irreparable harm to the school library media collection and to the program. Schools and districts with a commitment to a quality program require that the school library media professional be certified in educational media before they are assigned to be a school building level library media specialist.

In areas of the state where certified library media specialists are not priorities for every school program, individuals considering enrolling in certification programs may rethink the decision and elect not to do so fearing they will not have jobs when they finish. This in turn has provided principals with an excuse to say they can't find a qualified media specialist for their school. This cycle is dangerous to the profession, but also to Florida students who deserve library media programs staffed by certified, qualified library media specialists.

The most recent development regarding certification as a school library media specialist is also potentially damaging to the program, to collections and to students. Certification may be obtained by passing the subject area test for educational media. No coursework or experience is necessary. Passing the test requires only the lowest-level knowledge of the role, that which can be measured with multiple-choice questions. The test, because of the process in place for updating and validating, is also sadly out of date and out of sync with reality in today's technology-rich, outcomes driven school library media programs. Certifying individuals who do not have in-depth knowledge of collaboration with teachers, information skills curriculum and instruction, technical processing, selection and evaluation of materials, collection development and materials for children and young adults may rapidly deteriorate school library media programs and collections.

Table 2.5 indicates the highest educational level of all paid library media center staff, professional and clerical. More than 68% of all library media specialists in Florida hold a master's degree or higher with media certification. Those with certification in educational media total approximately 78%, with 94% of high school library media specialists holding certification in educational media, but only 81% at the middle school level and only 73% at the elementary level. Those working in clerical positions include those with master's degrees, bachelor's degrees and those who have not yet completed a bachelor's degree.

Table 2.5. Highest Educational Level & Certification of All Paid Library Media Center Staff (Professional and Clerical)

Level	Master's or Higher with Media Certification	Master's Degree with Other Certification	Master's Degree with No Certification	Bachelor's Degree with Media Certification	Bachelor's Degree with Other Certification	Bachelor's Degree with No Certification	Less than Bachelor's Degree
Elementary	62%	8%	1%	17%	11%	7%	59%
Middle	75%	9%	1%	16%	6%	7%	60%
High	84%	6%	2%	24%	10%	8%	56%
Combination/Other	63%	11%	2%	17%	4%	7%	45%
Mean	68%	8%	1.2%	9.37%	17.99%	7.07%	58.31%

Until the recent "pass the test" route to certification was provided, Florida certification for school library media specialists required a bachelor's degree or higher with 30 graduate hours in specified areas of library media. Although almost 70% of all library media specialists in Florida hold a master's degree or higher along with media certification, fewer media specialists in elementary schools and combinations schools than middle or high school library media specialists hold the master's degree and certification. The school library media specialist needs both advanced training and recent education and professional development in order to be an effective instructional leader; to work collaboratively with teachers; to communicate program goals, needs and accomplishments to administrators and other members of the school community; to integrate and manage technology in the school library media center; to manage reading incentive programs; to provide information in a variety of formats; and to ensure that students can locate, evaluate and use information. School library media specialists are teachers, and advanced training and degrees are indicators of continued professionalism and good investments for successful careers.

Table 2.6 depicts staffing in Florida school library media centers. At the elementary level, there is an average of .99 paid professional in each media center working an average of 38.95 hours per week. There is an average of .97 clerical positions working 31.17 hours per week, and 7.94 volunteers work an average of 71.29 hours per week. At the middle school level, there is an average of 1.34 professional staff, 1.22 clerical staff, and 7.98 volunteers. At the high school level, there is an average of 1.79 professional staff members, 1.22 clerical staff, and 5.48 volunteers. Combination schools have 1.16 professional staff, .84 clerical staff on average, and 3.65 volunteers. Total hours of staffing provided by professional, clerical staff and volunteers total 141 at the elementary level, 106 at the middle school level, 136 at the high school level, and 90 in schools with combination grades or other levels.

Table 2.6. Florida School Library Media Center Staffing

Level	Paid Professional Staff (Headcount)	Professional Hours Per Week	Clerks (Headcount)	Clerk Hours Per Week	Volunteers (Headcount)	Volunteer Hours Per Week
Elementary	.99	38.95	.97	31.17	7.94	71.29
Middle	1.34	42.54	1.31	37.66	7.98	26.62
High	1.79	67.61	1.22	45.35	5.48	23.43
Combination/Other	1.16	44.95	.84	28.77	3.65	16.40

The large number of volunteers, especially at the elementary level, and the hours they assist are notable and commendable; however, training and coordination of volunteers is an additional professional responsibility for school library media specialists that most classroom teachers do not have. With the large number of volunteers at the elementary school level, a great deal of time must be devoted to this responsibility.

Professional Activities

Many of Florida's professional school library media specialists are members of professional associations at the local, state, and national level. 75.1% are members of their local professional association, 61.7% are members of FAME, the primary state professional association for school library media specialists, and 18% are members of a national library media professional association. Table 2.7 details professional membership in local, state and national professional associations by school level. It also shows percentages of library media specialists who hold memberships at a combination of local, state and/or national professional associations. Over 16% do not belong to any professional association.

Table 2.7. Membership of School Library Media Specialists in Professional Associations

Member of	Elementary		Middle		High		Combination/ Other		Mean	
	#	%	#	%	#	%	#	%	#	%
Local Association	685	73.7%	244	78.2%	220	81.8%	62	55.4%	1211	75.1%
State Association	541	58.2%	203	65.1%	195	72.5%	56	55.4%	995	61.7%
National Association	132	14.2%	64	20.5%	80	29.7%	23	22.8%	299	18.5%
Local and State	471	60.7%	176	56.4%	175	65.1%	45	44.6%	867	53.8%
State and National	108	11.6%	60	19.2%	70	26.0%	19	18.8%	257	15.9%
Local and National	118	12.69%	53	16.99%	75	27.9%	19	18.8%	265	16.4%
Local, State & National	169	18.2%	50	16.0%	68	25.3%	16	15.8%	234	14.5%
No Professional Membership	169	18.2%	40	12.8%	26	9.7%	27	26.7%	262	16.3%

While the number of school library media specialists holding membership at the local and district level is commendable, all should be encouraged to participate in these professional associations and their activities. At the same time, professional associations should try to determine the services and benefits that would attract additional

members. School library media specialists need opportunities for professional growth and development as well as the leadership opportunities that these groups provide. In addition, membership in national associations can assist in program development and help library media specialists keep in touch with current trends and new developments in the field. With only one or two professional library media specialists in a school, opportunities for specialized professional development are often difficult to find. 16.3% of school library media specialists in Florida's public schools are missing out on the benefits of belonging to such groups including leadership opportunities; opportunities for professional growth through publications, conferences, electronic discussion lists and newsletters; and opportunities to impact the profession through committee work, interactions with legislators and community leaders, and other activities.

The data indicate that FAME and other professional associations at all levels should aggressively market their programs and services to Florida's school library media specialists, conduct needs assessments, and tailor programs and activities, including professional conference programs, sessions and publications, to needs of today's school library media professionals.

There are two major professional conferences in Florida with programming specifically for school library media specialists, the annual conference of the Florida Association of Media in Education (FAME) traditionally held in various Florida locations during October or November, and the Florida Educational Technology Conference (FETC) held annually in Orlando on dates varying between the beginning of January and the end of March. Table 2.8 shows the number and percent of school library media specialists at each level who report that they regularly attend these conferences. Almost half attend either FAME or FETC, while ⅓ attends both. However, 30% say they attend neither professional conference on a regular basis.

Table 2.8. Attendance of School Library Media Specialists at State Professional Conferences

Attend	Elementary		Middle		High		Combination/ Other		Mean	
	#	%	#	%	#	%	#	%	#	%
FAME	461	49.8%	170	54.5%	171	63.6%	49	48.5%	851	49.6%
FETC	452	48.6%	162	52.9%	166	61.7%	38	38.8%	818	47.6%
Both Conferences	303	32.6%	110	35.3%	135	50.6%	28	27.7%	576	33.5%
Neither Conference	317	34.1%	89	28.5%	67	24.9%	41	40.6%	514	29.9%

The school library media profession changes rapidly. School library media specialists have been asked to assume new roles and responsibilities, particularly with respect to national and state standards, high stakes testing, reading initiatives, technology and information literacy. Funding and opportunities for school library media specialists to take advantage of statewide professional development opportunities are critical to quality school library media programs, and school library media specialists should request the time and financial assistance to attend these and other professional development opportunities including national and international conferences (especially when they are in close proximity to Florida), local workshops, online courses and collaborative experiences.

Many sessions at these conferences focus on the role of the school library media program and student achievement. Others present information about new and emerging technologies, new teaching and learning strategies, new curriculum tools and trends in education, all critical to today's school library media specialists. In recent years, information about national board certification has been a topic at these conferences, and the conferences have provided opportunities for professionals to meet and discuss National

Teaching Board of Professional Standards (NTBPS) requirements, the process and the benefits as well as the opportunity to make personal contacts for ongoing support.

Although Certification by the National Teaching Board of Professional Standards (NTBPS) in the area of school library media is relatively new and no one was certified in the area of Library Media/Early Childhood through Young Adulthood at the time of the study, 15 (.93%) school library media specialists held national board certification in an area other than library media, 103 (6.39%) were seeking certification at the time of the study and 331 (20.5%) were planning to seek national board certification in the near future (Table 2.9). Subsequently, 62 (3.6%) or 60.1% of those seeking the certification became national board certified in library media in 2002, the first time they were eligible.

Table 2.9. National Teaching Board of Professional Standards Certification

Status	Elementary		Middle		High		Combination/ Other		Mean	
	#	%	#	%	#	%	#	%	#	%
National Board Certified*	4	.43%	4	1.28%	6	2.23%	1	1.02%	16	.93%
Currently Seeking Certification	60	6.45%	19	6.09%	20	7.43%	4	3.96%	103	6.39%
Will Seek Certification in the Near Future	175	18.82%	68	21.79%	72	26.77%	16	16.33%	331	20.5%

Totals: Certified, 15 or .93%; Seeking, 103 or 6.39%; Will seek, 331 or 20.5%.

To continue to hone professional skills, to be regarded as professional teaching colleagues, and to continue earning the respect of peers, parents and legislators, school library media specialists should continue to seek national board certification and other opportunities to demonstrate mastery of their professional skills. They should be encouraged to participate in the process, and they should be supported at the school and district level while seeking national board certification. They should also be recognized and rewarded when they achieve the certification.

"After 26 years, I am more excited than ever about my job! I look forward to developing and maintaining a media program which will support the school curriculum and which will be a source of pride for years to come."

Age of the Profession

The Florida Retirement System offers the Deferred Retirement Option Program (DROP) to participants who "reach the normal retirement date, the first day a member completes 6 or more years service and attains age 62 or completes 30 years service at any age" (Florida Retirement System, 2003). At the time of the survey, a member could participate in the program for up to 60 months. Although the 2003 Florida Legislature lengthened the total time some educators maybe participate in the program, membership in DROP provides a fairly reliable measure of those who will be leaving the profession through retirement in the next few years. Table 2.10 indicates that over 25% of those currently employed as school library media specialists are currently in the DROP program, with 20.43% of elementary professionals, 26.6% of middle school professionals, 40.52% of secondary library media specialists and 31.17% of library media specialists working in combination/ other levels participating.

Table 2.10. Florida Media Specialists in DROP Program (Less than 5 Years to Retirement)

	Elementary		Middle		High		Combination/ Other		Mean	
	#	%	#	%	#	%	#	%	#	%
DROP	190	20.43%	83	26.60%	109	40.52%	32	31.70%	414	25.70%

Professional preparation programs, district personnel offices and school administrators should note with alarm the large number of school library media specialists who will be leaving the schools in the next several years due to retirement. This potential shortage does not take into account school library media specialists leaving for other reasons—maternity or family leave, moving out of state, returning to the classroom, moving to administration or district level positions, and the like. Florida must create strategic plans to recruit and prepare new people for the field. Practicing school library media professionals, including those who are about to retire, know what the position entails and should help identify teachers-and perhaps even high school students-who would most likely be a credit to the profession, and then steer them to college programs, post-bac certification and degree opportunities. Even after retirement, taking an active role in recruiting and mentoring new professionals will help to ensure the profession remains strong.

Service Hours and Library Media Center Usage

Table 2.11 depicts the average seating capacity of the library media center at each grade level. It also shows the average number of hours the library media center is open per week during school, before school, after school and in the summer. Elementary schools are open an average of 29.72 hours per week with an additional 4.98 hours before and after school available to students. Middle schools are open an average of 32.07 hours per week with an additional 4.6 hours before and after school. High schools are open an average of 34.79 hours per week and an average of 6.49 additional hours of operation before and after school. Combination schools are open 30.49 hours per week with an additional 5.94 hours available before and after school. All levels have some summer operating hours with high schools having the most open hours, averaging 8.28 hours per week.

Table 2.11. Library Facilities and Hours of Operation

	Elementary	Middle	High	Combination/ Other
Seating Capacity of Library Media Center	68.06	103.71	138.09	75.57
Hours Open per Week During School	29.72	32.07	34.79	30.49
Hours Open per Week Before School	2.22	2.77	2.50	2.64
Hours Open per Week After School	2.76	1.83	3.99	3.30
Hours Open per Week During Summer	2.02	2.62	8.28	5.32

Budget issues have prohibited most schools from providing extended hours to meet the information and instructional needs of students. While providing some time (less than 30 minutes per day in most cases) before and after school for teachers and students to come to the library media center, additional hours and staffing would make more resources available to more students.

Table 2.12 reports the average weekly usage (estimated counts and amounts) reported by library media specialists at each level with the mean across all levels in the last column. Usage includes individual (127.34) and group (34.85) visits to the media center for information skills instruction, individual (195.19) and group visits (37.22) to the library media center to use technology, and individual (306.56) and group (47.54) visits to the library media center for other uses. Table 2.12 also shows average circulation (781.81) per week and the estimated number of materials used in the library media center but not checked out (492) each week. The average number of interlibrary loans to other school library media centers within the district, from other school library media centers in the district, and to and from other library media centers outside of the district are indicated. The table also shows the percentage of time classes are flexibly scheduled on average by level. Table 2.12 also estimates the estimated average total number of hours students are online in the media center each week.

Table 2.12. Weekly Usage Statistics

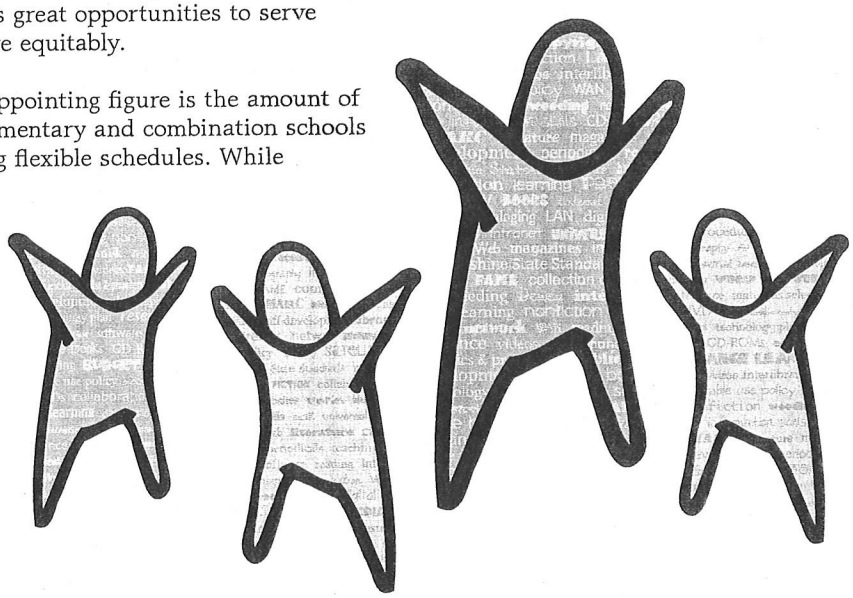
	Elementary	Middle	High	Combination/ Other	Mean
Individual Visits to Media Center for Information Skills Instruction	145.98	88.79	116.63	104.36	127.34
Group or Class Visits to Media Center for Information Skills Instruction	41.48	30.51	24.52	12.64	34.85
Individual Visits to the Media Center to Use Media Center Technology	148.32	310.52	376.22	101.85	195.19
Group or Class Visits to the Media Center to Use Media Center Technology	22.75	48.40	80.10	23.09	37.22
Individual Visits to the Media Center for Other Uses	303.70	316.35	342.74	205.48	306.56
Group or Class Visits to the Media Center for Other Uses	45.77	57.59	49.64	27.48	47.54
Circulation (Materials Checked Out)	1016.56	571.70	267.11	504.84	781.81
Materials Used in the Media Center	538.97	478.88	417.02	276.36	492.00
Interlibrary Loans to Other Library Media Centers in District	.92	1.69	1.55	.88	1.17
Interlibrary Loans from Other Library Media Centers in District	.55	1.69	1.18	.61	.89
Interlibrary Loans to Other Library Media Centers Outside the District	.08	.22	.45	.27	.18
Interlibrary Loans from Other Library Media Centers Outside the District	.05	.08	.22	.39	.10
Percentage of Classes Flexibly Scheduled	41.81%	80.61%	88.72%	58.81%	58.72%
Hours Students Are Online	13.07	84.04	106.90	27.44	43.84

These figures provide evidence that school library media centers are busy places, and that school library media specialists are busy professionals. At all levels, individual visits to the library media center for various uses average between 600 and 700 per week, many of whom need individual assistance. Added to that are between 100 and 200 class or group visits per week, and those generally require some planning with teachers. Although school size is somewhat smaller, elementary school circulation is roughly four times that of high schools and twice that of middle schools and combinations schools. High schools, however, report 1.5 times as many materials used in the library media center but not checked out as their average circulation figures. Elementary schools, on the other hand, report half as many items used in the media center as circulated, but still more items than in high schools. This is important when considering, for example, that reshelving those materials can take an inordinate amount of time.

Low interlibrary loan statistics at all levels indicate that school library media specialists still have not taken advantage of resource sharing opportunities that other types of libraries have realized and now assume as standard practice. Many are reluctant to advise faculty and students of the availability of this service and many still reject requests to borrow materials. In an age where budgets are smaller and needs are greater, interlibrary loan provides great opportunities to serve students more equitably.

Another disappointing figure is the amount of time that elementary and combination schools report having flexible schedules. While middle and high schools have approximately 80%–90% of their time flexibly scheduled, elementary schools have almost 60% of their time filled with scheduled classes and combination schools have approximately 42% scheduled classes. Particularly in elementary schools, it appears that time in the library media center may continue to be used as a way to provide a break time for teachers; but when classes are the media center most of the time, the media specialist has less time to meet and plan collaborative activities and instruction with teachers or to work with small groups and individuals who need assistance.

Flexible scheduling allows students to use the media center when they need it, not just when scheduled making it a learning facility open to them all day. Flexible scheduling also helps library media specialists design information literacy instruction that coordinate with teachers' lessons and the curriculum, factors which have been shown to contribute to student achievement (Loertscher, D., & Champlin, C., 2002). The Kentucky study (Allard, S., & White, J., 2000) indicated that flexible scheduling—where resources and the library media specialist are available to students and teachers on an "as needed" basis and where there is no limit on the length or frequency of visits by students or classes—was one of the most important characteristics of high performing schools (p. 4).



Staff Activities

Tables 2.13 through 2.16 summarize the estimated average number of hours per week paid library media staff spend on various activities that take place in school library media centers. The activities are categorized under the following headings: Learning and Teaching, Information Access and Delivery, and Program Administration. Subtotals are provided for each level. Because school library media specialists do not routinely track their time, all figures are estimated. In an effort to make data more comparable, the second column at each level gives the percentage of total estimated time at that level for each activity. The third column translates that estimate to minutes of a 40-hour workweek across all levels.

Table 2.13. Staff Time Allocation: Learning & Teaching

Staff Activity: Learning & Teaching	Elementary			Middle			High			Combination/Other		
	Mean Estimated Hours per Week	Percentage of Time	Minutes per week based on 40 hour week	Mean Estimated Hours per Week	Percentage of Time	Minutes per week based on 40 hour week	Mean Estimated Hours per Week	Percentage of Time	Minutes per week based on 40 hour week	Mean Estimated Hours per Week	Percentage of Time	Minutes per week based on 40 hour week
Planning with Teachers	1.74	2.05%	49	3.07	3.22%	77	3.67	3.10%	74	2.07	2.53%	61
Teaching Cooperatively with Teachers	2.28	2.68%	64	6.18	6.49%	156	8.50	7.18%	172	3.18	3.89%	93
Planning & Preparing Materials for Lessons Taught Independently of Classroom Teachers	3.52	4.14%	99	3.41	3.58%	86	3.82	3.23%	77	2.75	3.36%	81
Providing Staff Development to Teachers or Other School Staff	1.29	1.52%	36	1.98	2.08%	50	2.24	1.89%	45	1.16	1.42%	34
Meeting with Building or District Committees/ Teams/Task Forces (curriculum, technology planning, school improvement, etc.)	1.25	1.47%	35	1.51	1.59%	38	1.91	1.61%	39	1.29	1.58%	38
Assisting Individual or Groups of Teachers to Access or Utilize State Initiative Information (Sunshine State Readers, FCAT, SUNLINK, etc.)	1.49	1.75%	42	1.93	2.03%	49	2.11	1.78%	43	1.97	2.41%	58
Evaluating Students' Work (grading or correcting papers)	.62	.73%	18	.75	.79%	19	.77	.65%	16	1.12	1.37%	33
Subtotals: Estimated Time on Learning & Teaching	12.19	14%	338	18.83	19.7%	474	23.02	19.4%	467	13.54	16.5%	397

"Since switching to a flexible schedule, circulation is up, and the media center is being used more often by more students."

Learning and Teaching

As Table 2.12 indicated, only 41.61% of the elementary schools and 58.81% of the combination schools are flexibly scheduled, compared with 80–90% of middle and high schools. As a result, elementary school library media staff and those in combination grades spend only about ⅔ of the time planning with teachers that middle and high school library media staff members do. Even at the high school level, a total of only 6 (out of 40) hours per week planning with teachers and teaching cooperatively with them is not a great amount considering the large numbers of teachers in most of our high schools along with the fact the secondary schools have more paid professional staff.

The Colorado studies (Lance, et. al., 1993, 2000b) indicated that students in schools where media specialists worked closely with teachers achieved higher test scores than schools where school library media specialists and teachers did not collaborate. Training on the instructional role of the school library media specialist needs to be a requisite part of school administrator's coursework and preparatory experiences, and workshops for current principals and other administrators concerning the essential aspects of a quality library media program, along with the benefits to students based on the research, should be offered. There also needs to be a requirement for certification and recertification of administrators to demonstrate an understanding of the need for a certified media specialist and components of a quality library media programs. School library media specialists must make time to communicate with administrators about their activities, especially about their efforts that contribute to academic achievement, reading, and learning strategies.

The time spent "planning and preparing materials for lessons taught independently of classroom teachers" was very similar, with estimates ranging from 2.75 to 3.82 hours per week. One category of interest is "evaluating students' work (grading or correcting papers)," responses verify the perception that compared to teachers, media specialists spend little time grading papers, generally less than 30 minutes per week. However, the library media staff works with teachers and students in a different way than classroom teachers. Media specialists may participate in evaluation and assessment activities, for example by designing elements of rubrics related to information skills for students and teachers to use in evaluation. Feedback from the use of those rubrics may be used by library media specialists to plan activities related to other information literacy dimensions of assessment. All in all, working together to plan evaluation and assessment activities is a better use of time than grading papers, although library media specialists clearly do that as well.

2 to 5 times as much time is spent in "providing assistance in accessing information" as "providing reading incentive activities." Given the potential impact of the Internet on library media resources and student research and the emphasis on reading and lifelong learning, one might expect both figures to be even higher. Total estimated time devoted to teaching and learning is less than 20% at all levels. Given results of other "time on task" research, finding ways to increase the amount of time school library media specialists spend on the instructional process would most likely be reflected in improved student achievement.

"Every year it's a fight to keep what flexible scheduling I have (about 50%). I'm getting tired of fighting. If research shows that flexible scheduling raises test scores, why is fixed scheduling still an option in Florida?!?"

Table 2.14. Staff Time Allocation: Information Access & Delivery

Staff Activity: Information Access & Delivery	Elementary			Middle			High			Combination/Other		
	Mean Estimated Hours per Week	Percentage of Time	Minutes per week based on 40 hour week	Mean Estimated Hours per Week	Percentage of Time	Minutes per week based on 40 hour week	Mean Estimated Hours per Week	Percentage of Time	Minutes per week based on 40 hour week	Mean Estimated Hours per Week	Percentage of Time	Minutes per week based on 40 hour week
Performing Basic Library Media Center Activities (checking in and out, re-shelving, processing, retrieving materials)	21.05	24.78%	595	20.65	21.68%	520	21.40	18.09%	434	17.93	21.92%	526
Identifying Materials for Instructional Units Developed by Teachers	3.03	3.57%	86	3.75	3.94%	95	5.31	4.49%	108	3.14	3.84%	92
Providing Assistance in Accessing Information (searching, research process, citations, copyright, critical thinking, evaluation of online sources, etc.) to Individuals or Groups	5.04	5.93%	142	9.14	9.60%	230	15.11	12.77%	306	7.18	8.78%	211
Providing Reading Incentive Activities (booktalks, storytimes, reading contents, Battle of the Books, reader's advisory services, author visits, etc.)	630	7.42%	178	3.27	3.43%	82	2.89	2.44%	59	4.83	5.91%	142
Subtotals: Estimated Time on Information Access and Delivery	3.42	41%	984	36.81	38.6%	927	44.71	37.7%	907	33.08	40.5%	970

Information Access and Delivery

As information specialists, library media specialists and staff spend the largest amount and percentage of time on activities related to information access and delivery during each week. "Performing basic library media center activities (checking in and out, reshelving, processing, retrieving materials)" occupied nearly one-quarter of staff time at all levels and over half the time in "information access and delivery." Given that other areas may have bigger payoffs in terms of student achievement and skills for lifelong learning, that technology is available to assist in many of these basic functions, and that most of these tasks can be performed by students, clerks, or volunteers, school library media specialists should look for ways to work smarter and to re-prioritize activities, placing "working with teachers and curriculum" and other teaching and learning activities higher up on the list. If the perception remains among administrators and teachers that library media specialists primarily circulate books and perform low-level tasks, perhaps it is because that is where they continue to put the bulk of their visible time and effort.

"I am very fortunate to have a full-time aide who is wonderful and enables me to attend CORE meetings with the administration on a weekly basis [very important in making us an integral part of the school], curriculum and staff meetings, district meetings, and to go to classrooms when needed. Also, our 100% flexible schedule benefits the entire school."

Approximately 4% of a school library media specialist's time is spent identifying materials for teachers to use. If this is done in collaboration with teachers rather than in isolation, the activity offers more opportunities to clarify instructional goals and create new learning experiences for students that reflect both content objectives and information skills. Working together to identify materials also helps teachers become more information literate and better at searching, evaluating, and utilizing information so that library media specialists can spend more time with them on other teaching and learning activities.

The greatest disparity between schools is in the area "providing assistance in accessing information," with high school staff spending three times as much time as elementary schools, probably because of more specific and unique needs for materials at the high school level. In elementary schools, library media specialists spend nearly twice as much time as high schools in "providing reading incentive activities." While the emphasis on reading especially in the elementary grades is important, it seems equally important to teach students to locate, access, evaluate and use information in the early grades so they can become more independent and sophisticated in their research and use of library media resources. That would free middle and high school library media specialists to work more collaboratively with teachers and focus on more unique learning and information needs that occur at higher grade levels. At the same time, given test scores in reading at the middle and high school levels and the increased emphasis on reading, the fact that library media staff in the upper grades spend two to three times on reading incentive activities than elementary school professionals provides an area for further investigation. Does that time and those programs payoff in terms of improved reading skills? What is the impact on voluntary reading and reading for pleasure?

"We have two on staff funded through 'Experience Works' (formerly 'Green Thumb'). These senior citizens are paid through the state program and are invaluable to our media program. They shelve books and help process materials 20 hours a week."

Table 2.15. Staff Time Allocation: Program Administration

Staff Activity: Program Administration	Elementary			Middle			High			Combination/Other		
	Mean Estimated Hours per Week	Percentage of Time	Minutes per week based on 40 hour week	Mean Estimated Hours per Week	Percentage of Time	Minutes per week based on 40 hour week	Mean Estimated Hours per Week	Percentage of Time	Minutes per week based on 40 hour week	Mean Estimated Hours per Week	Percentage of Time	Minutes per week based on 40 hour week
Managing Library Media Center Technology	6.19	7.29%	175	8.99	9.44%	227	12.35	10.44%	250	8.30	10.15%	244
Managing Technology Throughout the School	4.47	5.26%	126	4.01	4.21%	101	2.80	2.37%	57	3.84	4.70%	113
Administering Electronic Reading Programs (AR, RC, etc.)	4.80	5.65%	136	6.05	6.35%	152	8.58	7.25%	174	5.85	7.15%	172
Managing Collection Development	1.76	2.07%	50	2.67	2.80%	67	4.58	3.87%	93	1.81	2.21%	53
Managing AV Equipment	2.35	2.77%	66	2.58	2.71%	65	3.44	2.91%	70	2.46	3.01%	72
Promoting the Media Program	.63	.74%	18	.86	.90%	22	1.50	1.27%	30	.76	.93%	22
Managing Interlibrary Loans	.74	.87%	21	.83	.87%	21	1.11	.94%	23	.67	.82%	20
Managing the Finances of the Media Center	.16	.19%	5	.24	.25%	6	.29	.25%	6	.15	.18%	4
Meeting with Building and District Library Media Staff	.91	1.07%	26	1.03	1.08%	26	1.34	1.13%	27	.87	1.06%	26
Meeting with Library Media Center Staff Outside the District	1.20	1.41%	34	1.06	1.11%	27	1.34	1.13%	27	1.51	1.85%	44
Meeting with Principal and/or Other Building or District Administrators	2.70	3.18%	76	1.64	1.72%	41	1.60	1.35%	32	1.62	1.98%	48
Attending Faculty or Staff Meetings	1.64	1.93%	46	1.89	1.98%	48	2.79	2.36%	57	1.53	1.87%	45
Duties Unrelated to School Library Media Center Services (monitoring recess, lunch, restrooms, playground duty, etc.)	7.59	8.93%	214	5.04	5.29%	127	4.43	3.74%	90	3.52	4.30%	103
Participating in Professional Development Activities as a Learner/Participant	2.21	2.60%	62	2.70	2.84%	68	4.45	3.76%	90	2.27	2.78%	67
Subtotals: Estimated Time on Program Administration	37.35	43.9%	1055	39.59	41.5%	997	40.6	41.7%	1026	35.16	33.0%	1031

Program Administration

"Managing library media center technology" consumes considerable amount of time each week at all levels, but high school staff spends an estimated 12.35 hours per week compared with elementary schools that spend 6.19 hours per week. High schools, of course, are larger and have more technology. However, this is a telling statistic, particularly since the Southern Association of Colleges and Schools (SACS) has modified standards to allow schools to count the school technology coordinator as a replacement for the second media specialist. Many schools are adopting this option at a time when high school media specialists are already stretched to the limit, providing new as well as time honored services. Another interesting item is "administering electronic reading programs" where it has been suspected that elementary schools would spend more time, high schools spend 8.58 hours per week as opposed to elementary schools with 4.8, perhaps because of larger numbers of students in secondary schools and the individual nature of these programs.

Little time is left in a library media specialist's busy day to promote the program, manage interlibrary loans, or manage the finances of the library media center; every effort should be made to find ways to provide more time for these three important elements of program administration. Promotion and public relations are key to utilization of library media resources and collaboration with teachers. Teachers and administrators can only begin to value the role of the library media specialist when professional relationships are developed and contributions to team efforts are recognized. Interlibrary loans have become easier to manage with SUNLINK, especially when taking advantage of email ILL, and few collections can meet the diverse needs of today's students. Providing access to resources outside the library media center is an important element of the contemporary library media program and specified throughout the current national standards, *Information Power: Building Partnerships for Learning* (AASL, 1998). In addition to increasing interlibrary loans, more time for managing finances in today's difficult budget years might reveal other ways in which dollars can be stretched and resources can be maximized. To do this, however, the library media specialist must be actively involved in the budget process.

Perhaps one of the most disturbing statistics in this area is the amount of time spent by library media staff on "duties unrelated to school library media center services" (monitoring recess, lunch, restrooms, playground duty, etc.) especially when compared with time spent on other professional tasks. Elementary library media staff, for example, report that they spend 9% of their time per week on "unrelated duties," four times as much time as "planning with teachers." It seems that if impacting student achievement is the bottom line, managing collection development and working with teachers would be more important than monitoring restrooms and assisting with the loading of school buses at the end of the day. While school library media specialists should assume their share of those duties, it seems to take a disproportionate amount of time when compared to other activities which have been shown to correlate strongly to student performance. Overall, there is a need for school library media specialists to work with teachers and principals, to help them understand the role of the school library media specialist, and to enlist their help in prioritizing their activities to be more in line with *Information Power.*

"The media center is always busy with many different things always going on at once. I love my media center and my program. I just wish I had more time in the day to juggle all the managing and teaching responsibilities."

Table 2.16. Staff Time Allocation: Summary & Totals

Area of Staff Activity	Elementary			Middle			High			Combination/Other		
	Mean Estimated Hours per Week	Percentage of Time (rounded to nearest %)	Minutes per week based on 40 hour week	Mean Estimated Hours per Week	Percentage of Time (rounded to nearest %)	Minutes per week based on 40 hour week	Mean Estimated Hours per Week	Percentage of Time (rounded to nearest %)	Minutes per week based on 40 hour week	Mean Estimated Hours per Week	Percentage of Time (rounded to nearest %)	Minutes per week based on 40 hour week
Learning & Teaching	12.19	14%	338	18.83	20%	474	23.02	19%	467	13.54	17%	397
Information Access & Delivery	35.42	41%	984	36.81	39%	927	44.71	38%	907	33.08	40%	970
Program Administration	37.35	44%	1055	39.59	41%	997	40.6	42%	1026	35.16	43%	1031
Total Estimated Time in All Areas	84.96	100%	2400	95.23	100%	2400	118.3	100%	2400	81.78	100%	2400

It should be noted that many participants felt video production should have been listed somewhere as an important use of professional time. In the open-ended questions, for example, they state:

None of your questions covered the television production aspect of the media program. My television production program impacts the entire school community. Nearly 1000 students a year are introduced to TV production either as audience members at the studio itself or as part of the production crew. We also produce numerous videos as part of classroom projects tied to curriculum each year.

I get paid for 40 hours of work a week. I work 50 to 60 hours per week. I may have missed it, but I saw no place on your log to put in the 10 hours a week that I devote to TV/video production activities.

This survey neglected to ask about our services in television production. For over 8 years now I have spent nearly an hour each day to videotape and produce the morning announcements. It is a highly organized program, requiring hours of work for scheduling, communication, etc. to expose students to the program.

Your survey did not address video production i.e. morning news, putting videos on, remote broadcasting. I know many media folks are given this task daily.

Others may have included video-related tasks in one of the three broad areas. While these are only estimates, time spent in various activities seem quite consistent across grade levels in most areas. A more detailed review of staff time is recommended for future studies. Perhaps we need easy, sophisticated and more accurate ways of recording how we spend our professional time. However, it appears that in all Florida public schools, less than 20% of staff time is spent on activities directly associated with teaching and learning, while the remaining time is equally divided between information access and delivery and program administration. While all activities contribute to the school community, it would seem sensible to find ways to maximize time spent planning and teaching collaboratively with teachers, teaching information literacy, and other teaching and learning activities that might result in higher student achievement.

As Stephen Covey says, "If we keep doing what we're doing, we're going to keep getting what we're getting." In this age of accountability, that may not be good enough.

School Library Media Policies and Procedures

Table 2.17 summarizes the percentage of schools reporting specific policies and procedures in place related to budgeting, information skills, distance learning, communication with the public library, copyright, collection development, policy and procedure manual, summer reading programs, and technology planning.

Table 2.17. Library Media Policies and Procedures

	Elementary	Middle	High	Combination/ Other	Mean
Media Specialist Prepares & Submits Annual Budget	41.51%	51.28%	57.99%	54.49%	47%
School Has Specific Information Skills Curriculum	62.37%	54.17%	47.58%	47.52%	57%
Media Program Has Responsibility for Distance Learning	23.12%	24.04%	30.48%	34.65%	25%
Ongoing Communication with Public Library	59.25%	62.18%	55.02%	56.44%	59%
Media Center Has Board Approved Copyright Policy	92.58%	95.19%	92.94%	80.20%	92%
Media Center Has Board Approved Collection Development Policy	79.89%	87.18%	88.25%	73.27%	82%
Collection Development Policy Includes:					
Materials Selection Policy	75.38%	83.97%	82.16%	72.28%	78%
Weeding Policy	71.18%	77.88%	76.21%	67.33%	73%
Reconsideration of Challenged Materials	75.48%	83.33%	82.53%	73.27%	78%
Library Media Program Has Written Policy and Procedure Manual	81.94%	90.06%	87.36%	71.29%	84%
Library Media Program Has Summer Reading Program	14.52%	13.78%	14.52%	10.89%	14%
Library Media Program Works Cooperatively with Public Library to Promote Summer Reading	71.08%	58.01%	30.48%	42.57%	60%
School Has Written Technology Plan	78.49%	83.01%	84.75%	77.23%	80%
Technology Plan Includes School Library Media Program/Center	56.60%	63.38%	72.12%	64.36%	63%

Budgeting

The number of school library media specialists who report preparing and presenting an annual budget ranges from 41.51% to 57.99%. Preparing a budget allows the school library media specialist to assess and prioritize needs on an annual basis. The budget can be prepared in different ways. For example, in zero-based budgeting, the budget is built from the ground up, with the final total being what the school library media specialist feels will meet the needs of the program. On the other hand, an amount may be allocated from the school budget and/or district, and the school library media specialist looks at needs and decides on priorities for spending. Either way, preparing the budget and presenting it to the principal offers an annual opportunity for dialogue about the media program, goals, needs and plans. Missouri's *School Library Media Handbook* (2002) available on the World Wide Web states:

> A budget is a planning document which states the library media center's funding needs and anticipated sources of income. The process of budget development involves identifying program goals, objectives and activities. Justification for funding should be stated in terms of how learning goals and objectives for the total school's instructional program are realized through the library media center. Under no circumstances should the library media specialist be required to administer the program without participating in the budgeting process. (Library Media and Technology Consultant, Missouri Department of Elementary & Secondary Education)

Wisconsin's requirements for initial licensure in school library media include evidence that the candidate can "prepare, justify, and administer the school library media program budget based on instructional program needs and state regulations and policies and funding program requirements" and, at the professional licensure level, that the candidate be able to "advocate for sufficient budget/resources from local, state and federal sources to meet library media program goals at the school district level." (*Library Media Specialist Licenses (Initial and Professional Levels)*, 2003)

In the latest revision of the Massachusetts Standards for School Library Media Programs, the job description for a library media specialist includes the ability to "plan, prepare and administer the library media budget, special funding and grants to reflect the needs of the entire learning community" (*Massachusetts School Library Media Program Standards for 21st Century Learning*, 2003).

Many media specialists commented that the budget is not part of their job responsibility because of "site-based decision making." However, site-based decision does not mean that the school library media specialist should abdicate the budget responsibility, or that the budgeting is controlled by the principal, but that the school library media specialist must become a part of the team that makes decisions about budget, curriculum, instruction, and instructional materials. The American Association for School Librarians position statement on site-based management says:

> Site-based management requires that the library media specialist plan and defend the building-level library media budget.

"All of our past funding sources have been cut— Public School Technology funds, flex funds, school budget, money for attending professional conferences, and we recently lost our technology specialist because of budget cuts. I know this will have a tremendous impact on my statistics and effectiveness as a library information specialist."

The budget request should indicate the resources necessary to accomplish a given set of goals and objectives which are tied closely to the instructional program. Aligning budgetary and instructional priorities is a sound practice that will win support for the library media program. A vehicle for establishing priorities for purchasing must be in place, and it must address the budgetary relationship to other departments in the school. Documentation of present needs and long-range planning for future needs should be an ongoing process (AASL, 2003).

"Is it better to leave outdated books on the shelves or weed them? I'm afraid we'd have nothing left if I weeded all I should. Our funds were frozen again this year."

Other media specialists said they have no budgeting responsibilities "because the principal just decides how much money we get. We have no say in the matter." While this is a difficult situation, it does not excuse the school library media specialist from preparing and justifying a budget. No matter how large or small the financial resources, preparing a budget—deciding on how to spend the money to make the most impact—is a critical professional function.

The budget process offers the school library media specialist an opportunity to work with school administrators and other members of the school community to help them understand the role and needs of the school library media program, and to demonstrate to them professionalism, leadership skills and planning abilities. This is an area that needs much improvement by and perhaps some professional development opportunities for Florida's school library media specialists.

Information Skills and Information Literacy

Only 57% of school library media specialists report that their school has a specific information skills curriculum. *Information Power* (AASL, 1998) clearly assigns responsibility for teaching students to be information literate, independent and socially responsible learners to the school library media program and library media specialist. In fact, the nine standards for student learning are the heart of the document. "The library media program combines effective learning and teaching strategies and activities with information access skills" (AASL, 1998, p.1). What are information skills? What is information literacy? In their book, *Fostering Information Literacy* (2000), Helen Thompson and Susan Henley purport:

> Information literacy demands skills more complex and the traditional library skills that have been taught for years. It requires more thought than simply finding a source and copying the information for a report. Information literacy skills include recognizing when information is needed, selecting appropriate sources from the overwhelming amount of available print and non-print resources, evaluating the information for accuracy and pertinence, organizing the facts so that they make sense, creating knowledge by associating the new information with previous knowledge and experiences, and then using this knowledge wisely. Other essential skills contained the concept of information literacy are problem solving, critical thinking, creative thinking, recognizing patterns, understanding relationships, and transferring knowledge from one discipline or setting to another. All of these are abilities that enable the learner to derive meaning from information—to learn to learn. Information literacy also implies a self-motivated enjoyment of learning and a responsibility to contribute to and abide by the rules of our information society and our community of learners (p. 2).

Information Power says, "Information literacy—the ability to find and use information—is the keystone of lifelong learning. Creating a foundation for lifelong learning is at the heart of the school library media program" (AASL, 1998, p. 1).

Information literate students have skills they need to learn and succeed throughout life. In *Learning for the 21st Century: A Report and Mile Guide for 21st Century Skills* (2003), the Partnership for 21st Century Learning, a private-public consortium of business, community, and education leaders, includes learning and information skills as one of six major elements of learning. These include information and communication skills, thinking and problems-solving skills, and interpersonal and self-directional skills (p. 9). School library media specialists have an opportunity to lead in this area through creating their own partnerships with classroom teachers and administrators. Those skills are critical. They will be taught. Library media specialists, with their unique training and skills, must lead in this area.

In order to teach and assess students' abilities to locate, evaluate, and use information, one must clearly identify the complex knowledge and skills that lead to these standards and how best to sequence them, and when to introduce them, how to reinforce them. Information skills instruction must be central to any successful school library media program and tied to other curriculum objectives, core skills and knowledge, and the Sunshine State Standards. The much anticipated publication of *Information Literacy: Florida's Library Media/Curriculum Connections* (2003) should provide some guidance for those without a school or district information literacy or information skills curriculum, but it is only a first step in creating a useable information skills curriculum. "School library media specialists should provide instruction in informational and instructional technologies, access to information resources, and help in interpreting, evaluating, and communicating intellectual content." (*Beyond Proficiency*, 2001, p.15) Table 2.18 and discussion of the data it contains also relates to information skills and curriculum in library media programs, and presents data that is cause for additional concern.

"We have a wonderful relationship with our local public library branch. We take kids over for a tour, provide them with a library card application and bookmarks with the library hours. We provide the public library with a list of our AR books. The Friends of the Library group has given a donation every year to support the AR program."

Distance Learning

That the school library media specialist currently has little responsibility for distance learning is not surprising. Distance learning opportunities for students, teachers, administrators and school library media specialists themselves are relatively new. However, it is an area that is growing rapidly and because it generally involves both technology and information, the expectation that school library media specialists will be involved both as managers and as learners will also grow. E-learning is already a multi-billion dollar industry in the K–12 market. School library media specialists will need training about distance learning, its various forms and technological delivery systems, where to find learning opportunities for themselves and others, and how to support teachers and students who are involved in distance learning courses and workshops.

Collaboration with the Public Library

Because no library—school or public—can meet all needs of students, "ongoing communication with public library" is important to providing the best services for all students, yet only 55.02% to 62.18% report collaborating with the public library. Given that school library media centers are generally not able to provide extended hours during the school week, are not open on weekends, and provide little services in the summer, communicating and working with the public library would benefit students and teachers. In addition, because school library media specialists are generally isolated by virtue of the fact that there are only one or two library media specialists in each school, collaborating with public librarians could offer professional dialogue and support from professional colleagues.

Copyright and Collection Development Policies

It is not surprising that most schools have copyright policies in place. Threats of litigation and articles in the press about copyright infringement generally make school boards direct their attention to copyright and put policies and procedures in place to protect the schools and districts. It is surprising, however, to see that fewer schools have collection development policies in place than have copyright policies. Collections are at the heart of the school library media program and consume the largest part of the budget. Even more surprising then is the fact that not all schools with collection development policies include the three primary elements: information about selection, information about weeding, and information about how to handle challenged materials. These are core concepts for school library media programs and to operate without clear guidelines can result in unbalanced collections, poor quality purchases, out-of-date materials, materials in poor condition, and even lawsuits. It is recommended that every school review their collection development policies, create them if they do not exist, and include details about those three elements. All three should be done through dialogue with faculty, administrators and parents. An essential element of a quality program is the assurance that the collection is being wisely developed and adequately maintained.

Summer Programs

Although the number of schools offering summer reading programs is low, ranging is from 10.89% to 14.52%, given recent budget constraints in schools and districts, it is understandable. However, if Florida is to reach the goal of having every student reading at grade level, the resources of both school and public libraries will be critical to students in the summer. To have school library resources and services unavailable for the summer seems counter productive.

School Technology Plans and the School Library Media Center

Unfortunately, it seems that all Florida K–12 schools do not have a technology plan, although technology may be part of a larger school improvement plan and therefore, perhaps, not reported here. It may also be that the school library media specialist is unaware of the school technology plan as they are frequently developed by a small group and not shared with the larger school community. A recent study (Burhans, 2003) revealed that SAT scores were significantly higher in secondary schools in Florida and two other southeastern states (North Carolina and Georgia) with written technology plans in place. The fact that school library media centers, with all the technology they house and distribute, are not consistently part of school technology plans is likewise disturbing. A strategic plan for teaching and learning

"Through a grant from the state, I was able to implement a summer reading program last summer where I had the library open for 3 hours, 4 days a week."

with technology should encompass all areas of the school where technology is present and used to access curriculum and information resources, including the school library media center. Although many schools employ both technology coordinators and school library media specialists, in many schools the school library media specialist also assumes the role of technology coordinator. In either case, the technology, electronic and human resources of the school library media center need to be integral parts of any school technology plan or school improvement plan, and the school library media specialist should be a part of any team developing, reviewing, or implementing a technology plan.

Information Skills and Information Literacy

Table 2.18 reflects the various approaches to teaching information skills. Best practices and national standards recommend collaboration with teachers and integrating information skills into the curriculum.

Table 2.18. How Information Skills Curriculum Is Taught

	Elementary	Middle	High	Combination/ Other	Mean
By Classroom Teachers Only	1.94%	2.24%	2.60%	3.96%	2%
Through Media Program Only	14.19%	5.77%	4.83%	9.90%	11%
Through Integration into the Curriculum & with Other Teachers	46.45%	47.44%	44.24%	35.64%	46%
No Answer	37.42%	44.55%	48.33%	50.50%	41%

Information Power, library media preparation programs, and library media program evaluation instruments place instruction in information skills and information literacy as a high priority for library media center programs at all levels. While it is encouraging to see that a larger percentage of school library media specialists are integrating the skills into the curriculum than relegating instruction to teachers or teaching information skills in isolation in the library media center, the number is troubling when combined with the fact that not all schools have an information skills curriculum in place (Table 2.12). Even more cause for concern, however, is that fact that 41% of the respondents who said they had an information skills curriculum in place did not provide any answer to this question, a cause for concern.

Although there are no Sunshine State Standards specifically for school library media programs, information skills are woven throughout the other state standards and benchmarks. The Florida Department of Education Office of School Library Media Services has developed *Information Literacy: Florida's Library Media / Curriculum Connections* (2003), a document that reflects both state and national standards to be addressed by school library media programs which will serve as a statewide guide to those aspects of information skills instruction. First available on the World Wide Web in the summer of 2003, it is a document the state, districts and the professional association need to promote to school library media specialists and help them understand how it can be used. Professional development will be needed to help school library media specialists, teachers and administrators understand, apply, integrate and evaluate the skills presented in the document. This presents a new opportunity for school library media specialists to work with teachers, and to help them help their students meet the Sunshine State Standards in all curriculum areas and all grade levels.

School Library Media Programs and Reading

Today's library media programs had their roots in traditional libraries, and books and reading have always been closely associated with libraries. Recently, both state and national attention have been directed at improving students' reading abilities. Because the school library media collection includes a wide variety of print materials including books, periodicals, reference materials and electronic and Internet-based resources, and because school library media specialists have traditionally focused much effort on promoting reading for information and for pleasure, it is not surprising to see that an extremely high percentage of school library media specialists at all levels consider the library media program to be "of importance" or "of critical importance" to the reading program of the school (Table 2.19). Of the respondents at all levels who indicated the media program was "not of great importance" or "not important" to the reading program (n=49 or 2.8%), 80% were not certified in educational media. Library media preparation programs and professional development opportunities for practitioners, then, are critical to helping school library media professionals understand the role of the school library media program in the reading program of the school. As teachers and classrooms strive to create print-rich environments, school library media specialists and the resources of the school library media center should not be overlooked.

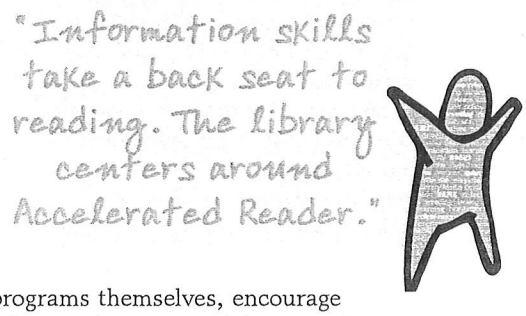
Table 2.19. Importance of Library Media Program to the Reading Program of the School

Status	Elementary		Middle		High		Combination/ Other	
	#	%	#	%	#	%	#	%
Of Critical Importance	590	68.13%	202	69.66%	122	48.80%	54	60.67%
Of Importance	243	28.06%	81	27.93%	100	40.00%	27	30.34%
Neither Important nor Unimportant	11	1.27%	2	.69%	10	4.00%	4	4.49%
Not of Great Importance, but Involved	15	1.73%	4	1.38%	12	4.80%	3	3.37%
Not Important	7	.81%	1	.34%	6	2.40%	1	1.12%

Research supports the school library media specialists' perception that the media program is critical to students' achievement in reading. A study of over 200,000 students in 32 countries (Elley, 1992) concluded that the number of resources in the school library was a powerful predictor of reading scores. A regular increase in average score was observed with increases in library size across all countries and within most of them. In Steven Krashen's (1993) review of reading research, he found that school libraries with larger, quality collections, that are available to students more hours, that provide comfortable and relaxing reading environments; and that are staffed with qualified school librarians, produce students with higher reading achievement. In a later study, Krashen (1995) found reading comprehension scores positively correlated with the number of books per student in school library media centers and with software in the school library media centers. Indicators of school library media quality were significant predictors of reading comprehension scores, while total school expenditures did not affect reading comprehension test scores.

It seems equally important, then, that school library media specialists be aware and take advantage of the many state and district professional development opportunities available to help educators improve students' reading skills. Just Read, Florida!, FLaRE, Reading First, Florida Online Reading

Professional Development (FOR-PD) and other statewide efforts offer training and materials to help learn more about scientifically-based research and strategies to help students become better readers. School library media specialists should participate in those



programs themselves, encourage other teachers to participate, and work collegially to implement sound reading improvement efforts. If all teachers are indeed reading teachers, the school library media specialist should mirror and reinforce efforts of teachers within the school to support classroom-based reading efforts, and work closely with reading teachers and coaches to offer a comprehensive, cohesive reading program.

It should be noted that perceptions of others in the school community might not align with that of the school library media specialist. In the Minnesota study, which included site visits to a number of school library media programs, principals did not associate school library media programs with efforts to improve reading skills:

> With the ongoing emphasis on reading improvement, site visitors observed that few principals acknowledged the role of a media program in improving reading. With the generally accepted theory that practice is a key to learning to read and in spite of the research showing how media programs can help improve reading, few principals mentioned this as an impact of their media program. (Baxter & Smalley, 2003, p. 84)

In a report of focus groups of parents, teachers, principals and students prepared for the American Association of School Librarians by KRC Research (2003), "most believe school librarians primarily play a support role—finding the information or resources needed in the most efficient way. Many, especially parents and students, do not see librarians as educated professionals who play an active role in the academic community."

In a presentation to school library media specialists, Dr. Sean Walmsley, Professor of Reading at University of Albany in his keynote address to the Capital Area School Development Association (NY) said:

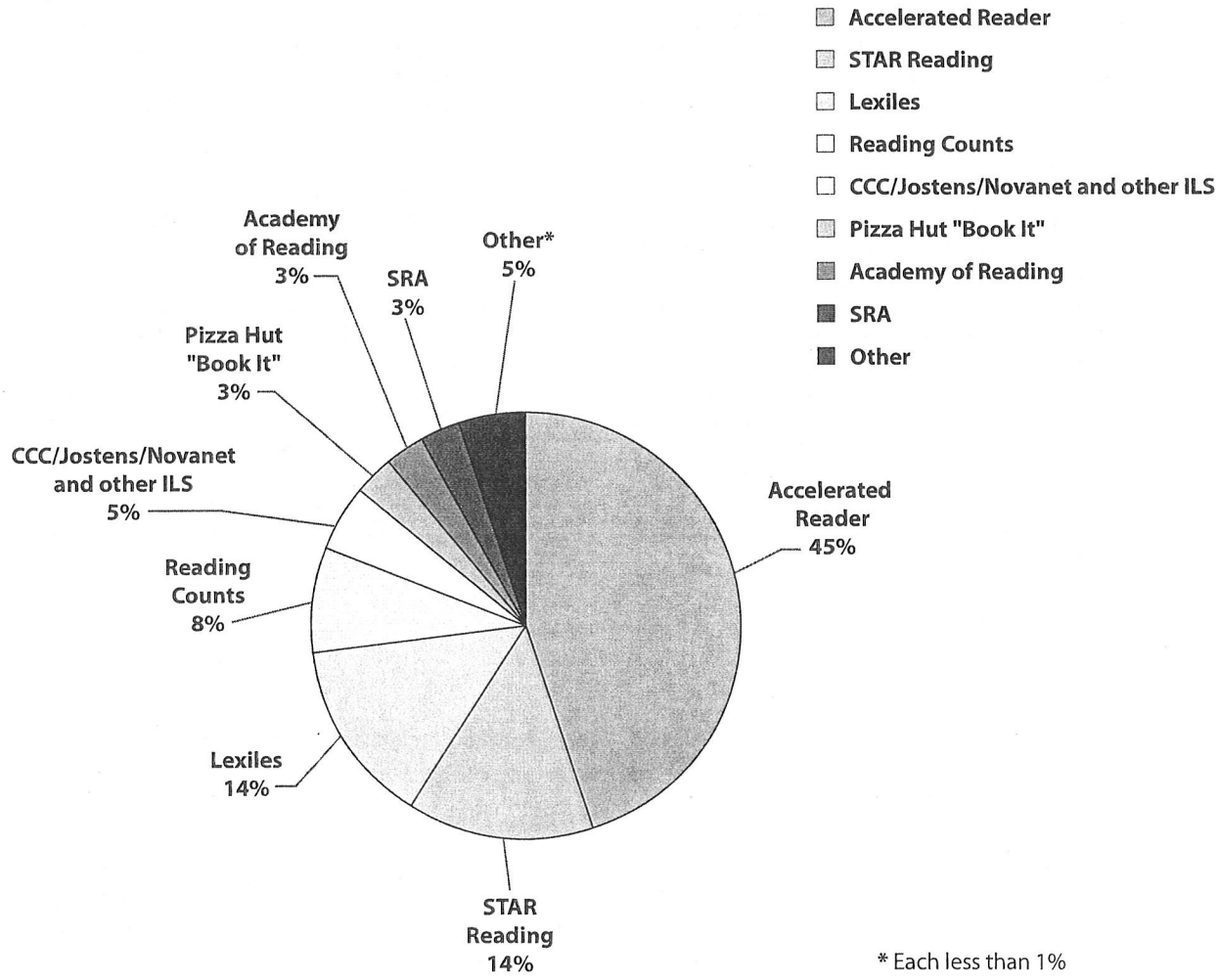
> Finally, my challenge to library media specialists is rethinking their roles in language arts their schools. I said they need to become more involved in the areas where they have the most to offer—in the area of accessibility to reading material (in both and classroom), in the selection and teaching of a wide range of library literature and other material, in the whole area of visual literacy. But they also have to be aware of, and be smart players in, the shifting politics, policies, and budgets of a post-September 11th environment. Not everyone thinks that the library/media center is a core component of the school's language arts program.
>
> . . . I'd like to see library media specialists take on more of a leadership library media in their schools to help shape the literacy policy in their building and role district. There are several key areas in which their training and experience uniquely qualifies them—in accessibility to books and other material, in promoting literacy understanding (not just reading comprehension), in visual literacy (as opposed to just textual literacy), and in motivating children to read. These require a long-term, sustained effort, and they need the leadership of the library media specialist to ensure their success. (Walmsley, 2002)

With the current emphasis on reading in Florida's K–12 public schools, it is imperative that school library media specialists participate fully in school reading improvement efforts, increase awareness of the active role the media programs play in reading among all member of the school community, and change perceptions through action and advocacy.

Reading Incentive Programs

School library media specialists report spending between 4.8 and 8.5 hours per week administering reading incentive programs in their schools (Table 2.15). Figure 2.2 indicates the percentage of the total number of schools returning the survey (n=1715) that reported using each reading incentive program listed. Some schools use more than one program, while many do not report the use of any commercial program.

Figure 2.2. Reading Incentive Programs Reported in Use in Florida



* Each less than 1%

School Library Media Center Resources, Technology, and Budgets

SUNLINK

SUNLINK, Florida's K–12 online public school union database of school library media holdings, is unique to Florida schools. Funded by the Florida legislature through the instructional materials budget of the Florida Department of Education, SUNLINK provides electronic access to information in Florida's library media centers through a powerful search engine. Users may search by title, author, subject, keyword, format, location, language, and date of publication. Boolean logic, truncation and wild card searches are also supported. SUNLINK is the one mechanism funded and used statewide to locate, access, and evaluate resources within and beyond the library media center as recommended by *Information Power* (AASL, 1998).

The project began in 1988. The first database was produced in 1992 on CD-ROM. In 1996, the first version of SUNLINK appeared on the World Wide Web, and beginning in the fall of 2002 is accessible only via the Web. Although originally funded as a resource-sharing tool, library media specialists have also used it for other purposes, and, in fact, the project itself has added enhancements such as the capability to search by reading level, interest level, or popular reading program features, and searchable educational websites.

Membership in SUNLINK is free, however, schools must apply to the project. SUNLINK pays all costs of record conversion and maintenance, provides a project manual and school directory, develops and distributes training materials and promotional items, and provides a monthly newsletter for all Florida K–12 public schools. Schools may receive their own enhanced, electronic records upon request, and these have been used to automate many school library media centers, saving time and money for individual schools. SUNLINK schools are responsible for postage to send interlibrary loan (ILL) materials to a borrowing school or to return them to schools from which they were borrowed, although project records indicate that over 95% of ILLs take place within a district, so district courier or mail services can be used at no cost to either school in an ILL transaction.

Criteria for selection as a SUNLINK school include collection readiness (weeded, readable and substantially complete shelflist or electronic records with enough match points that they can be converted to full MARC records), and willingness to share resources, maintain the database, and respond to requests for information from the project office. New schools may become SUNLINK members automatically by providing records for opening day collections.

"Although we will not have every book in our collection, we can get almost any title they desire through SUNLINK. The look on a student's or teacher's face when a special book comes in makes my day. It says that even though we are living in a small town, favorite books are only a website away and that I will go out and find them."

Table 2.20. SUNLINK Status

Public School Level	SUNLINK School		Not a SUNLINK School		Don't Know	
	#	%	#	%	#	%
Elementary	724	79.5%	173	19%	14	1.5%
Middle	270	87.1%	39	12.6%	1	.3%
High	252	95.5%	11	4.2%	1	.4%
Combination/Other	75	76.5%	19	19.4%	4	4.1%

Over 83% of Florida's public schools are SUNLINK schools. That a higher percentage of high schools and middle schools are included in SUNLINK probably is the result of two things. First, at the beginning of the project, only high schools or combination schools who had graduating twelfth graders were accepted due to funding limitations. The SUNLINK Task Force felt made this decision based upon the fact that there were fewer high schools than other types of schools and that high school students had the greatest need for information that may not be available in their own school library media centers. As more schools were included and additional funding became available, the application process was opened to middle schools and then to elementary schools. Second, an earlier survey of non-SUNLINK schools by the SUNLINK project office revealed that although most Florida schools have plans to become SUNLINK schools, some library media specialists, especially those in elementary schools, have fixed and hectic schedules with little clerical help and indicate they have not had time to have prepare their collections for the retrospective conversion process. They also indicated that they felt that elementary students have less unique research needs and most of their requests for materials could be handled by the local school's library media collection.

"The best thing about SUNLINK is the interlibrary loan of books. We are a very small school in a very small district and interlibrary loan is often instrumental in attracting students to the library."

Although the number of respondents who indicate they do not know if their school is a SUNLINK school or not is relatively small, it is a cause for concern. It is possible that some of the respondents are not certified library media specialists and have not learned about SUNLINK in certification courses. It may also be the case that some of these library media specialists have been hired from out-of-state and have no experience with or knowledge of SUNLINK for that reason. Library media specialists who are new to a school may not know whether the records for their new school's collection is a part of SUNLINK or not, and may not have gone to the effort, however small, to find out. With the large number of impending retirements, this situation could worsen if steps are not taken to make sure SUNLINK status, membership benefits and responsibilities are known to new library media specialists. This is a joint responsibility of the SUNLINK office, the school district and the library media preparation programs. Knowledge of SUNLINK should be required for certification as an educational media specialist in Florida.

District orientation for teachers and library media specialists should include information about SUNLINK, encouraging schools who are not SUNLINK members to apply and directing SUNLINK school library media specialists to participate in maintenance and resource sharing within district guidelines. In light of the budget crunches schools and library media programs are experiencing, SUNLINK can extend access to information for teachers and students at little or no cost.

Table 2.21. Non-SUNLINK Schools' Timeframe for Applying to SUNLINK

Public School Level	Within a Year		2–4 Years		5 Years or More		Do Not Plan to Be a SUNLINK School	
	#	%	#	%	#	%	#	%
Elementary	33	20.2%	54	33.1%	17	10.4%	59	36.2%
Middle	10	26.3%	10	26.3%	3	7.9%	15	39.5%
High	5	50%	1	10%	—	—	4	40%
Combination/Other	2	12.5%	4	25%	1	6.3%	9	56.3%

Table 2.21 summarizes the answers of non-SUNLINK schools with regard to when they plan to apply to the SUNLINK project. Although many plan to apply within the next five years, some do not plan to be a SUNLINK school. Many of these schools are in smaller districts with no district level library media coordinator/supervisor. Many are also schools with no certified school library media specialist, so they may not see the benefits of full MARC records, resource sharing, or even library automation systems. Membership in SUNLINK has been completely voluntary, and library media specialists who have taken the time to apply and complete the process should be recognized. While the rewards are great, those have either not been communicated to non-SUNLINK schools or the incentives are not compelling enough to move them to apply. Since this is a statewide project funded by the Department of Education, the DOE may want to find incentives for including to the holdings of all K–12 Florida public schools in SUNLINK in the near future.

Table 2.22. Who Uses SUNLINK?

Used by	Elementary		Middle		High		Combination/ Other		Mean	
	#	%	#	%	#	%	#	%	#	%
Media Staff	590	80.8%	236	88.4%	218	87.6%	64	84.2%	1108	83.8%
Faculty	168	23.9%	90	34.6%	87	35.7%	25	35.7%	370	29.0%
Students	110	15.7%	91	35.0%	122	49.0%	31	43.1%	354	27.7%

Table 2.22 summarizes use of SUNLINK by library media staff, faculty and students. Although SUNLINK does not require any report of how the database is used or by whom, and unless the district requires the statistics in a report of some kind, it can be assumed that these are estimates by the library media specialist for the most part. Even these estimates may be less than accurate because SUNLINK can be used by teachers, administrators, students, parents or media staff from home, the classroom or any computer with an Internet connection, so school library media specialists may not know the extent to which SUNLINK is being used outside of the library media center. However, school library media specialists would most likely know if SUNLINK is being used by teachers and students from conversations and reference interviews, collaborative planning sessions, requests for interlibrary loans, printouts of SUNLINK bibliographies and other indicators.

While the answers to this question of "who uses SUNLINK" deserves further exploration, it is quite clear that, although SUNLINK is designed to be used by students and teachers, it is still seen as primarily a tool for library media staff. While it is rewarding to the project staff and to the SUNLINK Task Force to see that SUNLINK is valued by library media specialists, efforts must be made to make it more accessible and used by teachers

and students as well. Because SUNLINK can be used by teachers to locate materials for units of instruction, to identify age-appropriate educational websites, to meet the special needs of some learners, and to create group and individual bibliographies, school library media specialists should offer training and support for teachers in using SUNLINK. Because students need access to information beyond the walls of the media center, because SUNLINK uses technology and requires the construction and refinement of search strategies for success, because the skills are transferable to other research processes and tools, and because the interface is easy enough for them to use, SUNLINK should be taught as a useful and unique tool for information retrieval by students of all ages.

How do school library media staff use SUNLINK? Although designed primarily as a resource-sharing tool, Table 2.23 indicates that it has found a wide variety of other uses in today's busy library media centers. In many districts, it serves as a district union catalog, providing access to the collections of other schools in the districts. In some cases, SUNLINK also provides greater access to the school's own collection because it is available on the World Wide Web from classrooms and homes, and because multiple access points including keyword, publication date, format, language and reading level, for example, are provided in SUNLINK while they may not be available in the school's own automated catalog. It is also used to help locate materials for teachers and in collection development (selection and weeding.) Although only 12% say they have used it to assist with challenges to materials in the collection, that means it has helped at least 200 school library media specialists through what many consider to be a stressful situation.

Table 2.23. All Uses of SUNLINK by School Library Media Specialists

Use SUNLINK for	Elementary		Middle		High		Combination/ Other		Mean	
	#	%	#	%	#	%	#	%	#	%
Teaching Information Skills	168	18.06%	71	17.88%	66	24.54%	21	20.39%	326	19.01%
Finding Educational Websites	185	19.89%	81	20.40%	73	27.14%	24	23.30%	363	21.17%
Assisting with Challenges to Items in Collection	81	8.71%	48	12.09%	49	18.22%	29	28.16%	207	12.07%
Selection	223	23.98%	102	25.69%	116	42.12%	32	31.07%	473	27.58%
Weeding	342	36.77%	126	31.74%	120	44.61%	33	32.04%	621	36.21%
Online Access to Own School's Collection	328	35.27%	136	34.26%	118	43.87%	39	37.86%	621	36.21%
Locating Materials for Teachers' Units	382	41.08%	162	40.81%	129	47.96%	40	38.83%	713	41.57%
Creating Bibliographies	249	26.77%	110	27.71%	100	37.17%	64	62.14%	523	30.50%
Interlibrary Loan	569	61.18%	227	57.18%	220	81.78%	69	66.99%	1085	63.27%
Online Access to Collections in the District	571	61.40%	218	54.91%	200	74.35%	73	70.87%	1062	61.91%
Locating Materials to Support Sunshine State Standards	194	20.86%	81	20.40%	56	20.82%	18	17.48%	349	20.33%
Locating Materials to Support Reading Initiatives	179	19.25%	67	16.88%	63	23.42%	23	22.33%	332	19.36%

When looking at the top five uses of SUNLINK by grade level (Table 2.24), there is little variation in the top three uses at all levels: 1) interlibrary loans (resource sharing), 2) cataloging and technical processing, and 3) online access to other collections in the district (district union database).

Table 2.24. Primary Uses of SUNLINK (Top 5 by Level)

Public School Level	Interlibrary Loans	Cataloging	Online access to other collections in district	Online access to own school's collection	Creating Bibliographies	Weeding/Collection Development	Locating Materials for Teachers' Units	Teaching Information Skills
Elementary	20.11% (1)	19.46% (2)	18.60% (3)	—	—	2.80% (5)	2.80% (5)	—
Middle	30.13% (1)	21.47% (2)	17.95% (3)	5.77% (4)	2.24% (5)	—	—	—
High	32.34% (1)	27.51% (2)	19.70% (3)	6.32% (4)	—	1.86% (5)	—	—
Combination/Other	21.76% (1)	24.75% (2)	19.80% (3)	4.95% (4)	—	1.98% (5)	—	1.98% (5)

SUNLINK is least used for locating materials to support the Sunshine State Standards, finding educational websites, teaching information skills, finding materials to support reading initiatives, and assisting with challenges to materials in the collection. Except for the last, these features and capabilities are most recent or not obvious to the casual user of SUNLINK. SUNLINK should continue its efforts to educate school library media specialists about the many uses of this tool.

The level of use by the school library media specialist could be attributed to: 1) speed and reliability of Internet access, 2) familiarity with SUNLINK and its features, 3) diversity in collections, 4) district policies/procedures/resources, 5) degree or importance of collaboration between school library media specialists and teachers, and 6) degree to which the library media specialist uses or feels comfortable with Internet.

Technology and the School Library Media Center

Since the early 1980s and the introduction of computers into K–12 schools, library media centers have integrated more and more technology resources into collections and activities. Today, many online databases, electronic reference sources and multimedia tools are specifically designed for K–12 students and curricula. Library media specialists have automated circulation, cataloging and other administrative tasks. Table 2.25 indicates the extent to which computer technology is present in today's schools and library media centers.

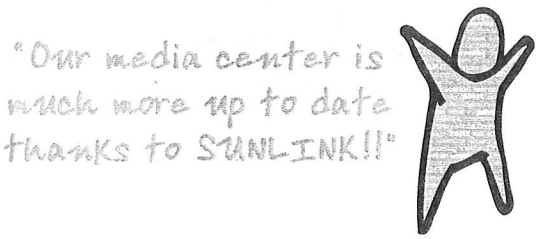


Table 2.25. School Technology Resources (Average by Level)

Technology	Elementary	Middle	High	Combination/ Other	Mean
Number of computers under media supervision	20.79	31.19	42.62	24.94	26.68
Number of other computers in the school	155.80	253.58	411.18	221.03	219.34
Number of standalone computers under media center supervision	6.42	5.68	10.23	4.72	6.82
Number of other standalone computers in the school	48.74	60.06	80.35	21.95	53.57
Internet capable computers under media center supervision	18.49	28.51	37.18	21.87	23.80
Other Internet capable computers in the school	126.07	216.78	371.58	217.23	185.96
Computers connected to the Internet under media supervision	15.20	32.07	39.58	21.98	23.00
Other computers connected to the Internet in the school	103.04	186.55	304.84	184.81	154.88
Computers on LAN under media center supervision	17.37	25.91	33.72	14.94	21.72
Other computers on LAN in the school	115.90	194.82	319.26	174.30	166.30
Computers on WAN under media center supervision	16.24	27.39	160.32	20.92	43.45
Other computers on WAN in the school	123.74	282.27	516.42	196.60	219.15
Number of computers in media center with access to online catalog	13.66	23.34	34.95	22.06	19.65
Number of other computers in the school with access to online catalog	78.58	219.80	241.09	120.45	132.97
Number of computers in media center with access to SUNLINK	14.49	26.62	37.49	22.73	21.41
Number of other computers in the school with access to SUNLINK	93.54	265.62	326.50	180.17	167.27
Computers under media center supervision with access to other online databases	51.51	19.30	35.82	20.01	17.56
Other computers in school with access to online databases	70.73	150.68	292.70	139.31	125.23
Computers with CD-ROM drives under media center supervision	22.46	33.27	37.96	24.83	27.30
Other computers in school with CD-ROM drives	140.40	214.65	367.35	202.88	192.81
Number of computers under media center supervision with access to networked CD resources	9.79	21.02	23.59	17.66	14.78
Other computers in school with access to networked CD resources	64.93	113.02	194.61	69.52	95.07
Computers with printer access under media center supervision	18.68	35.00	44.33	23.56	26.47
Other computers in the school with printer access	131.60	209.53	365.70	210.91	187.68
Computers under media center supervision with any accommodations for persons with disabilities	.64	1.28	2.17	.63	1.02
Other computers in the school with accommodations for persons with disabilities	7.37	15.20	30.58	15.17	13.98

"Our media center serves a 600 student technical magnet high school as well as about 10,000 adult technical and ESOL students. We strive to provide the access to information that enables all of our diverse students to succeed in their educational endeavors while here."

There appear to be some questionable numbers in the data in Table 2.25. For example, respondents at the middle and high school levels, report more computers connected to the Internet in the library media center than the total of Internet capable computers in the library media center. At the high school level, the number of computers on the wide area network (WAN) exceeds the total number of computers in the school, and that doesn't seem possible except that these are averages from across the state, and several large schools with huge numbers of computers could skew the averages. In any case, the data points out the large number of computers in our K–12 schools and the heavy responsibility it has added to the role of the school library media specialist. While business recommends one technical staff position for every 50 computers in the company, schools have not been adequately staffed to deal with technical problems. In many cases the school library media specialist acts as the school technology coordinator in addition to other professional duties. In some schools, school library media specialists have moved to a position as technology coordinator when such a position is funded because it is seen as an "easier" position, and is when compared to doing both jobs.

Technology for Special Needs

One area that requires attention is the lack of technology resources to accommodate the needs of special learners. Among the elementary, middle and high schools participating in the Florida School Library Media Study (Table 2.26), there are 1487 records reporting an average of 15% of their students with disabilities. 1256 (84%) of those schools report having computers with any accommodations for persons with in the media center, the average is 1.02 computers. 1064 (72%) of schools report other computers with accommodations to disabilities in the school, averaging 13.03 computers per school. The standard deviation is 68 computers, with many schools reporting that all or most of the computers have accommodations for students with special needs. This may include built-in system accommodations such as the ability to change font size, turn audio on and off, control the mouse speed, and enable sticky keys, but not special accommodations included in most universal access stations.

Table 2.26. Students with Special Needs and Computers with Accommodations for Disabilities in the School Library Media Center and in the School

Variable	N	Mean	Std Dev	Sum	Minimum	Maximum
Schools in the Florida Library Media Study Reporting Students with Disabilities	1588	16.45006	10.76966	26123	0.20	100
Computers with any accommodations in the school library media center	1339	1.00224	5.09235	1342	0	100
Other computers with any accommodations in the school	1129	13.16918	68.08343	14868	0	930

Table 2.27. Correlations between the Percentage of Students with Disabilities in the School and the Numbers of Computers with Accommodations for Disabilities

Pearson Correlation Coefficients Prob > |r| under H0: Rho=0 Number of Observations		
	Computers with any accommodations in the school library media center	**Other computers with any accommodations in the school**
Schools in the Florida Library Media Study reporting students with disabilities	-0.02011 0.4693 1297	0.01066 0.7246 1094

Table 2.27 indicates there is a statistically significant ($p<.05$) negative correlation (-.02) between the percentage of students with disabilities in the school and the number of computers with accommodations for students with special needs in the school library media center. In other words, the more students with special needs, the less computers available in the media center to help them access information and curriculum materials in electronic format, to use graphic organizers, word-prediction software and talking word processors to help them organize information and create reports.

There is no correlation between percentage of students with disabilities and other computers in the school with accommodations for disabilities. This is an area which needs immediate attention if students with special needs—including those with temporary needs and those not meeting official criteria for classification as a special needs student are to succeed academically and to acquire information and technology skills that will serve them well throughout life.

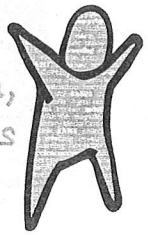
Although many school library media centers in the state have acquired a universal access workstation through the *Florida Universal Access Project* (2003) or as a result of seeing one of the model workstations and implementing its features locally, the technology available to meet the needs of the hearing impaired, visually impaired, or those cognitively, linguistically, or otherwise challenged is clearly not adequate. Technology accommodations include adaptive keyboards and other input devices, adjustable worktables that can be used by those in wheelchairs, screen readers, text to speech devices, scanners, word prediction software, concept mapping software, and simple devices such as those built into operating systems: font enlargement, sticky keys, high contrast displays. School library media specialists need professional development opportunities to learn more about ways to include all students in school library media centers activities and to provide for the needs of special learners and to ensure that those students are fully engaged in the school library media program and able to access and use information.

Other Technology Measures

The Florida Department of Education's Bureau of Educational Technology conducts an annual Technology Resource Survey with additional measures, but does not attempt to isolate any factors related to the school library media center or media program. Because library media programs include so much technology and technology resources, and because of library media program needs and resources are not regularly included in school technology and/or school improvement plans (Table 2.17) it might be prudent to include several questions about library media technology on the annual survey or to include some measures every other year in order to more accurately assess the needs and contributions of the school library media center's technology.

The data from the survey is the basis for the new *Florida School Technology and Readiness (STaR) Chart* (2003), a rubric based tool for evaluating technology and professional development. A graphic depiction of technology resources, student

"Our school received 60 wireless laptops that allow 3rd graders tools to access our mathematics software and resources. They also allow our adult migrant students to access Internet resources at night. Assistance with grant writing, initial organization, setup, laptop orientation for teachers and students were all done through the media center."



and teacher skills, the *STaR Profile Report Homepage* (2003), is available to the entire school community and the public through the World Wide Web. The tool allows each school to compare its own results with that of the district and the state. The School Library Media Services Office of the Florida Department of Education should work together with the Bureau of Educational Technology to ensure that library media technology is adequately assessed and represented. Library media specialists must be aware of that annual survey, results, and the STaR chart in order to more adequately meet the needs of their students and teachers with resources and professional development and to improve program planning and budgeting.

Because of differences in school sizes, even within a level, the school technology resources data was calculated by student population (Table 2.28) to make comparison easier for individual school library media specialists.

"In addition to being library media specialist, I am also our school's LAN administrator. I keep current five databases of student information (Athena, AR, Novell Client, Edutest, & FCAT Explorer). I am also responsible for all computer hardware maintenance and upgrades for our school."

Table 2.28. School Technology Resources (per 100 students)

Technology	Elementary	Middle	High	Combination/ Other	Mean
Number of computers under media supervision	2.35	3.11	3.32	5.29	2.82
Number of other computers in the school	15.32	21.12	26.48	38.29	19.72
Number of standalone computers under media center supervision	.66	.49	.72	.87	.65
Number of other standalone computers in the school	4.23	4.22	3.97	3.30	4.14
Internet capable computers under media center supervision	2.03	2.80	2.87	4.54	2.45
Other Internet capable computers in the school	11.81	17.30	21.12	35.16	15.75
Computers connected to the Internet under media supervision	1.60	3.01	2.91	4.46	2.27
Other computers connected to the Internet in the school	9.24	13.75	17.08	28.23	12.51
Computers on LAN under media center supervision	1.77	2.32	2.52	2.83	2.08
Other computers on LAN in the school	10.44	14.82	18.27	26.22	13.58
Computers on WAN under media center supervision	1.69	2.44	11.88	3.96	4.20
Other computers on WAN in the school	11.50	21.57	30.26	31.72	18.40
Number of computers in media center with access to online catalog	1.50	2.24	2.70	4.47	2.01
Number of other computers in the school with access to online catalog	7.22	16.58	13.95	18.12	10.99
Number of computers in media center with access to SUNLINK	1.60	2.51	2.88	4.61	2.17
Number of other computers in the school with access to SUNLINK	8.62	19.85	19.10	27.11	13.85
Computers under media center supervision with access to other online databases	1.18	1.80	2.73	4.06	1.74
Other computers in school with access to online databases	6.36	11.11	17.03	22.23	10.22
Computers with CD-ROM drives under media center supervision	2.46	3.21	2.91	5.32	2.80
Other computers in school with CD-ROM drives	13.01	16.26	20.92	30.06	15.98
Number of computers under media center supervision with access to networked CD resources	.98	1.87	1.64	3.31	1.38
Other computers in school with access to networked CD resources	5.56	8.22	10.78	10.78	10.14
Computers with printer access under media center supervision	2.01	3.33	3.37	4.99	2.68
Other computers in the school with printer access	12.02	15.08	21.17	32.69	15.49
Computers under media center supervision with any accommodations for persons with disabilities	.06	.11	.15	.12	.10
Other computers in the school with accommodations for persons with disabilities	.64	1.10	1.77	2.28	1.04

Table 2.29 examines the types of computers by operating system in Florida's public schools and Table 2.30 depicts the same data per 100 students in the school population. At the elementary level, the count is almost equally divided between the two major platforms, Macintosh and PC/Windows. At the middle school level, there are more PC/Windows machines than Macintosh, and at the high school level there are almost three times as many PC/Windows machines as Macintosh computers.

Table 2.29. Types of Computers (Average by Level and Type) as Described in Florida DOE State Technology Resources Survey 2001*

	PC/Windows Computers*							Macintosh Computers*						
	Pentium I	Pentium II	Pentium III	Pentium IV	Other Windows	Obsolete PCs	Total PCs	G3	G4	iMac	PowerMac	Other Macs	Obsolete Macs	Total Macs
Elementary	11.65	11.74	20.88	3.96	7.13	5.50	40.49	4.78	1.11	16.53	11.91	5.75	11.98	39.36
Middle	15.71	20.01	32.72	7.13	8.10	8.33	63.37	7.66	.88	12.48	14.21	4.71	6.83	35.48
High	34.94	57.54	49.06	42.05	8.41	8.45	139.45	11.37	3.14	15.42	15.35	7.29	9.73	48.32
Combination/ Other	8.40	16.95	19.65	13.63	2.77	1.76	42.82	3.16	1.69	9.15	5.78	4.05	3.18	22.55

Table 2.30. Types of Computers (Per 100 students)

	PC/Windows Computers*							Macintosh Computers*						
	Pentium I	Pentium II	Pentium III	Pentium IV	Other Windows	Obsolete PCs	Total PCs	G3	G4	iMac	PowerMac	Other Macs	Obsolete Macs	Total Macs
Elementary	.64	.80	1.58	.22	.39	.31	3.46	.31	.06	1.31	.85	.32	.71	3.26
Middle	.97	1.26	2.13	.36	.40	.42	4.74	.43	.04	.77	.84	.22	.33	2.53
High	1.81	3.01	2.82	1.74	.31	.29	8.59	.46	.12	.66	.64	.22	.29	2.38
Combination/ Other	1.09	2.32	3.00	1.49	.30	.18	6.54	.37	.21	1.13	.71	.40	.33	2.98

* Categories and sub-categories taken from the Florida Department of Education Technology Resources Survey, Fall 2001 (Bureau of Educational Technology). These categories and sub-categories used at the request of Florida Media Supervisors in order to compare to responses from school technology coordinator. Please note that researchers recognize that iMacs are either G3s or G4s; therefore, models may overlap.

"We run 28 different CD-ROM programs daily. Our biggest struggle is to get high speed access to the Internet. It is almost impossible with 686 computers in the school to have success with the Internet. I am happy we have the CD-ROM tower in the media center for research."

Library Media Center Automation

The first applications of computer hardware and software designed especially for school library media centers were those that allowed circulation and catalog functions to be automated. Most school library media centers have an automated circulation system of some kind (Table 2.31), but fewer have automated catalog systems. No school library media center should be without an online public access catalog (OPAC) or an automated circulation system any more than any business today should be without a computer. Circulation systems streamline the process of tracking materials, freeing the library media specialist and other staff to spend time on more important tasks such as information skills instruction, assisting students and teachers with information needs, and collaborating with teachers. Online catalogs provide "real world" applications of computer technology and equip students with search skills that transfer to the Internet and other electronic reference tools.

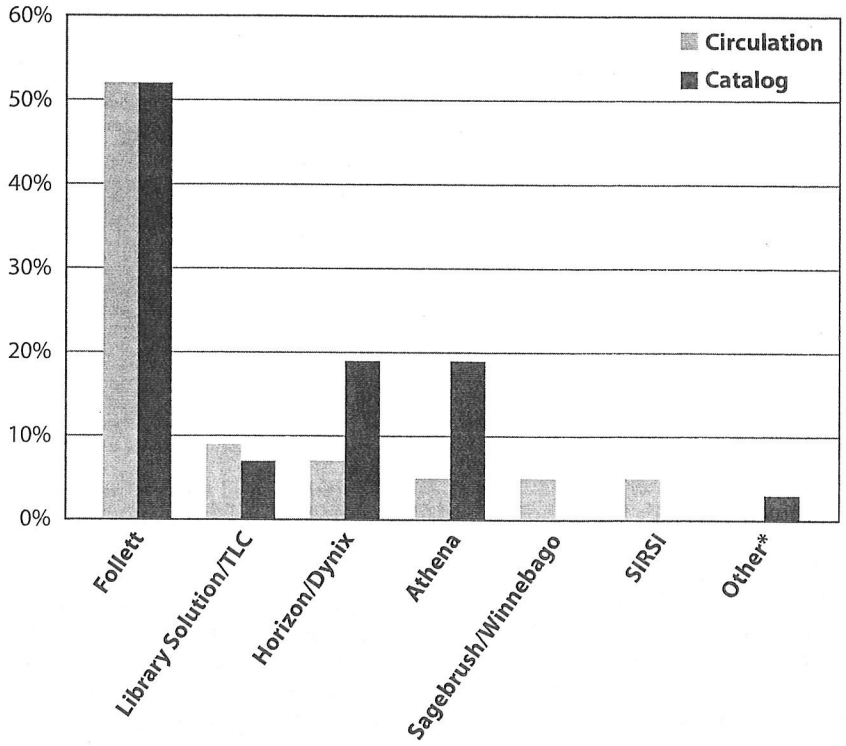
Schools without automation systems, or without adequate systems, should certainly work with school technology planning committees and/or school improvement teams to help them understand the need for these systems and the benefits to students and teachers so that they can be acquired within a short timeframe. Although many schools have an automated catalog, only 33 to 43% of them are available to students from home via the Internet and only 39 to 49% have access to automated district catalogs. SUNLINK may serve both purposes for many of these schools, however, so all districts with SUNLINK schools have access to the catalogs of SUNLINK schools in the district.

Table 2.31. Library Media Center Automation

	Automated Circulation	Automated Catalog	School Catalog Is Internet Accessible	Automated District Catalog
Elementary	94.30%	91.40%	36.99%	45.59%
Middle	94.55%	83.17%	43.27%	49.04%
High	93.68%	92.57%	46.10%	49.07%
Combination/Other	88.12%	83.17%	33.66%	39.60%

Figure 2.3 illustrates the primary school library automation systems in use in Florida. Follett has the largest established market share in both circulation and catalog systems at the current time.

Figure 2.3. Circulation and Catalog Systems Reported in Use in Florida K–12 Public Schools



* Less than 1% each
** Combined, each less than 5%

Other Technologies in the Library Media Center

Computers are not the only technologies available in today's school library media centers. Since the Elementary and Secondary Education Act (ESEA) was signed by Lyndon Johnson in 1965 to target funding for the redress of inequities in education based on poverty and race, funding has provided for broad initiatives including funding for educational materials such as books and audiovisual materials for school libraries. The 1970s witnessed a large influx of filmstrips, kits, 16mm films, slides, sound recordings and other non-print materials. During the 1980s, educational computer software and hardware became elements of quality library media centers.

Table 2.32 summarizes the technologies most common (telephone, CD-ROM drives, email for school library media specialist, each over 90%) and least common (keyboarding devices–19%, handheld computers–12%, and MP3 players–6%) in today's school more likely to be seen as classroom tools than tools for the school library media center, however, they can assist students and teachers with research, note taking, and organization information and transfer of data. They are relatively inexpensive devices compared with computers, and school library media centers might want to consider adding them to the tools available for students. Handheld computers and MP3 players are relatively new to the education market, and it is anticipated that as the educational applications for them grow and they become more established in schools, their use in school library media centers will increase as well.

Table 2.32. Availability of Other Technologies in Media Center

Technology	Elementary	Middle	High	Combination/ Other	Mean
Telephone	92.68%	94.55%	92.57%	86.14%	92.62%
Fax	7.85%	21.15%	39.76%	14.85%	16.19%
CD-ROM Drives	92.69%	91.35%	93.66%	90.10%	92.43%
CD-ROM Server	29.03%	38.78%	45.72%	29.70%	33.75%
Video/Data Projector	73.23%	81.73%	82.90%	71.29%	76.36%
Digital Camera	76.67%	75.64%	76.95%	76.24%	76.55%
Satellite Dish	24.19%	31.09%	43.49%	46.53%	30.15%
Laptops	55.81%	61.22%	68.77%	52.48%	58.81%
DVD	24.09%	33.97%	42.75%	22.77%	29.03%
Audio CDs	74.62%	78.21%	80.67%	64.36%	75.68%
MP3	4.73%	8.01%	10.04%	5.94%	6.33%
CD-ROM Burner	33.76%	45.83%	55.39%	36.63%	39.89%
Photocopier	43.12%	78.85%	91.82%	65.35%	59.55%
Wireless Networking	13.96%	18.91%	17.84%	12.87%	15.51%
Keyboarding Devices	24.30%	28.53%	13.01%	11.88%	22.46%
Handheld Computers	8.49%	11.86%	14.13%	13.66%	10.42%
Email for Media Specialist	90.97%	89.74%	92.91%	88.12%	90.76%
Email for Teachers	85.38%	87.50%	89.96%	81.19%	86.29%
Email for Students	12.58%	20.51%	34.94%	37.62%	19.42%
Board Adopted Internet Access Policy or AUP	90.75%	90.71%	91.45%	89.11%	90.76%
Internet Filtering	85.70%	86.86%	89.59%	86.14%	86.60%
School Website	76.02%	82.05%	90.33%	76.24%	79.59%
Main Page Links to Media Center	36.77%	49.36%	58.74%	30.69%	42.49%
Main or Media Page Links to SUNLINK	11.08%	26.64%	34.94%	13.86%	18.05%
Web Resources Page Designed/Maintained by Media Center	33.23%	37.50%	41.64%	25.74%	34.99%

Although the use of the Internet and World Wide Web is a very recent development especially when compared to books and other forms of intellectual property, almost the same number of schools have Internet access policies or acceptable use policies (AUPs) as copyright polices, and schools with Internet access policies or AUPs (Table 2.32) far outnumber schools with collection development policies, selection policies, weeding policies, and policies for reconsideration of challenged materials (Table 2.17).

School Websites

Marilyn Miller and Marilyn Schontz (2001) reported in 1999–2000, 55% of schools had a school website, but only 27% of school library media centers had a web presence. While in 2000–2001, over ¾ of all Florida schools report having a school website, very few link to the school library media center from the main page of the website. In fact, almost ⅔ of school library media programs do not have or maintain a web page for the library media center, with only an average

across grade levels of 35% reporting that they do. Very few school websites or library media center web pages (18% statewide) provide a link to SUNLINK.

"We are using our website to promote many programs at our school. Media staff and student assistants are responsible for content."

School library media centers can greatly increase their visibility to students, teachers, parents, administrators and the public by creating and maintaining a web page for the library media center and related resources. School library media specialists should select appropriate web resources for their school community and provide links to them from the library media center web page. In addition to providing a valuable service and making the school library media center more visible, web pages can help convey the fact that school library media resources go beyond the walls of the library media center and, in fact, beyond the school. They can also communicate that library media centers are "with it" places and library media specialists are effective users of Internet technologies. Library media web pages provide an opportunity to showcase resources, services, special events and staff. They can organize frequently used resources and provide tutorials and assistance to those seeking information. While creating and maintaining a web page takes time, it may save time in the long run and will make appropriate information resources more readily available to teachers and students.

Making frequent changes to parts of the school library media program page(s) will entice people to return frequently. A link to SUNLINK can be created easily, and is a good reminder of a resource available to students and teachers. SUNLINK has provided articles on how to do this and has included graphics for web pages. These articles should be updated and made available again now that more schools have web access and a web presence.

School library media center web page development is an excellent topic for professional development for school library media specialists who do not know how to create or maintain web pages. Much has been written about elements of effective websites and exemplary school websites, and excellent examples of school library media web pages can be found through Internet search engines and inquiries on LM_NET and FAME_NET listservs. Once developed, school library media specialists should be proactive in getting webmasters to link to library media pages from top pages on the school website and find compelling reasons and ways to update the pages frequently.

School Library Media Collections

Table 2.33 indicates average sizes of components of school library media resources by type and grade level and Table 2.34 shows collections per 100 students.

"We feel that we have a 'service-oriented' high school library media center. Meeting the needs of 600 to 800 patrons daily is a challenge. One of the biggest challenges is providing these services and materials to our students and teachers with a very limited budget."

Table 2.33. School Library Media Resources

	Elementary	Middle	High	Combination/ Other	Mean
Print Volumes	11278.2	13148.7	22355.9	9701.88	13497.6
Current Periodical Subscriptions	20.53	54.78	51.57	29.64	32.88
Current Newspaper Subscriptions	1.57	1.99	3.22	1.90	1.95
Electronic Subscriptions	3.38	6.62	19.27	56.11	10.04
Encyclopedias on CD or DVD	17.70	13.87	20.07	13.47	17.11
Video Materials (Tape or DVD)	509.79	725.07	934.87	706.82	636.45
Computer Software Packages for Use by Students in the Media Center	78.20	60.96	37.58	67.42	67.31
Total Volumes Purchased 2000–2001*	869.49	903.13	1267.81	1024.83	955.52
Volumes in Specific Areas:					
616/Medicine & Health	10.73	19.23	38.20	19.70	17.77
620/Space	13.63	13.66	24.45	10.31	15.33
320/Government	7.50	8.98	14.92	12.98	9.45
Volumes Weeded 2000–2001**	437.14	394.96	606.35	376.36	454.28

* 65 (3%) media centers purchased a total of 10 volumes or less. 101 (5%) purchased 100 volumes or less.

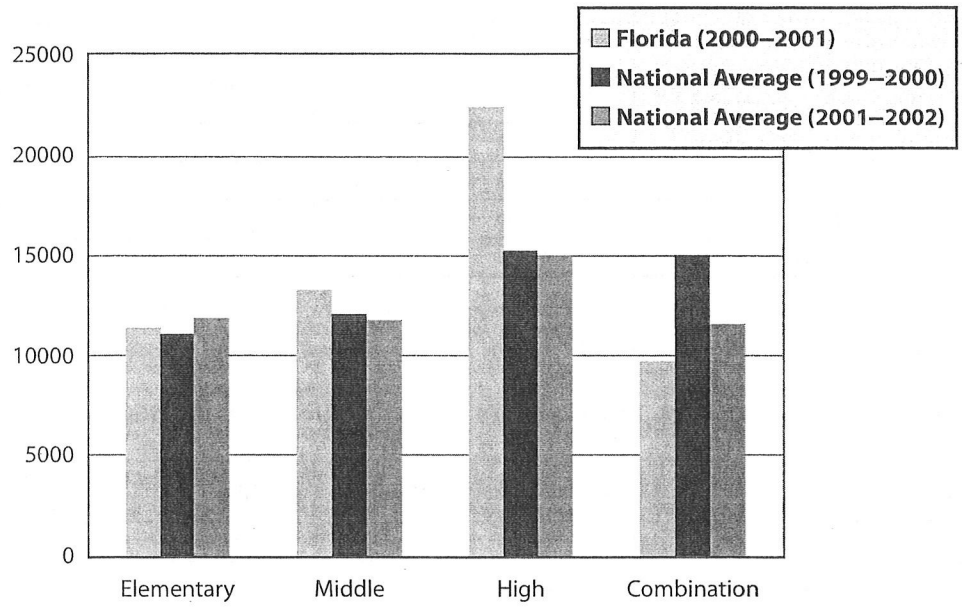
** 134 (8%) weeded no volumes. 368 (21%) weeded 50 volumes or less. 533 (31%) weeded 100 volumes or less.

Table 2.34. School Library Media Resources (per 100 Students)

	Elementary	Middle	High	Combination/ Other	Mean
Print Volumes	1311.04	977.44	1090.49	322.00	1044.03
Current Periodical Subscriptions	2.53	4.21	2.52	1.06	2.66
Current Newspaper Subscriptions	.19	.16	.16	.07	.16
Electronic Subscriptions	.38	.48	.90	1.88	.76
Encyclopedias on CD or DVD	2.08	1.04	.94	.42	1.32
Video Materials (Tape or DVD)	59.18	54.31	43.90	23.46	48.94
Computer Software Packages for Use by Students in the Media Center	8.42	4.10	1.64	1.99	4.76
Total Volumes Purchased 2000–2001*	87	58	53	31	64
Volumes in Specific Areas:					
616/Medicine & Health	.95	1.08	1.43	.53	1.05
620/Space	1.23	.76	.91	.27	.91
320/Government	.67	.50	.56	.35	.56
Volumes Weeded 2000–2001**	46.58	27.26	26.39	11.42	32.13

Comparing Florida's collections (2000–2001) to 1999–2000 national averages (Miller, M., & Schontz, M., 2001), Florida schools' book collections average 11,278 at the elementary level compared to 10,992 nationally, 13,148 at the middle school level compared with 11,973 nationally, 22,355 in Florida's high schools compared with 15,156 nationally; and 9.701 in combination schools compared with 14.909 nationally. Schontz (2003, email communication, August 31) reports mean figures for book collections in 2001–2002 to be at 11,792 for elementary schools, 11,707 for middle schools, 13,864 for high schools, and 11,565 for combination schools (Figure 2.4.) (Appendix I). Florida's collections are larger on average, except for at the combination school level.

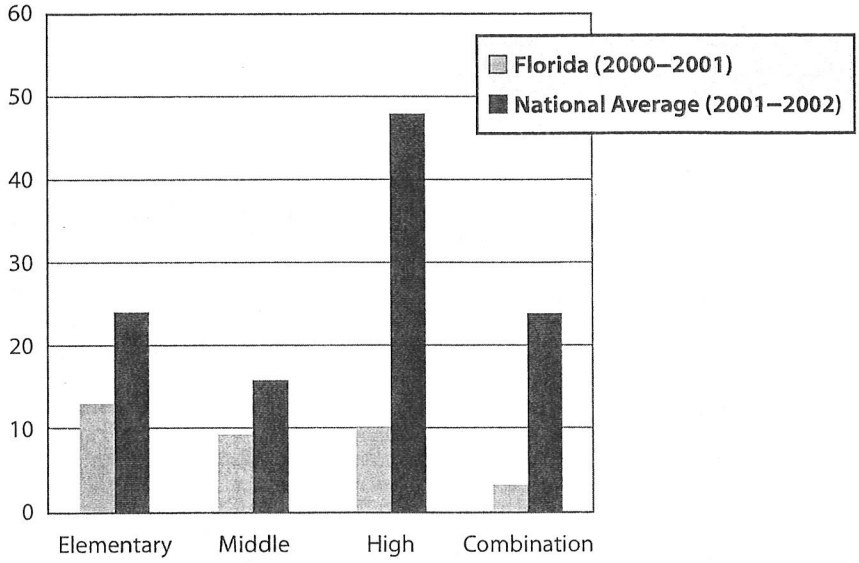
Figure 2.4. Book Collections in Florida School Library Media Centers Compared with National Averages



However, perhaps Florida's schools tend to be much larger in population than average, and as a result the number of books per student at all levels is significantly smaller than national averages (Figure 2.5). Elementary and middle schools have about ½ the number of books per student as the national average; high schools have about ⅕ of the national average; and combination schools, a startling ⅛. It should be noted that at the high school level, the national average per student was 48 while the median was 15 indicating some extremely large collections were included in the sample. However, even if the median figure was used, Florida high school book collections per student would still be only ⅔ that of the national average.

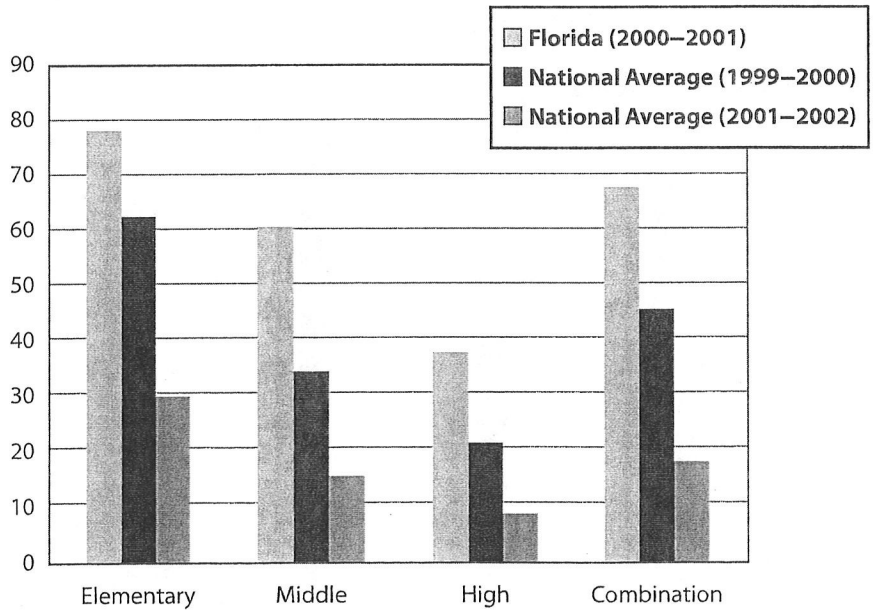
"Our media center is seven years old, but it was opened with old books and material older than me. I have been trying to weed and buy new materials, but money is short especially now with all the cuts."

Figure 2.5. Book Collections per Pupil in Florida School Library Media Centers Compared with National Averages



The software collections are larger in Florida schools than national averages: 78 packages at the elementary level, 60 at the middle school level, 37 at the high school level and 67 in combination schools compared with 62, 34, 21 and 45 nationally in 1999–2000. National averages for software in school library media collections were significantly lower in 2001–2002: 29, 15, 8 and 17, perhaps indicating a trend toward more standardized packages, more dependence on networks and the Internet, or a move from computer labs, frequently located in or near school library media centers, to classrooms (Figure 2.6).

Figure 2.6. Software Collections in Florida School Library Media Centers Compared to National Averages



Video collections in Florida are higher than national averages as well with 509 videos in the average elementary school, 725 in middle schools, 934 in high schools and 706 in combination schools compared with 252, 319, 528 and 327 nationally in 1999–2000 and 303, 341, 563 and 172 in 2001–2002 (Figure 2.7). Florida's school video collections tend to be larger than average, however, when compared on a per pupil basis are more equivalent except at the high school and most especially in combination schools (Figure 2.7).

Figure 2.7. Video Collections in Florida School Library Media Centers Compared to National Averages

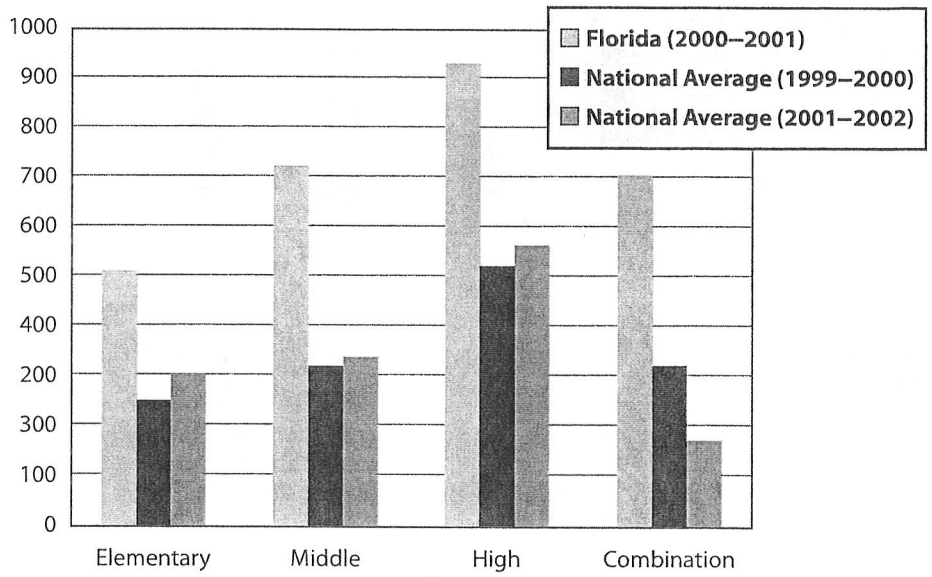
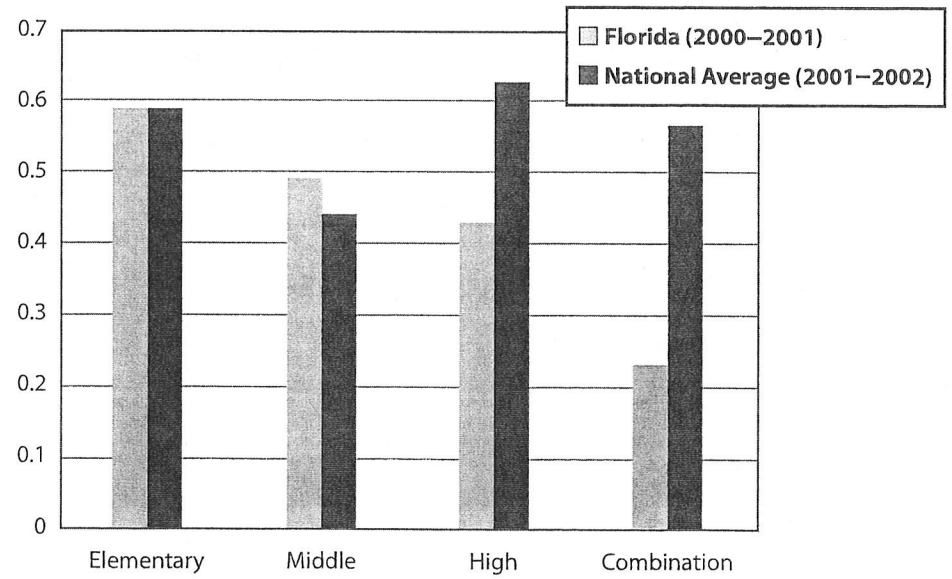


Figure 2.9. Video Collections per Pupil in Florida School Library Media Centers Compared to National Averages



On average, collections are larger than required by Southern Association of Colleges and Schools (SACS) standards. Florida collections contain newspaper and periodical subscriptions, electronic resources and reference materials, computer software, Web-based resources, and a variety of audiovisual formats including video and audio resources. Quantity alone, however, does not ensure a quality collection or a collection that meets the information and curriculum needs of students and teachers.

Information in three areas by Dewey number and topic were specifically requested to see if purchases were made in those areas (320/ Government, 616/Medicine & Health, and 620/Space). These were selected because they were areas targeted in the previous year by SUNLINK's Weed of the Month program. Weed of the Month is a nationwide collaborative effort between SUNLINK and LM_NET, a professional listserv, to weed school library media collections a little at a time by providing a topic, Dewey ranges, specific criteria for weeding, examples of titles that might need reconsideration, and recommendations of titles to replace weeded items. These same areas of the collection were most recently used to evaluate collections for admission to SUNLINK. The assumption was that those would be areas in which specific titles would have been added. Whether or not purchases are related to Weed of the Month or SUNLINK, it appears that these are areas where school library media specialists added new titles to the collection during the 2000–2001 school year.

In addition to resources found in the school library media collection, online and electronic resources beyond the school library media center are frequently provided for teachers and students. Table 2.35 indicates the percentage of programs by level that provide access to online resources through subscription services or networked CD-ROMs including full-text databases. Availability is highest at the high school level and least available at the elementary level. Where online resources are provided, many make the resources available to both students and teachers from home, an excellent way to meet information needs by providing current information at the time and place they are needed.

Table 2.35. School Library Media Electronic Resources

	Elementary	Middle	High	Combination/ Other
Subscribe to Online Periodical Services	37.20%	62.18%	82.16%	50.50%
Subscribe to CD-ROM Services	23.76%	30.77%	44.61%	23.76%
Subscribe to Other Full-Text Services	44.09%	53.21%	66.54%	47.52%
Online Services Accessible from Home by Teachers	58.06%	74.68%	85.87%	63.37%
Online Services Accessible from Home by Students	54.84%	73.72%	84.76%	60.40%

Given the fact that online resources are relatively new, that they are expensive, that budgets are tight, and that not all schools and classrooms yet have Internet access, these numbers are very promising. The Internet is becoming as important and integral to research in schools and library media centers as it is in homes. The advantages of using online resources selected by professionals and provided by the library media center over those found with general search engine include authoritativeness, credibility, quality, scope, depth, and appropriateness for school audiences among others. Schools without online subscriptions and resources should work to have appropriate databases included

in school technology plans, funded, and in place as quickly as classrooms and homes are connected. In fact, having those resources in place in advance helps teachers, students and parents answer the questions, "So I have the Internet, now what do I do?" and "Why do we need the Internet in our school?"

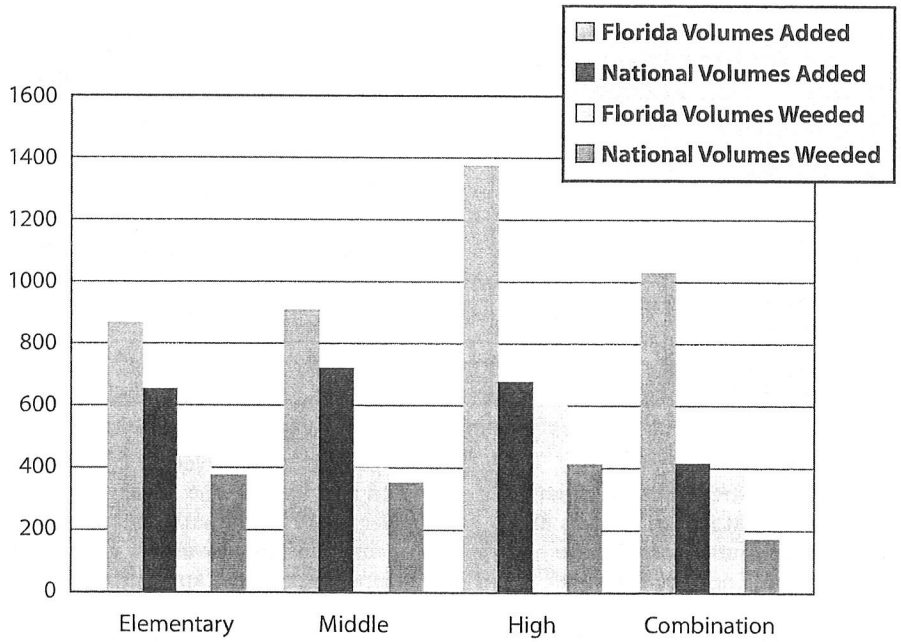
Because information available on the World Wide Web continues to grow exponentially, because the use of online and full-text databases continues to increase, and because Web-based resources are preferred by most students to traditional and certainly to dated text-based materials, the state should continue to explore the economy and ease of statewide licensing with a common interface for school users. The FAME legislative platform has included the requests and rationale for statewide licenses for online databases. Several of Florida's largest school districts already spend huge amounts on electronic resources; those contracts could be leveraged to provide equitable access to all students in all schools and to provide access from home as well as many states have already done.

Weeding and Age of Collections

Despite incentives such as SUNLINK membership and easier local automation implementation, the 2003 analysis of the SUNLINK database revealed that as a statewide average 21% of the collections in SUNLINK schools have publication dates before 1980, and 50% have pre-1990 publication dates. Brodart Automation, the company that maintains the SUNLINK database, estimates the average age of the collections in SUNLINK is 1983. (Karen Rider, electronic mail, August 13, 2003).

Florida's public schools added more considerably more volumes at each level than the national average (Schontz, email communication, August 31, 2003), they also weeded more than the national average (Figure 2.10).

Figure 2.10. Volumes Added and Weeded: Florida Averages by Level Compared to National Averages by Level



"My library is in bad shape. I've been here only a few years, but it has not been weeded in a long, long time. The average copyright date is 1965."

Figure 2.10 and Table 2.33 indicate a good level of activity in the area of weeding when compared to annual purchases. In the past decade, much emphasis has been placed on weeding collections in preparation for both SUNLINK applications and local school library media automation projects. However Table 2.36 indicates that less than ⅓ of Florida's school library media specialists feel their collections are thoroughly weeded.

Table 2.36. Florida School Library Media Specialists Perceptions of Need for Weeding

	Elementary	Middle	High	Combination/ Other
Feel Collection is Thoroughly Weeded	29.35%	30.13%	28.62%	29.70%

The mean number of volumes at each level purchased in 2000–2001 is approximately twice the number of items weeded from those collections. It is discouraging to note the large number of schools who purchased few new materials and the huge number who did little or no weeding (Table 2.33). There are many new schools in Florida, but even new collections need maintenance and balance. A quick review of "age of collection" data on SUNLINK website (2003) reveals that many school library media collections are in need of serious weeding efforts.

Table 2.37 depicts primary reasons why library media specialists report they have not weeded their collections adequately. One-third claim "lack of knowledge;" however, that construct was not defined in the survey and needs some follow-up data collection to clarify whether it is lack of knowledge of the collection, lack of knowledge of the weeding process and criteria for de-selecting materials, lack of knowledge about replacement materials, or other knowledge deficit. In any case, weeding is an area of need for professional development.

Table 2.37. Reasons for Not Weeding Adequately

Primary Reason	%
Lack of Knowledge	33%
Lack of Time	16%
Lack of Resources to Replace Weeded Materials	15%
Collection Will Not Meet SACS Standards If Weeded	12%
LMS New to School and Learning Collections and Community	8%
Ongoing Process—Never Complete	6%

Table 2.38 lists the primary collection development tools used by Florida's school library media specialists and the percentage of respondents who named each tool.

Table 2.38. Primary Collection Development Tools

Primary Tool	%
SUNLINK's Weed of the Month	25%
School Library Journal	18%
Publishers' Catalogs	10%
Booklist	10%
Accelerated Reader Test, Disks & Catalog	4%
Teacher Recommendations	4%
Hornbook	3%
Titlewave	3%
The Book Report	2%
Award Lists	1%
Other*	5%

* Less than 1% each and includes curriculum and subject area journals, Popular Magazines, ALA/AASL lists, Curriculum Guides, Amazon, Barnes and Noble Websites, Kirkus Reviews, *FMQ*, computer and technology publications

SUNLINK's Weed of the Month, with suggestions and criteria for weeding one small topic of the collection along with ideas of new titles to consider, is mailed monthly to every Florida K–12 public school whether or not they are SUNLINK schools. It is also available online at the SUNLINK site (www.sunlink.ucf.edu/weed). Titles suggested for purchase are selected from traditional collection development tools including *School Library Journal* and reviews from *Booksinprint.com* and *Childrensbooksinprint.com*. The idea of weeding—and adding new titles—one area of the collection at a time is obviously appealing to many. The SUNLINK Weed of the Month is limited to two sides of one page, however, and even though more extensive lists are found on the Weed of the Month website, they are not comprehensive. Use of more traditional and new collection development tools must be continued.

It should be noted that SUNLINK is working with Brodart Automation to improve the current "age of collection" feature in SUNLINK by separating fiction from non-fiction titles. SUNLINK is also working with Brodart to provide data for a free, more comprehensive collection analysis employing new collection development service from Brodart beginning in the fall of 2003 for SUNLINK schools. This will be an added benefit for SUNLINK schools and hopefully an additional incentive for non-SUNLINK schools to begin the application process.

Budgets for School Library Media Centers and Resources

Table 2.39 indicates the average expenditures statewide by grade level and also shows the per pupil expenditure in each category. Table 2.40 provides budget information in the same categories by size of district (Appendix G). Additional tables (Appendix H) examine the budget by district size and grade levels.

"A large percentage of our print collection has a copyright date of pre-1980."

Table 2.39. Budget Information in Dollars (per Student Expenditures in Parentheses)

	Elementary	Middle	High	Combination/ Other	Mean
Budget for books	3881 (4.18)	20130 (13.89)	7609 (3.28)	4270 (1.23)	7727 (5.47)
Other sources for books	7610 (6.96)	5816 (3.23)	11497 (4.12)	3394 (.80)	7694 (4.56)
Budget for newspapers/ magazines	591 (.62)	4040 (2.77)	1788 (.77)	1064 (.29)	1504 (1.05)
Other sources for newspapers/magazines	125 (.06)	173 (.05)	395 (.08)	308 (.05)	189 (.06)
Budget for electronic format materials	781 (.63)	618 (.31)	1207 (.39)	888 (.20)	830 (.44)
Other sources for electronic format materials	1121 (.65)	606 (.20)	1202 (.27)	915 (.14)	1030 (.38)
Budget for non-print	770 (.66)	1185 (.73)	1942 (.70)	951 (.24)	1066 (.64)
Other sources for non-print	506 (.32)	1116 (.38)	1374 (.32)	430 (.07)	751 (.30)
Budget for electronic access to information	139 (.09)	509 (.22)	2219 (.67)	667 (.12)	636 (.28)
Other sources for electronic access to information	171 (.08)	2495 (.73)	1759 (.35)	285 (.04)	884 (.28)
School budget for operating expenditures	1376 (1.29)	2222 (1.38)	3617 (1.40)	1458 (.34)	1940 (1.20)
Other sources for operating expenditures	1736 (1.01)	1035 (.34)	965 (.17)	485 (.07)	1426 (.51)
Total operating expenditures from school budget	6764 (7.10)	9230 (6.19)	18181 (7.95)	8726 (2.44)	9362 (6.50)
Total operating expenditures from other sources	6906 (5.77)	10601 (5.35)	15876 (5.04)	4329 (.98)	8932 (4.81)
School budget for equipment	12040 (7.79)	4495 (1.93)	13402 (3.93)	439 (.91)	10319 (4.57)
Other sources for equipment	7250 (3.76)	5749 (1.76)	9581 (2.09)	6264 (1.06)	7327 (2.51)
School budget for capital purchases	1295 (.63)	1192 (.35)	7376 (1.61)	837 (.14)	2378 (.78)
Other budget for capital purchases	1451 (.69)	2633 (.64)	9340 (1.53)	807 (.12)	2948 (.88)
Total capital outlay from school budget	5369 (3.49)	5345 (2.28)	19294 (5.82)	44764 (9.24)	10547 (4.70)
Total capital outlay from other sources	7026 (3.70)	6946 (2.05)	11636 (2.45)	10735 (1.91)	8073 (2.77)

Table 2.40. Budget Information by District Size in Dollars

	Very Large Districts	Large Districts	Medium Districts	Medium Small Districts	Small Districts	Special Districts
Budget for books	11795	4950	3263	3782	4756	10031
Other sources for books	10075	6210	6681	4212	3274	3000
Budget for newspapers/ magazines	2280	758	815	821	945	2566
Other sources for newspapers/magazines	173	259	124	220	98	3500
Budget for electronic format materials	780	1129	565	712	680	7660
Other sources for electronic format materials	1041	925	1118	1178	593	—
Budget for non-print	1223	1068	946	783	707	532
Other sources for non-print	962	698	594	500	185	—
Budget for electronic access to information	695	672	602	458	431	3585
Other sources for electronic access to information	550	456	2388	737	436	—
School budget for operating expenditures	2067	1982	2088	1432	1352	931
Other sources for operating expenditures	2140	751	1083	625	577	—
Total operating expenditures from school budget	10145	9705	8252	7415	8496	28122
Total operating expenditures from other sources	8235	8286	14690	5732	4396	7500
School budget for equipment	17570	3653	3713	3435	3403	65062
Other sources for equipment	7342	5956	9424	6631	4917	75000
School budget for capital purchases	3394	1202	3122	878	181	4300
Other budget for capital purchases	2686	2469	5985	478	2118	—
Total capital outlay from school budget	17309	4382	4810	4079	3644	69362
Total capital outlay from other sources	8990	6268	8586	6752	6805	75000

With regard to school library media budgets, results of previous studies (American Library Association, 2003a) are consistent and irrefutable:

- Spending for school library media programs is the single most important variable related to better student achievement.
- Students in schools with well-equipped library media centers staffed by professional library media specialists perform better on assessments of reading comprehension and basic research skills.

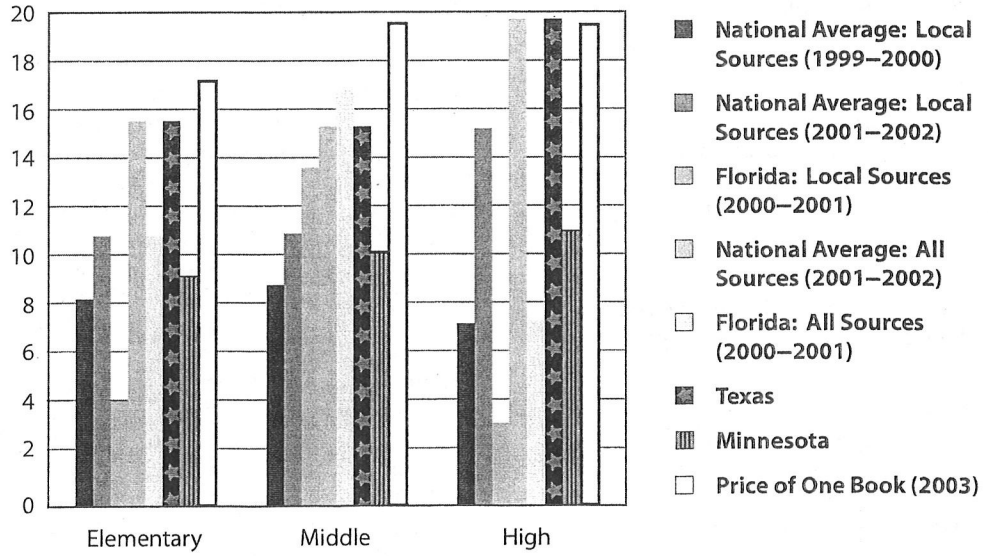
- In studies in six states where library media programs are better staffed, better stocked and better funded, academic achievement tends to be higher.

The budget tables reveal inequities between types of schools and also between sizes of school districts in Florida. Although frequently used to stretch the budget by securing materials through interlibrary loan rather than through purchase, SUNLINK alone cannot counter the inequities. Every effort should be made to ensure equity in funding as well as in access to quality materials.

However, the tables do not paint the whole picture. How do Florida budgets compare to national averages? The American Library Association in the AASL Advocacy Toolkit (ALA, 2003b), citing an article by Marilyn Miller and Marilyn Schontz, reports that nationwide "the median per pupil expenditure by school library media centers from local budgets for books in 1999–2000 was $8.44 for elementary schools, $9 for middle schools, and $7.35 for senior high schools." A year later, Florida's mean expenditure for books from the local school budget was $4.18 at the elementary level, $13.89 at the middle school level, and $3.28 at the high school level per student. Combination schools reported a paltry $1.23 per student for book purchases. Schontz (2003, email communication, August 31) reports mean expenditures for books from all sources in 2001–2002 were $15.83 at the elementary level, $15.55 at the middle school level, and $19.96 a the high school level. Florida's mean figures were $11.14, $17.12, and $7.40 respectively.

In 2000, School Library Journal estimated the average cost of a book was $17.57 across grade levels and types of books. Non-fiction titles for grade 5 and up averaged $21.26. Trade paperbacks averaged $8.41. Adult titles, frequently purchased in high schools averaged $24.96 for fiction titles and $68.57 for non-fiction including single-volume reference works. "In the past three years, average book prices have increased by roughly 70 cents per year, double the historical yearly average" (St. Lifer, E. 2002). By 2003, those prices had climbed to $19.18 as the average price across grade levels and types of books, $22.99 for non-fiction for grade 5 and up, and $76.87 for an adult non-fiction title.

Figure 2.11. National Average Per Pupil Expenditures for Books Compared to Florida School Library Media Expenditures, Other States, and the Average Cost of One Book



Sources: National Average: Local Sources (1999–2000), Miller & Schontz, 2001; National Average: Local Sources (2001–2002) and National Average: All Sources (2001–2001), Schontz, 2003; Texas: Smith, 2001; Minnesota: Baxter & Smalley, 2003; Book prices, St. Lifer, 2002.

Florida K–12 school budgets provide funding for approximately one new book per student every three to four years. Brodart Automation, Florida's SUNLINK automation vendor, estimates the average date of publication for a library book in Florida (SUNLINK schools only) to be 1983 (Karen Rider, electronic mail, August 13, 2003), and it is surmised that most schools not already in SUNLINK have older, more outdated collections. By comparison, Minnesota lamented the fact that their budgets provided less than ½ the cost of a new book (Baxter, S., & Smalley, A., 2003) and that the average date of publication in that state was 1985. The Texas Study (Smith, 2002) reported elementary schools spend $15.83 per student on books, middle schools $15.55 and high schools spent $19.96 per student during the 1999–2000 school year.

School library media specialists report having to rely on school book fairs, grants, PTA contributions candy sales and other fund-raisers to purchase books for their school library media collections. From the free commentary section of the survey:

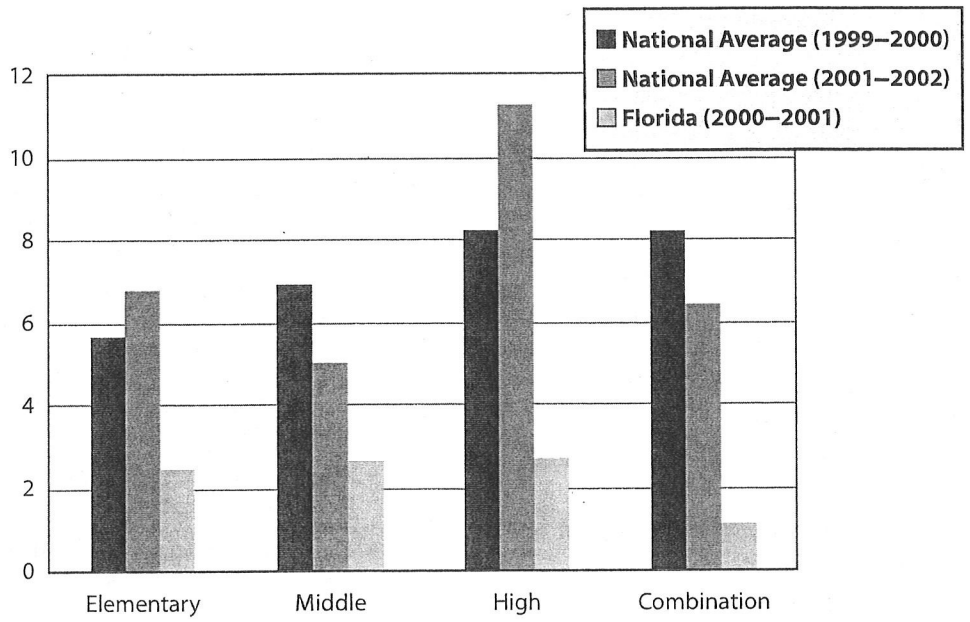
> *Based on current state and county funding, our media center would be unable to build a relevant collection if it wasn't for the strong support of our PTA. Their support of our program is unconditional and anything I have requested they have granted on the spot.*
>
> *I rely on Book Fairs for extra funds to help with library needs.*
>
> *We have an annual candy sale with all profits used for library books and materials. These funds are critical for purchasing new books and materials for our media center.*
>
> *I use SUNLINK a great deal to supplement my collection. We have a tiny budget. I am looking for ways to get grant monies.*
>
> *If it were not for holding 2 book fairs each year, I would not have money for any of the "extras" that are so essential to a quality media program. Of coarse "extras" means basics in this day and age, paper, puppets, posters, etc.*
>
> *Last August the Media Center budget was cut to $0. I promoted the Book Fair heavily since this is the only money I have to use to buy new books and materials.*
>
> *Money is so light that it is very difficult to keep up with all the students needs. We serve transition, ESOL and gifted for the county and we have a large percentage of ESE—nonspecific funding for all of these special needs. We have 2 book fairs a year, which is a lot of extra work, but we have to have the money.*

In fact, across grade levels, "other sources for books" accounted for 45% of funding with total funding available from all sources being about ½ the cost of a new book. Funding from all sources, local and state funds, grants and fundraisers provided inadequate budgets for books: elementary, $11.14; middle, $17.12, high school, $7.40; and combination schools, $2.03. Many of those resources went to reading program materials such as Accelerated Reader and Reading Counts rather than to broader-based reading materials including nonfiction. At a time when Florida's education efforts focus on reading and improving reading scores, school library budgets for print materials are dismal. Students need new, exciting, relevant books to attract their attention and keep them reading. If helping them to become competent, discerning lifetime readers is the ultimate goal, our school library media programs are severely under funded.

The AASL Advocacy Toolkit (ALA, 2003b) also reports that "in the United States, sales of video games and other entertainment software ($6.0 billion in 2000) total more than nine times the amount spent on books, periodicals, audiovisual, and other materials for school library media centers" ($647.0 million in 2000). Miller and Schontz (2001) reported that in the 1999–2000 school year, expenditures for non-print (audiovisual, software, CD-ROMs and web-based products) averaged $5.67 at the elementary level, $6.89 at the middle school level, $8.22 at the high school level, and $10.62 for combination schools. Florida's schools in 2000–2001 reported non-print budgets of $2.43 at the elementary level, $2.57 at the middle school, $2.70 at the high school level, and $1.05 in other grade combination schools, averaging $2.32 per student across

all grade levels. Despite the national trend of increased spending for web-based products such as online databases and subscriptions, Florida' schools spend a fraction of the national average for both non-print and print resources (Figure 2.12).

Figure 2.12. National Per Pupil Expenditures for Non-print (Audiovisual, Software and Web-Based Products) Compared with Florida's Schools' Per Pupil Expenditures



The lack of financial resources to replace outdated materials that need to be weeded is both perceived and real. Florida's library media centers could do so much more to impact reading and student achievement were adequate funding provided. School libraries have been shown to influence reading scores while classroom libraries do not, and print-rich environments, like the library media center with a wide variety of fiction and non-fiction books, electronic and digital resources, encourage voluntary reading, the best predictor of literacy (Lonsdale, 2003).

Total materials expenditures nationwide (excluding capital outlay) in 2001–2002 averaged $23.76 per pupil at the elementary level, $22.92 per pupil at the middle school level, $32.78 per pupil at the high school level; and $28.94 per pupil in combination schools (Schontz, email communication, August 31, 2003). In *Becoming a Nation of Readers*, Anderson, Hiebert, Scott, and Wilkinson, (1985) described the importance of reading: "Reading is a basic life skill. It is a cornerstone for a child's success in schools, and indeed, throughout life. Without the ability to read well, opportunities for personal fulfillment and job success will be lost." If we are serious about creating a state of readers and information literate citizens, school library media programs need an infusion of cash. To bring local spending and books per student in Florida's school library media centers up to *the minimum* of the national average should be an immediate and primary goal of each school library media specialist, each parent, the state professional association, the Florida Department of Education, school districts and the Florida Legislature. Research indicates there would be an immediate return on the investment in terms of student achievement. To go beyond the national average would demonstrate an understanding of what it takes not only to raise test scores, but also to create readers who enjoy books and who know how to use information resources to solve problems and increase understanding of our complex world, skills that will endure throughout life.

Key Findings

How do school library media programs, resources, and services contribute to student achievement?

Schools at all levels with a certified library media specialist and better staffing (more than 60 hours per week) have higher FCAT scores.

In Florida's public school schools where there is a university-trained certified library media specialist:

- There are more total library staff hours per week.
- There are more books per student.
- There are more subscriptions to newspapers and periodicals.
- There are more computers in the library media center per 100 students.
- There are more computers in the school per 100 students.
- The library media budget per student is higher.
- Students visit the library media center more often.
- Circulation is higher.

Each of these contribute to higher academic achievement as measured by the FCAT.

Elementary Schools

Better staffed elementary schools library media centers (60 hours per week of staffing and above) average 55.5% of students at grade level or better on the FCAT, while the poorer staffed schools average 51%. That is a 9 percent improvement in test scores for schools with at least 1.5 FTEs (60 HPW).

When comparing elementary school library media centers with 80 HPW of staffing to those with less, better staffed schools average 57.1% of students scoring at grade level or better, while the poorer staffed group averages 52.7%, an 8.3 percent improvement associated with having at least 2.0 FTEs (80 HPW).

Test scores are more than 20% higher in elementary schools where staffing is at 80 hours per week or more than in schools with less than 60 hours per week.

Among the higher scoring elementary schools:

- 63.2% of elementary schools with 80+ HPW of library media staffing scored at grade level or better.
- 56.4% of elementary schools with 60–79 HPW of library staffing scored at grade level or better.
- 42.6% of elementary schools with less than 60 HPW of library staffing scored at grade level or better.

In Florida's elementary schools, FCAT scores are higher where:

- There is a university-trained certified library media specialist.
- The total number of paid staff is higher and there are more hours per week of staffing.
- Circulation is higher.
- Schools have access to the library media center catalog through the school's computer network.
- There are more books and videos.
- There are more computers in the library media center and those computers provide Internet access.
- There are more non-print materials purchased from the school budget.

In elementary schools that scored in the top one-third on the FCAT:

- Library media centers were staffed for at least 10% more hours per week.
- Circulation was 45% higher.
- There were 23% more videos in the collection.
- 41% more was spent for non-print materials.

Middle Schools

At the middle school level, in higher scoring schools:

- 53.9% of middle schools with more than 80 HPW of library staffing scored at grade level or better while only 46.1% passed in schools with poorer staffing.

Better staffed middle schools (60 hours per week of staffing and above) average 43.8% of students at grade level or better, while the poorer staffed schools average 42.4%. That is a 3.3% improvement in test scores for schools with at least 1.5 FTEs (60 HPW).

When comparing middle schools with 80 HPW of staffing to those with less, better staffed schools average 44.5% of students scoring at grade level or better, while the poorer staffed group averages 42.6%, an improvement of 4.5% where staffing is at least 80 HPW.

In the middle schools, FCAT scores are higher where:

- There are more university-trained certified school library media specialists and the library media center is staffed more hours per week.
- More materials are circulated.
- There are more videos in the collection and more reference materials on CD-ROM.
- More computers in the library media center provide access to the Internet.

In middle schools that scored in the top half on the FCAT:

- Library media centers were staffed an average of 17% more hours per week.
- There were 34.8% more videos in the collection.

High Schools

High schools showed even larger differences in test scores where there was better staffing:

- 55.1% of students passed the FCAT reading test in higher scoring schools with library media staffing of 80 HPW or more, while only 37% passed in schools with poorer staffing.

High schools with 60 hours per week of staffing or more average 39.1% of students scoring at grade level or better, while the poorer staffed schools average 32%. That is a 22.2% improvement in test scores for schools with at least 1.5 FTEs (60 HPW).

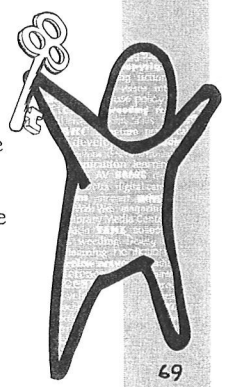
When comparing better staffed high schools (with at least 80 HPW of staffing per week) to those with less, better staffed schools average 39.7% of students scoring at grade level or better, while the poorer staffed group averages 33.1% passing, a 20% improvement associated with having at least 2.0 FTEs (80 HPW).

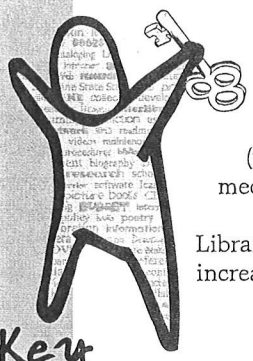
At the high school level, FCAT scores are higher where:

- The library media center is staffed more hours per week.
- There are more university-trained certified library media specialists.
- There are more paid library media staff members.
- There are more interlibrary loans provided to other schools in the district.
- There are more visits to the library media center to use technology.
- There are more networked computers in the school and more computers with Internet access.
- There are more computers in the library media center and more computers have Internet access.

In high schools scoring in the top third on the FCAT:

- University-trained certified library media specialists provided an average of 20% more hours of professional staffing per week.
- There are 34% more paid library media staff and 31% more hours of total staffing per week.
- There are 66% more interlibrary loans provided to other schools in the district.
- There are 50% more computers in the library media center and 42% more library media center computers were connected to the Internet.





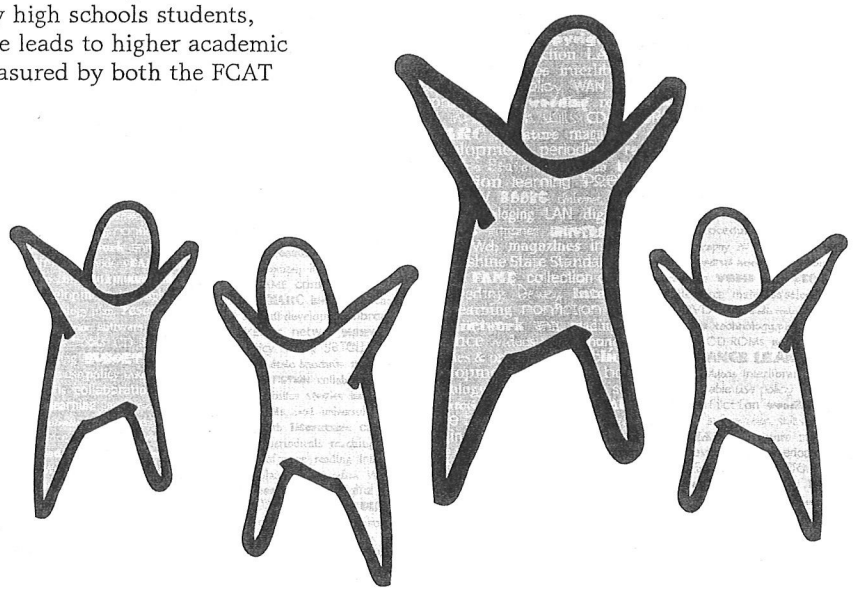
Key Findings

Both high school FCAT and ACT scores are significantly higher with increased library usage (visits by individuals to the library media center).

Library usage at the high school level increases with:

- The number of university-trained certified library media specialist hours per student
- The total library staff hours per student
- The number of networked school computers per student
- The number of books per student
- The number of subscriptions, videos and software packages per student
- The library expenditures per student

Strong high school library media programs—those with more university-trained certified staff and staff hours, technology, and books—have more usage by high schools students, and increased usage leads to higher academic achievement as measured by both the FCAT and the ACT.



Part III: The Impact of Florida's Library Media Programs and Library Media Specialists on Student Achievement

The research question most Florida educators and school library media specialists would like answered by this study is: "Do school library media programs impact Florida students' achievement?" In many of the notable state studies where school library media programs were found to impact student achievement, including both Colorado studies, Alaska, Texas, New Mexico, Oregon, Pennsylvania, Massachusetts, North Carolina and Iowa, the impact of school library media specialists and library media program variables on student achievement has been examined by dividing schools into higher and lower performing on a standardized test or state test or on other variables.

In this section, similar analysis techniques are used to examine scores on the Florida Comprehensive Assessment Test (FCAT) reading assessments at three grade levels and to examine those in light of a number of library media variables to determine statistically significant differences and to determine which library media factors may impact student achievement. At the high school level ACT scores were used for additional test data to measure the impact of high school library media usage. Because of their experience and expertise in this area, Keith Curry Lance and Marcia Rodney were contracted to examine the data and perform statistical tests for Florida schools similar to those conducted in other state studies.

Statistical Tests

For this section of the study several different statistical tests were used: crosstabulation and Chi-square, comparison of means and t-test, correlation, factor analysis and regression analysis. More information about these tests and how they are used in library media and student achievement impact studies can be found in *Powering Achievement* (Lance & Loertcher, 2002, p. 55–57).

The Impact of Staffing on Student Achievement

Strong media programs are led by a strong media staff. The first tables in this section examine the relationship between staffing and student achievement in Florida schools.

Table 3.1. Distribution of Library Media Specialists Among Florida Schools, 2001–2002

Number of library media specialists	Elementary (3rd Grade)		Middle (8th Grade)		High School (10th Grade)	
	Number reporting	Percent	Number reporting	Percent	Number reporting	Percent
4	0	0.0%	0	0.0%	2	0.9%
3	0	0.0%	0	0.0%	14	6.4%
2	3	19.3%	20	7.2%	115	52.8%
1	601	80.3%	229	83.0%	78	35.8%
0	144	19.3%	27	9.8%	9	4.1%
Total	748	100.0%	276	100.0%	218	100.0%

Table 3.1 shows the distribution of certified library media specialists who reported staffing levels on the Florida School Library Media Survey and whose schools reported FCAT scores at the third, eighth and/or tenth grade levels in 2000–2001.

Table 3.2. Florida Elementary Schools by 3rd Grade FCAT Reading Scores and Total Library Media Staff Hours Per Week

Total Library Media Staff Hours Per Typical Week	3rd Grade FCAT Reading Scores		Total
	Higher scoring schools (median or above)	Lower scoring schools (below median)	
80 or more hours per week	96 63.2%	56 36.8%	152 100.0%
60–79 hours per week	132 56.4%	102 43.6%	234 100.0%
Less than 60 hours per week	113 42.6%	152 57.4%	265 100.0%
Total	341 52.4%	310 47.6%	651 100.0%

Pearson Chi-Square = 18.678, p = .000

Cross tabulations of school library media staffing and FCAT test scores indicate that staffing is a strong predictor of higher achievement at all levels. Florida's elementary schools were divided into two groups, schools scoring at grade level or above on the third grade FCAT in reading, and schools scoring below grade level on the third grade FCAT in reading. These were examined by the total number of hours the library media center is per week (Table 3.2).

As staffing increases, the percentage of students scoring at grade level or above also increases. Among the higher scoring schools, there is a difference in the number of students passing the FCAT of 6.8% between those staffed a total 80 hours or more per week and those staffed between 60 and 79 hours per week and over 20% in elementary schools with 80 hours per week or as opposed to those staffed less than 60 hours per week among the higher scoring schools.

Table 3.3. Florida Middle Schools by 8th Grade FCAT Reading Scores and Total Library Media Staff Hours Per Week

Total Library Media Staff Hours Per Typical Week	8th Grade FCAT Reading Scores		Total
	Higher scoring schools (median or above)	Lower scoring schools (below median)	
80 or more hours per week	55 53.9%	47 46.1%	102 100.0%
Less than 80 hours per week	65 46.1%	76 53.9%	141 100.0%
Total	120 49.4%	123 50.6%	243 100.0%

Pearson Chi-Square = 1.449, p =.229

Middle schools were divided into two groups by FCAT score on the eighth grade FCAT (reading). At the eighth grade level, there was a 7.8% difference in students passing the eighth grade FCAT among higher scoring schools in when the library media center is staffed more than 80 hours per week as compared with less than 80 hours per week (Table 3.3).

Table 3.4. Florida High Schools by 10th Grade FCAT Reading Scores and Total Library Media Staff Hours Per Week

Total Library Media Staff Hours Per Typical Week	10th Grade FCAT Reading Scores		Total
	Higher scoring schools (median or above)	Lower scoring schools (below median)	
80 or more hours per week	75 55.1%	61 44.9%	136 100.0%
Less than 80 hours per week	20 37.0%	34 63.0%	54 100.0%
Total	95 50.0%	95 50.0%	190 100.0%

Pearson Chi-Square = 5.071, p = .024

When Florida high schools are divided into two groups, schools scoring at grade level or above on the 10th grade reading FCAT and lower scoring (below grade level) schools, the number of hours the library media center is staffed (professional and clerical) per week makes a significant difference (Table 3.4). At the high school level, 18.1% more students scored at grade level or higher when library media centers were staffed over 80 hours per week compared to those with staffing of less than 80 hours per week.

Table 3.5. Florida Schools by Percent of Students at Grade Level and School Library Media Staff Hours Per Typical Week (60 Hour Per Week Criterion)

Florida Schools by Grade Level	Percent of Students at Grade Level (FCAT Reading Scores) by Library media Staff Hours Per Week			
	Schools with 60 or more hours per week	Schools with fewer than 60 hours per week	Percent difference (fewer to more hours)	t and significance of t
Elementary Schools (3rd Grade)	55.5%	51.0%	8.8%	3.465 .001
Middle Schools (8th Grade)	43.8%	42.4%	3.3%	.675 .500
High Schools (10th Grade)	39.1%	32.0%	22.2%	2.911 .005

Table 3.5 shows the percent of students at grade level and above on the reading FCAT by library media center staffing hours for each school level. A significant difference was found in those scoring at grade level and above at the elementary and high school levels. At the elementary level, there was an 8.8% difference the students scoring at grade level and above between those with 60 hours or more per week as compared to those staffed less than 60 hours per week. Although a smaller percentage scored at grade level or higher at the high school level, there was a greater difference, 22.2%, in those scoring at grade level or higher when school library media centers were staffed more than 60 hours per week compared with those staffed less than 60 hours per week.

"Because funds were cut, the media aide has been cut, leaving one person to do everything. I work a lot of extra hours just to keep my sanity."

Table 3.6. Florida Schools by Percent of Students at Grade Level and School Library Media Staff Hours Per Typical Week (80 Hour Per Week Criterion)

	Percent of Students at Grade Level (FCAT Reading Scores) by Library Media Staff Hours Per Week			
Florida Schools by Grade Level	Schools with 80 or more hours per week	Schools with fewer than 80 hours per week	Percent difference (fewer to more hours)	t and significance of t
Elementary Schools (3rd Grade)	57.1%	52.7%	8.3%	2.979 .003
Middle Schools (8th Grade)	44.5%	42.6%	4.5%	.969 .334
High Schools (10th Grade)	39.7%	33.1%	19.9%	3.234 .002

Table 3.6 shows the percent of students scoring at grade level and above on the FCAT for each grade level using 80 HPW or 2 FTEs as a threshold. A significant difference was found in those scoring at grade level and above at the elementary and high school levels.

At the elementary level, there was an 8.3% difference between those with 80 hours or more per week as compared to those staffed less than 80 hours per week. At the high school level there was 19.9% difference in those scoring at grade level or higher on tenth grade FCAT in reading when school library media centers were staffed more than 80 hours per week. Although the difference at the middle school level was not as large and not statistically significant, it still represented a positive difference of 4.5% for schools with better staffing.

Adequate staffing includes both professional staff and paraprofessional support staff. Capable support staff allows for more interaction with students and teachers and provides time for library media specialists to engage in higher-level professional activities such as planning and collaboration with teachers, collection development, information skills instruction and assessment activities.

Studies in five states, Colorado, Oregon, Texas, Iowa and New Mexico, conclude that the level of professional library media staffing contributes positively to student achievement. In Pennsylvania, adding support staff is a key difference between strong and weak library media programs. The Florida study supports those findings.

Other Library Media Program Variables and Academic Achievement

In addition to staff, variables related to staff activities, media programs, technology and collections have been shown to have impact on student achievement and test scores. Learners need a wide range of materials to support their information, curricular and recreational needs.

"Our situation is not unique in the state of Florida. This media center was designed to be covered by a staff of 3 media specialists and 2 full-time adult aides. I am trying to cover 10,000 sq. ft. of main research space and 7 smaller work and storage areas with one media specialist and one part-time aide. It takes Herculean efforts most days."

Table 3.7. Correlation Analysis for Elementary School Library Media Predictors of 3rd Grade FCAT Reading Scores, 2002

Variable	Pearson's Product-Moment Correlation Coefficient
Number of certified library media specialists	.221*
Number of total paid library media staff	.129**
Total paid library media staff hours per week	.130**
Circulation of library media materials per typical week	.129**
Number of networked school computers providing access to library media catalog	.082*
Number of print volumes	.098*
Number of videos	.110**

* $p < .05$ ** $p < .01$

Table 3.7 shows school library media variables most highly correlated to FCAT reading scores at the elementary level. Elementary FCAT reading scores are positively correlated to staff: the number of certified library media specialists, the total number of paid library media staff, and staff per 100 students. Other highly correlated variables in elementary schools are circulation, the number of networked school computers than can access the school library media catalog, and the number of videos in the collection.

Table 3.8. Correlation Analysis for Middle School Library Media Predictors of 8th Grade FCAT Reading Scores, 2002

Variable	Pearson's Product-Moment Correlation Coefficient
Number of certified library media specialists	.354**
Total certified library media specialist hours per week	.109* ♦
Circulation of library media materials per week	.109* ♦
Encyclopedias/Reference on CD-ROM	.165**
Number of library media computers providing Internet access	.113* ♦

* $p < .05$ ** $p < .01$

♦ one-tailed

Table 3.8 shows the school library media indicators most highly correlated to FCAT reading scores at the middle school level. Test scores on the eighth grade reading FCAT are higher where the total hours the media center is staffed by a professional, certified library media specialist is higher. In addition, as circulation increases, so do test scores. The number of encyclopedias and reference materials on CD-ROM, and the number of computers in the library media center that access the Internet are also positively correlated to academic achievement at the middle school level.

Table 3.9. Correlation Analysis for High School Library Media Predictors of 10th Grade FCAT Reading Scores, 2002

Variable	Pearson's Product-Moment Correlation Coefficient
Number of certified library media specialists	.422**
Total certified library media specialist hours per week	.139*
Total number of paid library media staff	.344**
Total weekly hours of paid library media staff	.265**
Individual library media visits per week for technology use	.154*
Number of networked school computers	.157*
Number of networked school computers providing access to the Internet	.159*

* $p < .05$ ** $p < .01$

At the high school level, FCAT test scores are positively correlated with staffing: the number of certified library media specialists, the total number of paid library media staff, and the hours the school library media center is open each week.

The total number of visits to the library media center by individuals to use technology, the number of networked computers in the school, and the number of school computers providing access to the Internet also correlate positively to increases in test scores at the high school level.

Table 3.10. Florida Schools by Percent of Students at Grade Level and School Library Media Staffing Level (Median by Grade Level), 2002

Florida Schools by Grade Level	Percent of Students at Grade Level (Top & Bottom Third on FCAT Reading Scores)			
	Schools with more library media staff hours per week*	Schools with fewer library media staff hours per week	Percent difference (fewer to more staff)	t and significance of t
Elementary Schools (3rd Grade)	56.3%	51.0%	10.4%	2.913 .004
Middle Schools (8th Grade)	46.1%	40.6%	13.5%	2.042 .043
High Schools (10th Grade)	42.9%	33.3%	28.8%	3.353 .001

* Figures for elementary and high schools are based on total library media staff; those for middle school are based on certified library media specialists

Table 3.10 indicates the percentage of students scoring at grade level and higher by staffing level (top third of staffing hours compared to bottom third). There is a difference in all grade levels, and is statistically significant at the elementary and high school levels. There is a 10.4% difference in students passing the FCAT at the elementary level in better staffed schools, and a 28.8% difference in better staffed schools at the high school level.

Table 3.11. Differences Between Highest and Lowest Scoring Florida Elementary Schools on Selected School Library Media Variables, 2002

Selected Library Media Variable	Averages for Selected Library Media Variables			
	Schools scoring in top third on FCAT Reading Test	Schools scoring in bottom third on FCAT Reading Test	Percent difference (bottom to top third)	t and significance of t
Percent of students at grade level on reading (FCAT)	70.5%	35.0%	101.4%	51.218 .000
Total library media staff hours per week	64.5	58.7	9.9%	2.536 .012
Circulation per week	1169	805	45.2%	5.323 .000
Library media computers with Internet access	22	16	37.5%	1.995 .047
Number of videos	529	430	23.0%	2.407 .017
Expenditures on non-print materials from library media budget	$843.75	$597.16	41.3%	2.222 .027

There are huge differences, ranging from over 101% at the elementary level to almost 124% at the middle school level, between the percentage of students reading at grade level in schools scoring in the top third as compared to those in the bottom third. Selected library media center variables reflect significant differences. Circulation in the top third of elementary schools was 45.2% higher than in the lower scoring schools. Higher scoring schools had 37.5% more computers with access to the Internet in the library media center, 23% more videos in the collection, and spent 41.3% more on non-print materials than lower scoring schools (Table 3.11).

Table 3.12. Differences Between Highest and Lowest Scoring Florida Middle Schools on Selected School Library Media Variables, 2002

Selected Library Media Variable	Averages for Selected Library Media Variables			
	Schools scoring in top third on FCAT Reading Test	Schools scoring in bottom third on FCAT Reading Test	Percent difference (bottom to top third)	t and significance of t
Percent of students at grade level on reading	58.9%	26.3%	123.9%	24.780 .000
Total certified library media specialist hours per week	39.7	33.9	17.1%	2.274 .024
Number of videos	775	575	34.8%	2.378 .019

At the middle school level, the percentage of students reading at grade level or higher in schools in the top third was 123.9% higher than those scoring in the bottom third. There was a difference of 17.1% total hours of staffing and 34.8% in the number of videos available to students in those schools (Table 3.12) with top scoring schools having significantly more staffing and more videos.

Table 3.13. Differences Between Highest and Lowest Scoring Florida High Schools on Selected School Library Media Variables, 2002

Selected Library Media Variable	Value for Selected Library Media Variables			
	Schools scoring in top third on FCAT Reading Test	Schools Scoring in Bottom Third on FCAT Reading Test	Percent difference (bottom to top third)	t and significance of t
Percent of students at grade level on reading	51.8%	23.7%	119.0%	19.839 .000
Total certified library media specialist hours per week	64.6	54.1	19.4%	2.146 .034
Total number of library media staff	3.1	2.3	34.8%	5.083 .000
Total library media staff hours per week	109.0	82.8	31.6%	3.356 .001
Number of Interlibrary media loans provided to other district schools	1.5	0.9	66.7%	2.279 .024
Number of library media computers	48	32	50.0%	2.360 .020
Number of library media computers with Internet access	40	28	42.9%	3.283 .001

At the high school level, three variables related to staffing were determined to be statistically significant when comparing higher scoring schools on the FCAT to the lower scoring schools (Table 3.13): total hours of staffing by a certified library media specialist, total library media staff, and total library media staffing per week. Other significant differences exist in the number of interlibrary media loans provided within the district each week (66.7% more), the number of computers in the library media center (50% more), and the number of computers with Internet access in the library media center (42.9% more).

Table 3.14. Correlation Analysis for Certified Library Media Specialist and Total Library Media Staff Hours Per 100 Students as Predictors of Other Library Media Ratio Variables for Florida Schools, 2002

Variable	Library Media Staff Hours Per 100 Students					
	3rd Grade		8th Grade		10th Grade	
	Certified library media specialist	Certified LMS with support staff	Certified library media specialist	Certified LMS with support staff	Certified library media specialist	Certified LMS with support staff
Library Media Staffing Total weekly library media staff hours	.395 **	—	.727 **	—	.779 **	—
Information Resources & Technology Volumes per student	—	.234 **	.494 **	.503 **	.610 **	.743 **
Subscriptions per 100 students	.311 **	.302 **	.196 **	.186 **	.295 **	.450 **
Videos per 100 students	.147 **	.155 **	.659 **	.523 **	.604 **	.671 **
Library media computers per 100 students	.173 **	.154 **	.364 **	.261 **	.387 **	.357 **
School computers per 100 students	—	.086 *	.478 **	.387 **	.594 **	.675 **
Library Media Usage Library media visits per student	.111 **	—	.171 **	.310 **	.164 *	.257 **
Circulation per student	—	.088 *	.147 *	.213 **	.233 **	.576 **
Library Media Expenditures Per Student	.100 *	.144 **	.391 **	.380 **	.530 **	.506 **

* p < .05 ** p < .01

Library media staffing hours per 100 students, including that of a certified library media specialist and the library media specialist with additional support, is positively correlated to a number of other library media variables: total volumes per student, subscriptions per 100 students, videos per 100 students, the number of computers in the library media center per 100 students, and the number of computers in the school per 100 students. In addition, the number of library media visits per student, circulation per student, and library media expenditures per student are positively correlated with staff hours.

There is a significant difference as measured on seven different library media variables in the number of students scoring at grade level or higher in schools with stronger programs (at median or above) than in weaker programs (below median). Elementary schools data are presented in Table 3.15, middle schools in Table 3.16, and high school data is presented in Table 3.17.

Table 3.15. Third Grade FCAT Reading Performance of Florida Elementary Schools with Stronger and Weaker Library Media Programs by Library Media Characteristic

Library media variable	Average Percent of Students Scoring at Grade Level on 3rd Grade FCAT Reading Test		Percent difference (weaker to stronger programs)	t and significance of t
	Stronger library media programs (median or above)	Weaker library media programs (below median)		
Total library media staff hours per week	55.6%	51.7%	7.5%	3.122 .002
Library media computers	55.6%	51.5%	8.0%	3.421 .001
Volumes	56.8%	50.5%	12.5%	4.973 .000
Videos	56.3%	51.0%	10.4%	4.271 .000
Circulation	56.7%	50.9%	11.4%	4.737 .000
Library media visits for technology use	55.0%	52.4%	5.0%	2.098 .036
Other library media visits	54.9%	52.3%	5.0%	2.040 .042

At the elementary level (Table 3.15), scores are 7.5% higher in programs where total library media staff hours per week were at the median or above, 8% higher where there were more computers in the library media center, 12.5% higher in collections with more print volumes, and 10.4% higher in collections with more than the median number of videos. Programs with above the median circulation figures scored 11.4% higher than those with lower circulation. Scores were higher by 5% each where programs were stronger as measured by visits to the library media center to use technology and other visits to the library media center.

"The media center is very active and is definitely the 'hub' of the school. We strive to include the community and local public library in our activities."

Table 3.16. Eighth Grade FCAT Reading Performance of Florida Middle Schools with Stronger and Weaker Library Media Programs by Library Media Characteristic

Library media variable	Average Percent of Students Scoring at Grade Level on 8th Grade FCAT Reading Score		Percent difference (weaker to stronger programs)	t and significance of t
	Stronger library media programs (median or above)	Weaker library media programs (below median)		
Library media computers	46.2%	41.5%	11.3%	2.476 .014
Circulation	45.6%	40.6%	12.3%	2.593 .010
Other library media visits (excluding technology usage)	45.2%	41.2%	9.7%	2.086 .038

Middle school test scores were 11.3% higher in library media programs where the number of computers in the library media center was at the median and above. Test scores (eighth grade FCAT, reading) in middle schools with median or above circulation were 12.3% higher. Where visits to the library media center were greater, there was a difference of 9.7% in test scores.

Table 3.17. Tenth Grade FCAT Reading Performance of Florida High Schools with Stronger and Weaker Library Media Programs by Library Media Characteristic

Library media variable	Average Percent of Students Scoring at Grade Level on 10th Grade FCAT Reading Score		Percent difference (weaker to stronger programs)	t and significance of t
	Stronger library media programs (median or above)	Weaker library media programs (below median)		
Total library media staff hours per week	40.9%	34.8%	17.5%	3.132 .002
Library media computers	40.5%	35.8%	13.1%	2.533 .012
Networked school computers	41.9%	36.1%	16.1%	2.881 .004
Library media expenditures	40.3%	36.4%	10.7%	2.012 .046
Library media visits for technology use	40.2%	36.0%	11.7%	2.215 .028
Other library media visits	40.3%	35.8%	12.6%	2.389 .018

At the high school level, programs stronger (median or above) on six different library media characteristics had 10.7% to 17.5% higher test scores (tenth grade FCAT reading) with staffing making the greatest difference (17.5%) and library media expenditures making the least (10.7%), but still significant, difference.

Table 3.18. Regression Analysis Measuring Impact of High School Library Media Staffing on 10th Grade FCAT Reading Scores Controlling for Selected School Characteristics*, 2002

Variable	R	R Square	R Square Change	Standardized Beta Coefficient	t and significance of t
Percent of teachers with advanced degrees	.361	.130	.130	.452	6.785 .000
Operating expenditures per student	.429	.184	.054	-.364	-4.922 .000
Total library media staff hours per 100 students	.476	.226	.042	.197	2.662 .008
Average class size (language arts)	.493	.243	.017	-.141	-2.046 .042

*Excluded variable: Average years of teaching experience

Table 3.19. Regression Analysis Measuring Impact of High School Library Media Usage on 10th Grade FCAT Reading Scores Controlling for Selected School Characteristics*, 2002

Variable	R	R Square	R Square Change	Standardized Beta Coefficient	t and significance of t
Percent of teachers with advanced degrees	.340	.116	.116	.384	5.606 .000
Operating expenditures per student	.401	.161	.045	-.286	-4.083 .000
Average class size	.435	.189	.029	-.158	-2.274 .024
Library media visits per student	.457	.209	.020	.146	2.134 .034

*Excluded variable: average years of teaching experience

Table 3.20. Regression Analysis Measuring Impact of High School Library Media Usage on ACT Test Scores Controlling for Selected School Characteristics, 2002

Variable	R	R Square	R Square Change	Standardized Beta Coefficient	t and significance of t
Teachers average years of experience	.345	.119	.119	.334	4.763 .000
Operating expenditures per student	.393	.154	.035	-.352	-4.766 .000
Library media visits per student	.462	.213	.059	.222	3.166 .002
Percent of teachers with advanced degrees	.486	.236	.023	.200	2.673 .008
Average class size (language arts)	.507	.257	.021	-.152	-2.220 .028

Tables 3.18, 3.19 and 3.20 indicate primary factors that account for variance in test scores: FCAT reading test scores at the 10th grade level can be attributed to the percentage of teachers with advanced degrees (13%), per student expenditures school-wide (5.4%), **total media staff hours (4.2%)** and class size (1.7%) for a total of 24.3% of the variance.

Table 3.19 looks at library usage and FCAT test scores at the 10th grade level and shows that variance in test scores can be attributed to the percentage of teachers with advanced degrees (11.6%), per student expenditures school-wide (4.5%), class size (2.9%) and the **number of library media visits per student (1.4%)** for a total of 20.9% of the variance.

Table 3.20 examines variance in ACT scores at the high school level and library media usage. 11.9% of the variance can be attributed to teachers average years of experience school-wide, 3.5% to per pupil operating expenditures, **5.9% to library media visits per student (usage)**, 2.3% to the percentage of teachers with advanced degrees, and 2.1% to average class size.

At all three levels, per pupil expenditures and class size are negative, indicating that smaller class sizes do contribute to student achievement, but higher total expenditures may not.

Table 3.21. Correlation Analysis for High School Library Media Predictors of Individual Library Media Visits Per Student, 2002

Variable	Pearson's Product-Moment Correlation Coefficient with Individual Library Media Visits Per Student
Certified library media specialist hours per 100 students	.164 *
Total library media staff hours per 100 students	.257 **
Networked school computers per 100 students	.208 **
Volumes per student	.303 **
Subscriptions per 100 students	.348 **
Videos per 100 students	.222 **
Software packages per 100 students	.171 *
Library media expenditures per student	.187 *

* $p < .05$ ** $p < .01$

At the high school level in Florida's public schools, the significant predictors of student visits to the library media center are the number of hours the library media center is staffed by a certified library media specialist per student, the number of software packages per student available in the library media center, and library media expenditures per students (Table 3.21). Also significant predictors are the total staffing hours per student, the number of networked computers in the school per student, and the number of periodical subscriptions, videos and books in the collection per student.

It is interesting to note that although networked computers allow students to search library media resources, the Internet and other electronic sources from anywhere in the school, they do not preclude students coming to the library media center for information. In fact, they increase usage of the library media center.

Florida's school library media programs do have a significant impact on student achievement. The importance of staffing is particularly notable at all levels. Print and non-print collections, technology access and use, and budgets are significantly higher in higher achieving schools.

What school library media factors may be related to student achievement and school grades in Florida's School Accountability Reports?

Florida's "A" elementary schools:

- Are more likely to have an information skills curriculum in place
- Are more likely to have a school website
- Are more likely to have a main web page or media center web page that links to SUNLINK
- Have significantly larger book collections
- Subscribe to more periodicals

School library media specialists in "A" elementary schools:

- Are more likely to work with individuals visiting the media center than with groups
- Spend more time planning for lessons taught independently of teachers
- Spend more time working collaboratively and teaching with teachers
- Spend more time involved in reading incentive activities and programs

"Non-A" elementary schools in Florida are more likely to improve their school grade when they report:

- Having an information skills curriculum in place
- Having a school website
- Having a link from the main school web page or the media center web page to SUNLINK
- Having more encyclopedias and reference materials on CD-ROM
- Spending more time teaching with teachers

Additional factors in improving a school's grade include:

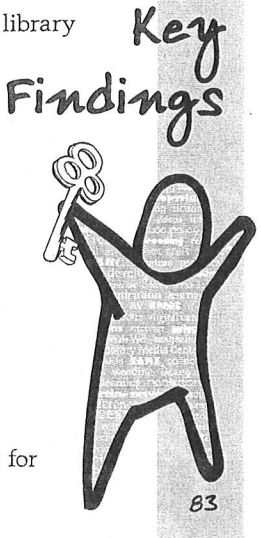
- Having a link from the school website to a library media center web page
- Working collaboratively with the public library on summer reading programs
- Reporting that the school library media specialist participates in professional development by attending the annual conference of the Florida Association for Media in Education

School library media specialists in "Non-A" elementary schools, however, continue their efforts toward improved student achievement and report:

- A significantly larger budget for books, a larger budget for books per student, and more total volumes (total and per student) purchased in the 2000–2001 school year
- A larger budget for electronic access to information (total and per 100 students)
- A larger budget for other operating expenditures from sources other than the school budget (total and per 100 students)
- A significantly larger overall budget (total and per student)
- More time assisting teachers with state initiatives (such as FCAT, Sunshine State Standards, etc.) per 100 students
- More visits by groups to the library media center for information skills instruction
- More time in meetings with district staff

Schools are less likely to lower their standing (school grade) when they have:

- More computers with access to SUNLINK in the library media center
- More networked computers in the library media center
- More networked computers in the library media center with Internet access
- Use of encyclopedias and other reference materials on CD-ROM
- More total staff hours
- More visits to the media center by individuals for information skills instruction and assistance
- A copyright policy in place
- Funding from of the school budget for other operating expenses



Part IV: Library Media Variables and School Grades

As in many other states, Florida schools now receive annual school grades to reflect student achievement and progress. In this section of the study, four research questions are addressed:

- What are the significant library media factors to make "A" elementary schools?
- On what library media variables are "Non-A" elementary schools excelling in their efforts to become "A" schools?
- What are the significant library media factors that may influence moving "Non-A" elementary schools to "A" schools?
- What library media factors may prevent an elementary school from moving downward in school grades?

Because this study was intended to address these and other important questions simultaneously, hundreds of variables were collected in the survey and others were available from the DOE and other sources. The large number of variables poses a significant challenge and traditional statistical methods are not most suitable for use. A two-stage data mining method was derived to solve this challenge.

Data mining (Hastie, T., Tibshirani, R., & Friedman, J., 2001) is a relatively new technique that can be used to handle massive number of variables and observations. At the first stage, the variable selection method based on the variable importance measure proposed by Breiman, L., Friedman, J. H., Olshen, R. A., & Stone, C. J. (1984) was used to identify a set of important variables that have significant impact on each of the research question separately. Typically, it can reduce the number of the variables to a small set of variables that are highly related to the response variable.

In this study, the number of variables that were selected by the decision trees is about 10. Since the number of variables is significantly reduced, we used the traditional logistic regression (Allison, 1999) model technique to build a model for each research question. Although each individual model is not presented in this in this section, the summary report for each question based on its logistic regression model is presented. In this technique, variables not statistically significant when isolated become more powerful predictors when combined with other significant factors and so are presented in the tables in the section although indicated NS (not significant).

Dr. Morgan Wang from the University of Central Florida's Data Mining Program was contracted to examine the data from a different perspective. With graduate student Yang Zhang, library media variables as they related to school grades at the elementary level were analyzed.

School Grades

Each summer for the past several years, Florida school communities have anxiously awaited the announcement of "school grades" and the annual *School Accountability Report.* The Florida Department of Education says the *School Accountability Report,* available to the public on the World Wide Web, is "designed to identify high and low performing schools, stimulate academic improvement and summarize information about school achievement."

Schools are assigned a performance grade based primarily upon student achievement data from the *Florida Comprehensive Assessment Tests (FCAT).* Grades are determined through a formula that takes into consideration the number of students scoring at grade level or higher, students making adequate learning gains, and the learning gains of students who had previously scored at the lowest levels. School grades "communicate to the public how well a school is performing relative to state standards." School grades are included in the annual *Florida School Indicators Reports* and current versions and some indicators are available on the World Wide Web (2003), and the data from 2000–2001 report was provided by the Florida DOE for use in this Florida School

Library Media Study. Table 4.1 shows the grade distribution for all schools assigned school grades in the *Florida School Indicator Report, 2001.*

"A" Elementary Schools

872 elementary schools with reported school grades participated in the Florida Library Media Study. Among them, 224 schools (25.27%) were A schools, 193 were B schools (22.13%), 354 were C schools (40.60%) and 84 were D schools (9.63%) (Table 4.2 and Figure 4.1). The remainder were new ("N") schools (not graded).

Table 4.1. School Grades Distribution (All Schools) 2001

School Grade	Frequency	Percent	Cumulative Frequency	Cumulative Percent
A	592	24%	579	24%
B	412	16%	1004	40%
C	1122	45%	2126	85%
D	307	12%	2433	97%
N	66	3%	2499	100%

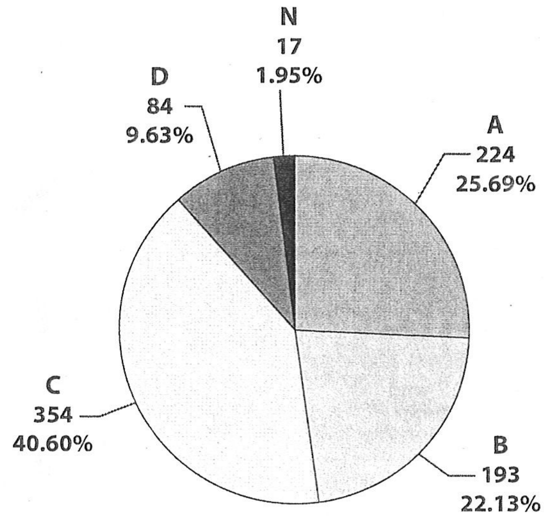
N= Not Graded

Table 4.2. School Grade Distribution 2000–2001 Elementary Schools Participating in Florida Media Study

School Grade	Frequency	Percent	Cumulative Frequency	Cumulative Percent
A	224	25.69%	224	25.69%
B	193	22.13%	417	47.82%
C	354	40.60%	771	88.42%
D	84	9.63%	855	98.05%
N	17	1.95%	872	100.00%

"Despite the fact that our student population is largely low income, the reading initiatives that the media center supports have dramatically improved our students' abilities and interest in reading. Circulation continues to grow."

Figure 4.1. Study Data School Grade Distribution 2000–2001



The largest difference between "A" elementary schools and "Non-A" elementary schools is directly related to the percentage of students who received free and reduced lunch. Keith Curry Lance (personal communication, April 2003) described the "poverty factor" as the largest contributor to test scores in every study he and his colleagues have conducted, accounting for an average of 50% to 60% of the variance. In the Texas study:

> Although most of the variance in TAAS scores was attributed to socio–economic factors, Smith (2001) found school libraries to have a measurable effect on student achievement. At the elementary and middle school levels, approximately 4% of the variance in TAAS scores was attributed to school libraries, while that figure more than doubled at the high school level, reaching 8.2% (Association for Supervision and Curriculum Development, 2003).

In Florida elementary schools socio-economic factors account for 70% and at the middle school level, 78% of the variance in test scores. For some unexplained reason, in the data received from the Florida Department of Education, most high schools reported zero (0) students on free and reduced lunch, so variance in test scores attributed to poverty could not be determined.

The analysis in this section was based on 872 elementary schools. Generally, the higher the percentage of free and reduced lunch, the lower the percentage of "A" schools. The lower the percentage of those receiving free and reduced lunch, the higher the percentage of "A" schools.

Table 4.3. School Grade and Percentage of Students on Free and Reduced Lunch

School Grade	Number and % of Free and Reduced Lunch					Total
	0–20	20–40	40–60	60–80	80 up	
A	54 56.25%	74 38.34%	58 24.47%	32 14.22%	6 4.96%	224
Non-A	42 43.75%	119 61.66%	179 75.53%	193 85.78%	115 95.04%	648
Total	96 100%	193 100%	237 100%	225 100%	121 100%	872

Significant Library Media Factors in "A" Schools

However, other significant differences in library-related factors were found in "A" schools.

Table 4.4 compares "A" elementary schools to "Non-A" elementary schools on several different library media variables.

Table 4.4. Significant Library Media Variables in Florida's "A" Elementary Schools Compared to "Non-A" Elementary Schools

Library Media Variable	"A" Elementary Schools n=224	"Non-A" Elementary Schools n=648	Significance (*)
Have information skills curriculum in place	70.18%	63.03%	0.05
Have a school website	86.18%	78.64%	0.01
School or media center web page links to SUNLINK	19.67%	12.42%	0.01
Book collection	12941	11036	0.01
Magazine Subscriptions	22	20	0.05
Newspaper Subscriptions	1.43	1.25	NS*
Number of Visits by Groups Weekly	33.06	46.99	0.01
Number of Visits by Individuals Weekly	144.49	112.98	NS*
Number of Minutes Spent Planning for Instruction Taught Independently of Teachers Weekly	66.30	65.19	NS*
Number of Hours Spent Planning & Working with Teachers Weekly	3.07	2.03	0.10
Number of Hours Involved in Reading Incentive Activities Weekly	7.71	5.89	0.05
Have Collection Development Policy in Place	86.43%	82.83%	NS
Report Ongoing Communication with Public Library	63.80%	59.75%	NS

(*) The statistical significances on this table are based on one-side Z test on each variable separately. Some important variables emerged when from the logistic regression model and are also included in this table although these variables might have not significant results on the one-side Z test.

It appears that "A" elementary schools may be more involved in instruction and instructional activities than their "Non-A" counterparts. Compared to "Non-A" elementary schools, they are more likely to report having an information skills curriculum in place, making it more likely that information skills and information literacy are an important part of the school library media program. They also report more time planning with teachers, more time working collaboratively with teachers, and more time involved in reading incentive activities. They spend more time with individuals than with groups of students on information skills instruction and assistance in accessing information. This may be attributed to more flexible scheduling, although statistically the differences between "A" and "Non-A" schools was not significant on this measure as an independent variable or in the larger predictive model.

"A" schools also have significantly larger print collections, including books, magazines and

newspapers, and numerous studies have shown that having more quality reading materials leads to more voluntary reading and higher test scores.

Although websites vary in content and quality, the fact that a school has a web presence indicates a commitment to making information about the school more readily accessible to the school community including teachers in classrooms, parents at home or work, and taxpayers in general. It also demonstrates an awareness of the growing importance of the Internet as an information resource. Although less than 20% of all schools have a link to SUNLINK from the school web page or a library media center web page, "A" elementary schools report that link significantly more than "Non-A" elementary schools. In an earlier study of "A" high schools with school websites, Wunderlich (2002) found that 64% of them linked to school library media center information and resources. This may indicate a greater recognition of the importance of resources outside of the school and the willingness to borrow or loan through interlibrary loan with other schools in the district and state to meet the information needs of students and teachers.

In addition, although not statistically significant even in the larger model, a higher percentage of school library media specialists in "A" schools report having a board approved collection development policy in place than their colleagues in "Non-A" elementary schools. A higher percentage also report ongoing communication with the public library.

"Non-A" Elementary Schools: A for Effort?

There is little doubt that teachers and administrators in "Non-A" elementary schools, however, are working hard to improve student achievement and test scores. This is also evident in the school library media centers and among school library media specialists. When compared to "A" schools, "Non-A" schools (Table 4.5) reported:

Table 4.5. Significant Library Media Variables in Florida's "Non-A" Elementary Schools Compared to "A" Elementary Schools, 2000–2001

Library Media Variable	"A" Elementary Schools n=224	"Non-A" Elementary Schools n=648	Significance (*)
Book Budget	3221.36	4105.62	0.05
Budget for Books (per 100 students)	425.40	581.19	0.01
Volumes Purchased 2000–2001	684.87	905.44	0.01
Budget for Electronic Access to Information (Per 100 Students)	95.63	155.78	NS *
Budget for Other Operating Expenditures from Other Sources (per 100 students)	116.81	296.28	0.01
Overall Budget	6137.71	7084.05	0.10
Overall Budget (per 100 students)	818.76	1010.16	0.05
Hours Spent Assisting teachers with State Initiatives (per 100 students)	.17	.23	0.01
Visits by Groups for Information Skills Instruction Weekly	33.06	46.99	0.10
Hours in Meetings with District Staff	1.06	1.34	0.05

(*) The statistical significances on this table are based on one-side Z test on each variable separately. Some important variables emerged when from the logistic regression model and are also included in this table although these variables might have not significant results on the one-side Z test.

It would appear that "Non-A" schools are spending significantly more over all in their library media centers as well as more for books, purchasing more total volumes than "A" schools. It is hoped that all schools can find adequate and equitable funding for library books, and that all schools will continue to increase their spending in an effort to improve reading scores and attitudes statewide. "A" schools need continued attention if they are to maintain that status.

It is not surprising to see that more time is spent working with teachers on state initiatives in "Non-A" schools. School improvement efforts are a priority. Many school library media specialists report working with students and teachers on FCAT Explorer, writing FCAT-type questions for use in the classroom, developing FCAT skill-related collections, work with CCC or Josten's or other integrated learning system. They also report more time meeting with teachers to add materials to the collection that teachers feel will support efforts to raise FCAT scores (Appendix D). The fact that more groups visit the school library media center than individuals may reflect the more rigid scheduling and effort to be sure every student has information skills and extra reading instruction; however, if the instruction is aimed primarily at FCAT skills, it may be at the expense of higher order thinking skills, critical thinking, evaluation, and problem solving.

District staff may feel compelled to assist "Non-A" schools, and more frequent meetings are the result.

"Non-A" Schools: Moving Up?

What library media factors, then, are statistically significant in schools improving school grades when compared to schools that did not improve or, in fact, received a lower grade?

The grade distribution for all schools in the 2001–2002 school year is depicted in Table 4.6.

Table 4.6. School Grade Distribution (All Schools), 2002

School Grade	Frequency	Percent	Cumulative Frequency	Cumulative Percent
A	894	35%	894	35%
B	553	22%	1447	57%
C	725	29%	2172	86%
D	185	7%	2357	93%
F	64	3%	2421	96%
N	109	4%	2530	100%

A total of 869 elementary schools that returned usable surveys for the Florida School Library Media Study also had school grades reported in Florida DOE school indicator reports for both year 2000–2001 and 2001–2002. For 2001–2002, there were 376 schools "A" elementary schools, (43.22%), 191 "B" schools (21.95%), 230 "C" schools (26.44%), 58 "D" schools (6.67%) and 14 "F" schools (1.61%) and 1 "N" school (.12%). Table 4.7 shows the distribution of school grades for schools participating in this study for year 2001–2002 (Figure 4.2, Table 4.7).

Figure 4.2. Study Data School Grade Distribution 2001–2002

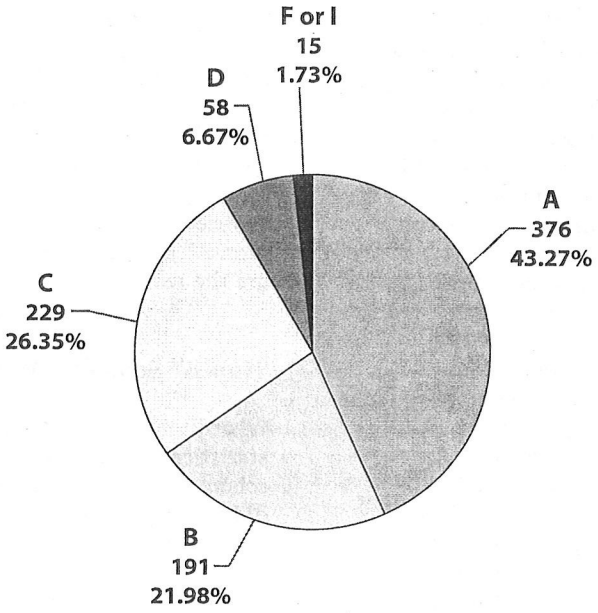


Table 4.7. Florida Media Study Data School Grade Distribution, 2001–2002

School Grade	Frequency	Percent	Cumulative Frequency	Cumulative Percent
A	376	43.27%	376	43.27%
B	191	21.98%	567	65.25%
C	229	26.35%	796	91.60%
D	58	6.67%	854	98.27%
F	14	1.61%	868	99.88%
I	1	0.12%	869	100.00%

Table 4.8 shows the changes of these schools. 140 (16.11%) received a lower school grade in 2001–2002 than in 2000–2001, 360 schools remained unchanged, and 369 schools (42.46%) improved their school grade. However, in looking only at "Non-A" schools (Table 4.9), 57% improved their school grade one or more grade levels (B to A, D to B, etc.) while 33% remained unchanged and 9.89% received a lower grade (A to B, A to C, etc.)

Table 4.8. Elementary School Grade Changes from 2000–2001 to 2001–2002

Grade Change	Frequency	Percent	Cumulative Frequency	Cumulative Percent
Lower grade	140	16.11%	140	16.11%
Unchanged	360	41.43%	500	57.54%
Improved grade	369	42.46%	869	100.00%

Table 4.9. School Grades Change for "Non-A" Elementary Schools

Grade Change	Frequency	Percent	Cumulative Frequency	Cumulative Percent
Lower grade	63	9.75%	63	9.75%
Unchanged	214	33.13%	277	42.88%
Improved grade	369	57.12%	646	100.00%

Table 4.10 shows that 70.68% of "B" schools participating in the *Florida Media Study* improved their schools grade in 2001–2002. Grade "B" schools were more likely to improve than grade "C" and grade "D" schools. Although by the very nature of the grade "A" schools could not improve (nor could "N" schools get lower grades). In the 2001–2002 Accountability Report 34.53% of "A" schools received lower grades than in 2000–2001.

Table 4.10. Grade Change by School Grades for Elementary Schools in 2001–2002 Compared to 2000–2001

Grade Change	School Grades (Number and %)					Total
	A	B	C	D	N	
Lower grade	77 34.53%	21 10.99%	31 8.76%	11 13.10%	0 0.00%	140
Unchanged	146 65.47%	35 18.32%	151 42.66%	28 33.33%	0 0.00%	360
Improved grade	0 0.00%	135 70.68%	172 48.59	45 53.57%	17 100.00%	369
Total	223	191	354	84	17	869

Although the percentage of students on free and reduced lunch remains the most significant predictor of school grades, it also is also the most significant factor in whether or not schools can improve their grade. As the percentage of students on free and reduced lunch decreases, the number of schools improving their grade increases (Table 4.11).

Table 4.11. Percentage and Number of "Non-A" Elementary School Students Receiving Free and Reduced Lunch and Grade Change Status

Upgraded	Number and Percentage of Free and Reduced Lunch					Total
	0-20	20-40	40-60	60-80	80 up	
Yes	37 90.24%	108 90.76%	109 60.89%	75 39.06%	40 34.78%	369
No	4 9.76%	11 9.24%	70 39.11%	117 60.94%	75 65.22%	277
Total	41	119	179	192	115	646

However, when comparing schools that improved their school grade to those who did not (Table 4.12), library media specialists report some significant differences as well.

Table 4.12. Significant Library Media Variables in Florida's "Non-A" Elementary Schools Compared to "A" Elementary Schools, 2000-2001

Library Media Variable	"Non-A" Elementary Schools That Received Higher School Grades n=369	"Non-A" Elementary Schools That Did Not Improve Their School Grades n=277	Significance (*)
Have Information Skills Curriculum in Place	64.10%	61.99%	0.10
Have a School Website	81.82%	74.24%	0.01
School Web page or Media Center Web page Links to SUNLINK	50.88%	39.22%	0.01
Encyclopedias and Reference Materials on CD-ROM	23.55	11.65	0.01
Hours Spent Teaching with Teachers Weekly	2.17	1.85	NS *
Work Collaboratively with the Public Library on Summer Reading Programs	76.88%	66.42%	0.01
Report Library Media Specialist Attends FAME Conference	90.79%	88.09%	NS *

(*) The statistical significances on this table are based on one-side Z test on each variable separately. Some important variables emerged when from the logistic regression model and are also included in this table although these variables might have not significant results on the one-side Z test.

Many of the variables in "A" schools are also significant factors in whether or not a school improves their school grade, most notably:

- Having an information skills curriculum in place
- Having a school website
- Having a link from the main school web page or the media center web page to SUNLINK
- Spending more time teaching with teachers

Additional factors include:

- Having more encyclopedias and reference materials on CD-ROM
- Having a link from the school website to a library media center web page
- Working collaboratively with the public library on summer reading programs
- Reporting that the school library media specialist participates in professional development by attending the annual conference of the Florida Association for Media in Education

The fact that a school library media specialist is responsible for maintaining a web presence for the school library media center and has been proactive in working with others to establish a link from the school's main web page demonstrates the school library media specialist's awareness of the power of the Internet as a communication and research tool, his or her ability to keep up-to-date in web authoring tools or in supervising those with web authoring abilities, and his or her leadership abilities. The efforts to work with the public library demonstrate a dedication to students that extends beyond the school year and a positive relationship with the larger school community. Professional development efforts may focus on sessions for school improvement or just provide a time for sharing ideas and strategies with colleagues from across the state; in any case, reporting attendance appears to be beneficial to the school.

Maintaining the Grade!

Another way to look at the grade changes would be to examine the factors that made schools less likely to receive a lower grade (Table 4.13).

Table 4.13. Significant Library Media Variables in Florida's Schools That Did Not Receive Lower Grades in 2001–2002 Elementary Schools, 2000–2001

Library Media Variable	Elementary Schools That Received Lower School Grades n=140	Elementary Schools That Did Not Receive Lower School Grades N=712	Significance (*)
Computers with Access to SUNLINK in the Library Media Center	10.87	15.77	0.05
Networked Computers in the Media Center	12.47	17.01	0.05
Report Having Networked Computers in the Media Center with Internet Access	78.57%	86.66%	0.01
Total Staff Hours	62.04	65.99	0.05
Individual Visits to Library Media Center for Information Skills Instruction and Assistance	79.70	121.28	0.05
Report Having Copyright Policy in Place	95.00%	97.75%	0.05
Report Using CD-ROM Reference Materials	80.71%	86.52%	0.05
Report Using the School Budget for Other Operating Expenses	60.71%	70.37%	0.01

(*) The statistical significances on this table are based on one-side Z test on each variable separately.

Among the significant library media factors, schools were less likely to receive a lower grade when they reported more emphasis on technology as measured by the use of electronic reference sources, numbers of networked computers, computers with Internet access, and computers with access to SUNLINK. That the number of Internet capable computers in the school library media center and those with access to SUNLINK would be different (since the current version of SUNLINK is only accessible via the Internet) is puzzling; however, schools may have designated portions of their computers to be dedicated to different tasks in an effort to make the most of the equipment and access they have.

Staffing was a significant factor as well, with more staffing and a staff led by a university-trained certified school library media specialist, contributing to maintaining a school's standing. More staffing also allows for more individual assistance to students in the library media center. Schools are less likely to lower their standing if they have a copyright policy in place and more flexibility in using the school budget.

"We're proud that our library is the most used place in the school. It is packed with kids before school, after school, and during both lunches, with students catching up on classwork and reading. We hear such positive comments from staff members about how much our students use the media center and how great it is that they feel so welcome!"

Part V: Conclusions and Recommendations

This report was designed to convey information about the status of Florida's public school library media programs: staffing, budgets, collections, technology, activities, policies and procedures. Baseline data have been reported, primarily through statewide averages that can be used to by individual school library media programs to assess their own status relative to others in the state. In several instances, where data was available, comparisons have been made to national averages.

The report also details findings about how school library media programs are related to student achievement. Key findings have been compiled and presented in previous sections.

Conclusions

Florida's school library media programs are active, vital contributors to teaching and learning in Florida's K–12 schools. Findings of this Florida library media study parallel those from numerous research studies on the impact of school library media centers. **School library media programs positively impact student achievement when:**

- **A professionally trained, full-time certified library media specialist leads the program.** Where school library media specialists have the educational background and training necessary to provide school library media services, to coordinate paid staff and volunteers, to work collaboratively with teachers, and to communicate effectively with administrators, to provide instruction and research assistance to students, and to manage collections, information, technology and fiscal resources, students learn and achieve.
- **Adequate support staff is present.** Test scores rise incrementally with more hours of staffing. Competent support staff can provide time for the school library media specialist to engage in more instructional activities with students and teachers and to provide assistance to more individuals and groups each day.
- **School library media collections are strong both in quantity, in quality and in variety.** Test scores were higher in schools with more books, periodicals and newspapers, videos, electronic subscriptions, non-print materials, technology, Internet connections and adequate budgets for building and maintaining collections.
- **Students have access to resources beyond the library media center.** More computers, more networked computers, and more computers with Internet access in the school library media center and throughout the school with access to media resources lead to higher student achievement. Schools with websites, links to selected school library media resources and to SUNLINK, and subscriptions to high quality online databases integrate technology tools that appeal to students, help them access information, and help them use information from the library shelves and beyond the library media center walls. The use of interlibrary loan through SUNLINK is beneficial to students and teachers and highly cost-effective.
- **Literacy, information literacy and technology literacy are taught.** School library media specialists provide students with skills that will last a lifetime: learning to locate, evaluate and use information; to read, listen, view and think critically and creatively; to understand the research process; to read fluently and to value reading; to use technology effectively as a tool for accessing, organizing, analyzing and presenting information. These skills are integrated throughout the school curriculum and support the Sunshine State Standards.
- **Students use the library media center and its resources.** Where media resources are valued and used, academic achievement increases. Usage increases with the size and quality of the collection, staffing, technology, electronic and non-print resources and the school library media center budget.

- **Technology is available.** Computer technology and online resources are common tools to today's students, and online databases and the World Wide Web give new meaning to "current" information resources. Technology resources extend library media resources to classrooms, homes and other public spaces and increase usage of other traditional print and non-print resources.

Recommendations

Recommendation #1

All schools deserve a competent, professional, certified, university-trained school library media specialist, and each school and every community must ensure they have qualified leaders for their school library media programs.

Qualified, certified school library media specialists have substantial specialized coursework and experience in a school library media center, including an internship or working with experienced mentor. Unfortunately, although many programs do, not all school library media centers in Florida have a certified school library media specialist. In addition, many Florida schools have large student populations, and as schools increase in size, the number of certified school library media specialists must also increase; while technology specialists may "count" as media specialists under SACS accreditation standards, and while teachers without media certification are well-intentioned, they do not have all the qualifications and training necessary to lead a quality program.

Without qualified staff, significant investments in collections and technology resources may be lost. Reading programs are not supported, and information and technology literacies are not integrated into the curriculum where there are best taught.

Immediate attention should be given to the position of school library media specialist in Florida's elementary schools. 20% of elementary schools do not have qualified library media specialists. At the same time, elementary library media specialists who do not have flexible schedules and adequate support staff are carrying heavy workloads that render them unable to work with teachers and students in a way that can positively impact student achievement. The effects of this will be cumulative on those elementary students, and will most certainly be felt as they enter middle and high schools without the foundation in reading and information skills that they will need to succeed.

Florida must begin to recruit and train media specialists to fill the imminent vacancies caused by retirement and other attrition both at the school level and at the district level. The Florida Department of Education, approved school library media preparation programs, the state professional associations, and school districts need to work together to avert what is already becoming a serious situation due to a shortage of qualified personnel.

Recommendation #2

Quantitative and qualitative guidelines should be established for Florida's school library media programs.

"What gets measured, gets done," says Tom Peters, business guru and author of *In Search of Excellence*. School library media specialists need criteria and benchmarks by which to measure many elements of their programs: resources, facilities, technology, usage, collaboration, communication, services, and budgets. Clear, concise quantitative guidelines would be helpful in assessing strengths and weaknesses, in setting goals and in measuring improvement. Such guidelines would also be helpful in communicating with administrators, school boards, teachers and parents.

Florida guidelines should reflect research findings, Sunshine State Standards and other state initiatives as well as national standards

guidelines for media programs and school library media specialists. Both quantitative and qualitative standards or guidelines have recently been established by professional organizations or state departments of education in New Mexico, Minnesota, Massachusetts, and Kentucky among others. Most not only provide units and areas for measurement, and minimum acceptable levels, but rubrics for determining accomplishment at levels ranging from standard to exemplary, allowing room for continuous growth and improvement. Florida's school library media professionals would welcome similar guidelines. Some districts have created local guidelines, and those could certainly be used as a foundation for building statewide criteria, qualitative and quantitative guidelines.

Recommendation #3

Funding and collections must be improved to a *minimum* of the national average.

In the absence of state guidelines, national averages give us some minimal quantitative criteria against which to assess our collections and budgets. As this study reveals, Florida' schools spend a fraction of the national average for both non-print and print resources. Elementary and middle schools have about ½ the number of books per student as the national average; high schools have about ⅕ of the national average; and combination schools, a startling ⅛. Current budgets for books allow each student to have a new book only every 3 to 4 years at most levels, and every 8 to 10 years in combination schools.

If Florida is serious about improving student achievement and producing information and technology literate citizens, findings from this and previous studies cannot be ignored. With regard to school library media collections and budgets, results of previous studies (American Library Association, 2003a) are consistent and irrefutable:

- Spending for school library media programs is the single most important variable related to better student achievement.
- Students in schools with well-equipped library media centers staffed by professional library media specialists perform better on assessments of reading comprehension and basic research skills.
- In studies in six states where library media programs are better staffed, better stocked and better funded, academic achievement tends to be higher.

Increases in per pupil expenditures in school library media centers positively influence test scores, while overall school expenditures do not. School libraries have been shown to influence reading scores while classroom libraries do not, and print-rich environments, like the library media center with a wide variety of fiction and non-fiction books, electronic and digital resources, encourage voluntary reading, the best predictor of literacy. Budgets for non-print, electronic resources and databases should also meet or exceed national averages.

To bring local spending and books per student in Florida's school library media centers up to *the minimum* of the national average should be an immediate and primary goal of each school library media specialist, each parent, the state professional association, the Florida Department of Education, school districts and the Florida Legislature. Research indicates there would be an immediate return on the investment in terms of student achievement. To go beyond the national average would demonstrate an understanding of what it takes not only to raise test scores, but also to create readers who enjoy books and who know how to use information resources to solve problems and increase understanding of our complex world, skills that will endure throughout life.

Recommendation #4

Address equity issues.

All students need access to information resources, quality literature, literacy instruction, high quality databases, interlibrary loan services, and research assistance. Schools with strong library media programs have higher test scores; but students in schools with lower test scores

have an equal or greater need for quality resources and services. When socio-economic factors are considered, students in poorer schools and from poorer homes may find that the school library media program provides their best access to books, technology, online databases, and non-print materials. For those students, strong library media programs are even more critical.

Collections are stronger and budgets are larger in schools in districts with library media supervisors or coordinators. This puts students in ⅕ of our districts (districts with no library media supervisors/coordinators) to ½ of our districts (districts with part-time library media supervisors/coordinators) at distinct disadvantage.

We must also improve our abilities to provide access to information resources for those who are physically or cognitively impaired. The negative correlation between technology accommodations for students with special needs and the numbers of students with disabilities in our schools means those students are not getting equitable access to digital and electronic information sources. All school library media centers should have at least one universal access workstation with appropriate technology accommodations to meet the diverse needs of all learners.

Schools not yet in SUNLINK should be provided with incentives to meet criteria for acceptance within a reasonable timeframe. All schools should be provided with minimal budgets to cover the cost of interlibrary loans beyond the school district, the value of which would far exceed any costs. Schools must fully participate in resource sharing at least until equity can be achieved.

Both statewide guidelines for school library media programs and state-licensed online databases could also help to address inequities in access to information and quality resources. In addition to substantial per pupil cost-savings, online databases including full text magazines, newspapers and reference materials, guarantee access to students no matter the size or location of their school. They also provide access to information resources from the classroom or from home.

Recommendation #5

The new information skills document, *Information Literacy: Florida's Library Media Curriculum Connections*, should be widely publicized and disseminated to schools and integrated into a comprehensive Florida information literacy guide, developed in conjunction with other professional organizations and groups.

The new document clearly identifies Florida's Student Information Literacy Descriptors K–12 and provides correlations to national information literacy standards and to Sunshine Standards, benchmarks and grade level expectations. Because information technology is so important to today's students and teachers and fits naturally into the resources and services of school library media programs, and because they offer further opportunities to collaboration utilizing the expertise of the school library media specialist, National Educational Technology Standards for Students (NETS*S) should also be integrated.

This presents an excellent opportunity for FAME to work with other state content area professional associations to increase understanding among all stakeholders of the importance of technology and information literacy and how those are best integrated and taught. A document describing collaborative goals, exemplary activities, and assessments between school library media specialists and teachers across the curriculum would be of great benefit to Florida students, teachers and school library media specialists.

Recommendation #6

Each school library media program should undertake a self-evaluation and create an action plan for improvement.

Much attention has been given in recent years to Baltimore Public Schools (Curtis, D., 2000) where over $10 million dollars was allocated over a three-year period to improve school library media collections. The funding was a result of assessment, defining the problems, relating to current needs and goals within the district, creating a plan, and

communicating a vision. Curtis says they approached the problem with a research model and built on their strengths.

School library media specialists are the best change agents within their own programs. Begin the change process by honestly assessing your own program, identify areas needing change, research the topic, set goals, involve others, keep and use data, celebrate success.

1. Using a copy of the data you submitted for the study or other available sources of information, compare your responses to state averages provided in Part II of this document.
2. Determine strengths, weaknesses, opportunities, and threats (SWOT) or use some other framework for determining areas of strength, opportunity, growth and change.
3. Apply the same research model that you advocate and use with students to one or two areas you target for improvement
   a. *KidsConnect Model* (I wonder, I find, I evaluate, I share)
   b. *FlipIt* (Focus, Link/Locate, Input/ Interpret/Implement, Payoff/ Presentation, Intelligent Thinking)
   c. *Pathways to Knowledge* (Appreciation, Presearch, Search, Interpretation, Communication, Evaluation)
   d. *Big 6* (Task Definition, Information Seeking, Location and Access, Use of Information, Synthesis, and Evaluation)
   e. Other
4. Set SMART goals: S: specific; M: measurable; A: attainable; R: realistic, results-oriented, relevant; T: timebound, tangible, trackable
5. Involve others: Share the vision and the goals, involving the entire school community in your quest for improve ment: administrators, teachers, staff, parents, and students. Involve district staff whenever possible. They may bring additional resources and ideas to the effort. When building book collections, ask teachers and students to help determine areas of greatest need, and involve them in recommending titles to be weeded because of age, condition, difficulty, or format.
6. Keep records. Document what you do and changes you make in an effort to reach your goals. Create rubrics, graphs, tables, charts or other tangible products to show progress.
7. Shake it up! Do things differently and do different things. Keep things fresh and keep students expecting the unexpected. Do *not* maintain the status quo. Make people pay attention to the good things you are doing. Communicate your goals, your vision, your efforts, descriptions of elements you are working to improve, and progress. Get out of your comfort zone as often as possible to help you focus attention on change and the need for change.
8. Celebrate success! Any goal or benchmark attained is a reason to celebrate. Thank those who have helped you reach each goal and involve them in setting and attaining the next ones.

Recommendation #7

School library media specialists must become active advocates for school library media programs.

That school library media programs impact student learning is clear, but we must communicate that clearly and effectively to parents, administrators, boards of education, and legislators. We must find ways to convince them that staffing, facilities, collections, resources, budget, activities and technology in our library media centers make a difference. We must do this within our own individual schools and within our communities. We must communicate this to leaders within our districts, in institutions of higher education where training and preparation takes place for school library media specialists, teachers and administrators, we must communicate the message to divisions in the Florida Department of Education and to Florida legislators and their staffs.

Data alone is not enough. We need success stories we can share from throughout the

state. We need to document the impact of our programs on students and teachers. Keep records. Create a journal. Design action research projects. What changes did you make? What did you contribute to the units that teachers are planning and implementing? Are teachers using resources they didn't know about until you told them? Are they including information skills and critical thinking in assignments? Did you contribute to the assessment rubrics students are using to gauge their work? What did students learn about finding and using information? How did they feel about their work? What examples of student work can you show to make your point? Do you have notes or collaborative planning sheets to document your efforts? How would teachers rate the learning experiences they were able to provide with your help over earlier efforts? Do web pages created for the projects link to school library media resources? Can you design checklists and surveys to collect relevant data?

We need to use data with stories and stories with data to convince administrators that school library media programs are good investments in attaining overall school goals, not expensive collections of books and technology. Requests for funding should be framed in terms of student outcomes and how the new books, staff, databases, or services will help students reach and exceed standards.

We also need to stop talking to ourselves. Surely school library media specialists know they make a difference! But we need to communicate *that* we do and *how* we do to others. We need to leverage success. Team with teachers and administrators to present at *their* conferences and to publish in *their* publications about collaborative efforts, team goals that have been reached, how their instruction has changed with the help of the school library media center and its resources, how school library media programs enhance student achievement.

Recommendation #8

Create professional development opportunities for administrators and teachers, both preservice and inservice, to learn about the role of the school library media program and its resources.

Within school districts, within university training programs for administrators and teachers, and within the Florida Department of Education, we need to be sure opportunities are in place to allow administrators and teachers to learn more about the school library media center and how to benefit from its resources. This is not easily accomplished because there are so many expectations already. Additionally, many teacher educators and those who teach in educational leadership programs generally have been teachers and administrators in schools at a time when school library media centers were different places. They may not have experienced today's dynamic, learning-centered library media programs, so it is difficult for them to talk or teach about them.

We can use recent technology infusion efforts, however, as models. Schools clearly communicated to teacher training programs that new teachers and new administrators were not prepared to use technology in the classroom. Over a short period of time, that has changed and even college professors who never had the opportunity to use a computer in their own K–12 classrooms are infusing technology experiences and skills into their college courses.

Preservice experiences for teachers should include opportunities to work with school library media specialists from their first observations through internships and into the first years of teaching. Those formative experiences must show how library media specialists help develop and deliver instruction and how school library media centers create avid readers, skilled users of information and technology, critical thinkers and effective communicators.

School administrators and administrators-in-training also need experience in evaluating school media programs, empowering collaboration, and bringing library media resources to bear on school improvement efforts. Checklists, case studies, research findings and practical experiences should be included.

District staff can help provide these experiences and resources for experienced teachers and administrators through collaborative efforts with other district staff, involvement in development of workshops, courses, and other district efforts. Current efforts to improve reading, math and science performance must be tied to school library media resources and services, and school and district library media staff must be involved in these efforts.

Recommendation #9

Develop and deliver quality ongoing professional development opportunities for school library media specialists.

This study revealed a number of topics and tools from which school library media specialists could benefit from ongoing professional development: budgeting, information skills curriculum, instruction and integration; time management and task delegation; flexible access benefits and methods; collection development policies and procedures; weeding; distance learning technologies and opportunities; new and emerging technologies; research-based reading strategies and Florida reading initiatives; developing and maintaining school library media center web pages and resources; working with school webmasters; SUNLINK (for non-SUNLINK schools) and how SUNLINK can be used (for all schools); teaching students and teachers to use SUNLINK; working with technology coordinators; technology for special needs and universal access; leadership and public relations.

While many of these topics are addressed by sessions at FAME and FETC, more intensive opportunities are needed and can be addressed through workshops, online courses, university coursework, summer institutes, listservs, and directed self-study.

Every school library media specialist should create and implement an annual professional development plan to address these and other areas for professional growth.

Recommendation #10

Statewide data collection should be continued.

In order to ensure continued progress, monitor change, and document successes, data collection related to school library media programs and resources needs to be continued. Not every variable needs to be assessed each year. Perhaps different areas could be addressed annually based on state needs, goals and learning outcomes. Data can be easily collected online, and results can be disseminated the same way.

Priority should be given to collecting data related to factors that contribute to student achievement and, when qualitative and quantitative guidelines are created, to measuring those elements of quality programs. Progress and accomplishments should be widely publicized and celebrated, and assistance and resources should be targeted to areas of continued need.

"The secret of joy in work is contained in one word-excellence. To know how to do something well is to enjoy it."

– Pearl Buck

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University of Central Florida
College of Education
SUNLINK

January 22, 2002

Dear Colleague:

"Accountability" is more than a buzzword. It is a critical element in education today, and library media programs are not exempt. Although it is a fact that media professionals and FAME, our state professional association, work hard to make sure that media programs and media specialists are recognized as important elements to student success, we need hard data to assess the importance of school library media programs in our schools.

As you may know, data has been collected in other states: Colorado, Pennsylvania, Texas, and Alaska among them. This survey instrument is based, in part, on the instruments used in those studies, but designed to measure some of Florida's unique activities and services, including SUNLINK. Please note that this is NOT a SUNLINK research study nor is it funded in any way by the SUNLINK project; it is an independent research study conducted by Dr. Donna Baumbach and Dr. Lea Witta, University of Central Florida. We will be assisted in data analysis by Dr. Judy Lee (UCF) and Dr. Jim Carey (USF). Preliminary findings should be ready by the fall FAME conference in Daytona Beach.

It is critical that your school participate and provide accurate data in order to get a true picture of the status of Florida's school library media programs, and the role of media programs and media specialists on student achievement.

As an incentive to complete the survey, we will hold a drawing for 50 (fifty) FAME 2002 registrations (at the member rate) and 10 (ten) handheld computers/PDAs. To qualify, the survey must be completed online or postmarked by the deadline of February 22, 2002. Only complete surveys returned by the deadline will be eligible for the drawing. An email listing the winners will be sent to all whose surveys arrive in time and for whom an accurate email address is provided.

Although the survey appears long, most of the data should be readily available from your own records. Although you are asked to identify your school and district, the data will not be used to compare your school to any other school or your district to any other district. We are interested in getting a true picture of Florida's school library media programs as a whole. However, we need your school identification in order to correlate the data with FCAT scores and other measures of student achievement and to follow-up with schools should questions arise. Your answers are confidential.

You may complete the survey on paper and mail it back in the enclosed self-addressed, postage paid envelope, or you may complete the data online by entering it at http://www.sunlink.ucf.edu/survey. Completing the online version will save considerable data entry time for the researchers, but we urge you to do whichever is convenient and comfortable for you. We expect 100% of Florida's public schools to participate, and we will be in touch with you and/or your district if your survey is not returned by the deadline.

12443 Research Parkway, Suite 402 • Orlando, Florida 32826–3282

407-384-2074 • 800-226-0085 • 407-384-2077 (Fax) • SUNLINK@firn.edu • http://www.sunlink.ucf.edu

While participation is voluntary, the real picture of the contributions of Florida school library media programs and media specialists can only be drawn from complete and accurate data. Please take the time to participate in this important research study.

Sincerely,

Donna J. Baumbach, Ed. D.
Professor
Educational Media
University of Central Florida

Make a Difference! Participate!

Florida School Library Media Study

FLORIDA PUBLIC SCHOOL
LIBRARY MEDIA CENTER QUESTIONNAIRE

The school library media specialist or the person in charge of the school library media center should complete this survey instrument. Only one instrument should be completed per school.

If your school has no library media center, please complete Section I, Q1-13 only.

Please complete and return this Questionnaire by February 22, 2002.

The purpose of this research is to capture an accurate picture of the status of Florida's school library media programs and determine the role of media programs and media specialists on student achievement. Participation in this study is voluntary.

By completing this questionnaire, you give your consent to the researchers to use the data for this statewide research study. Your answers are confidential, and no attempt will be made to compare your school to any other school or your district to any other district by name. We ask you to identify your school and district so that we may correlate school library media data with FCAT scores and other measures of student achievement. We ask that you identify yourself as the respondent so that we can follow-up if necessary.

You may complete this form online at http://www.sunlink.ucf.edu/survey. You may find it useful to answer the questions on this form and then enter the data online. Note: If you complete this online, you should be aware that your employers might monitor Internet and email use; transmission and storage technologies are not secure. If you prefer NOT to complete the survey online, please mail it in the enclosed postage paid envelope OR to this address:

Donna Baumbach
University of Central Florida
ITRC & SUNLINK Project Offices
12443 Research Parkway, Suite 400-402
Orlando, FL 32826

If you have any questions or are unsure how to respond to a specific question please contact Dr. Baumbach by phone at (407) 384-2079 or email at baumbach_d@firn.edu.

Thank you for your help!

I. IDENTIFYING INFORMATION

Please identify your school by name, level, and district. Provide contact information for the individual who has prime responsibility for completing this survey (respondent).

1a. School Name: _____ 1b. 4-digit school code_____

2a. District Name: _____ 2b. 2-digit district code _____

3. School Level: (**CHECK ONE ONLY**)

- ☐ Elementary
- ☐ Middle School
- ☐ High School
- ☐ Combined: Elementary-Middle
- ☐ Combined: Middle and High School
- ☐ Combined: Elementary-Middle-High School
- ☐ Combined: Other

4. Grade levels: (**CIRCLE ALL THAT APPLY**)

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

5. Approximate Number of Students Enrolled: _____

6. Approximate Number of Faculty/Staff: _____

7. Name of Respondent: _____

8. Position of Respondent: _____

9. Email for Respondent: _____

10. Are you (Respondent) certified in educational media?

☐ Yes ☐ No, but seeking certification ☐ No

11. School Library Media Center (or school) Phone Number: _____

12. School Library Media Center (or school) Fax: _____

13. Does your school have a library media center? **(CHECK ONE)**

☐ Yes ☐ No (**if NO**, please **STOP**. No further information is required for this study. Please return the survey for our records.)

14. Does your school have more than one library media center?

☐ Yes ☐ No (**SKIP TO SECTION II, Q.1**)

14a. If yes, the library media center for which you are providing information is the library media center serving: (**CHECK ONE ONLY**)

- ☐ Elementary School
- ☐ Middle/Junior High School
- ☐ High School

II. LIBRARY MEDIA CENTER MANAGEMENT

1. What is the approximate total seating capacity of the library media center? _____

2. Do you prepare and submit a budget request to your school administrator?

☐ Yes ☐ No

3. Is there on-going communication between your library media center staff and your local public library staff?

☐ Yes ☐ No

4. Does your library media center have a school board approved copyright policy?

☐ Yes ☐ No

5. Does your library media center have a school board approved collection development policy?

☐ Yes ☐ No **(SKIP TO Q.6)**

5a. If yes, does your collection development policy address: **(ANSWER YES OR NO TO EACH)**

Materials selection policy	☐ Yes	☐ No
Weeding Policy	☐ Yes	☐ No
Reconsideration of challenged materials	☐ Yes	☐ No

6. Do you have a library media center policy and procedures manual?

☐ Yes ☐ No

7. Does your school library media center have a summer reading program?

☐ Yes ☐ No

8. Does your library media center or school work cooperatively with your local public library to promote student participation in a summer reading program or club at a local public library?

☐ Yes ☐ No

9. Does your school have a written technology plan?

☐ Yes ☐ No **(SKIP TO Q.10)**

9a. If yes, does it include the library media program/center?

☐ Yes ☐ No

10. Does your school have a specific information skills curriculum?

☐ Yes ☐ No **(SKIP TO Q.11)**

10a. If yes, how is the information skills curriculum taught?

- ☐ Through library media program only
- ☐ Through integration into the curriculum and with other teachers
- ☐ By classroom teachers only

11. Is your library media center responsible for coordinating **distance learning**? That is, are any lessons for students and staff development for teachers or librarians taught via television, satellite or a computer network (e.g. Florida Virtual School, Tuesday Teacher Training, etc.) handled or coordinated through the library media center?

☐ Yes ☐ No

12. Does your district have a district library media center coordinator/supervisor? (**CHECK ONE ONLY**)

- ☐ Yes, full-time
- ☐ Yes, part-time
- ☐ No district library media center coordinator/supervisor

13. Is your school a SUNLINK school? **(CHOOSE ONE OF THE FOLLOWING)**

a. ☐ Yes **(GO to Q.14)**

b. ☐ No, but we plan to be a SUNLINK school **(SKIP TO SECTION III)**
- ☐ Within a year
- ☐ Within 2-4 years
- ☐ In 5 years or more

c. ☐ No and we have no plans to be **(SKIP TO SECTION III)**

d. ☐ Don't know **(SKIP TO SECTION III)**

14. For which of the following do you use SUNLINK in your school? **(CHECK ALL THAT APPLY)**

- ☐ Online access to collections in your district
- ☐ Interlibrary loan
- ☐ Online access to your school's collection
- ☐ Cataloging
- ☐ Selection
- ☐ Weeding
- ☐ Assisting with challenges to items in collection
- ☐ Teaching information skills
- ☐ Locating materials for teachers' units
- ☐ Locating materials to support Sunshine State Standards
- ☐ Locating materials to support reading initiatives
- ☐ Creating bibliographies
- ☐ Finding educational websites
- ☐ Other _____

15. Which of the following is the **PRIMARY** use of SUNLINK in your school? **(CHECK ONE)**

- ☐ Online access to collections in your district
- ☐ Interlibrary loan
- ☐ Online access to your school's collection
- ☐ Cataloging
- ☐ Selection
- ☐ Weeding
- ☐ Assisting with challenges to items in collection
- ☐ Teaching information skills
- ☐ Locating materials for teachers' units
- ☐ Locating materials to support Sunshine State Standards
- ☐ Locating materials to support reading initiatives
- ☐ Creating bibliographies
- ☐ Finding educational websites
- ☐ Other _____

16. Is SUNLINK used regularly by: **(ANSWER YES OR NO TO EACH)**

Professional media staff in your school?	☐ Yes	☐ No
Students in your school?	☐ Yes	☐ No
Teachers in your school?	☐ Yes	☐ No

III. LIBRARY MEDIA CENTER STAFF

1. Please report the level of staffing for your library media center, by staff category, full-time, or part-time, number of persons in each category (adding part-time and full-time persons for each category), and the total number of person hours in a typical week for each staff category. Do not report more than 40 hours per week per person. Count each person only once.

For example, if you have 3 paid professional staff, one is full-time working 40 hours a week and two are part-time working 20 hours a week each, record "1" in the Full-time column, "2" in the Part-time column; "3" in the "Number of Persons" column, and "80" (adding 40+20+20) in the "Total Number of Person Hours per Week" column.

Library Media Center Staff Categories	**Number who are Full-time**	**Number who are Part-time**	**Total Number of Persons (head count, not FTEs)***	**Total Number of Person Hours per Week**
Paid professional staff				
Paid library media center aides or clerical staff				
Total (for Paid Staff)				
Adult volunteers (per typical week)				
Student volunteers (per typical week)				
Total (for Volunteers)				

*FTE refers to Full Time Equivalent

2. Please record in the table below the number of **paid** staff in your library media center by level of education and credentials and by the hours they work in a typical week.
Do not report more than 40 hours per week per person. Count each person only once.

Highest Education and Certification of Paid Library Media Center Staff	Number of Persons	Total Number of Person Hours per Week
Master's degree or higher with educational media certification		
Master's degree with teacher certification (not in educational media)		
Master's degree without any certification in education		
Bachelor's degree with educational media certification		
Bachelor's degree with teacher certification (not in media)		
Bachelor's degree without any certification in education		
Less than Bachelor's degree		
TOTAL (for Paid Staff)		

3. Does the librarian or media specialist with primary responsibility for this library media center also work regularly in another school library media center?

☐ Yes ☐ No

4. How many professional staff members are members of:

A State Media Organization (FAME) _____
A Local or District Library Media Organization _____
A National Library Media Organization (AASL, etc.) _____

5. How many professional library media staff members generally attend
a. the annual FAME conference? _____
b. the annual FETC conference? _____

6. How many professional library media staff members are currently:

National Board Certified _____
Seeking National Board Certification _____
Planning to Seek National Board Certification in the near future? _____

7. How many professional library media staff members are currently in the DROP program or retiring within the next five years? _____

IV. SERVICE HOURS PER TYPICAL WEEK

Please record the typical weekly number of hours that this school library media center is open for use.

Library Media Center Hours	Hours per Typical Week
Hours library media center is open per typical week **during** school hours	
Hours library media center is open per typical week **before** school hours	
Hours library media center is open per typical week **after** school hours	
Hours library media center is open per typical week **in the summer**	

V. STAFF ACTIVITIES PER TYPICAL WEEK

The library media center staff generally engages in a wide variety of activities each week. Please record (estimating, if necessary) the number of hours spent on each activity in a typical week by your paid staff.

If library media center staff does not engage in some activities weekly, please estimate the number of hours spent on that activity in a typical month and divide by four or estimate for a year and divide by the number of weeks per year the library media center is open.

Activities Performed by Paid Library Media Center Staff	Number of Person Hours per Typical Week
Learning and Teaching	
Planning instructional units with teachers	
Teaching cooperatively with teachers	
Planning & preparing materials for lessons taught independently of classroom teachers	
Providing information skills instruction to individuals or groups independently of classroom teachers	
Providing staff development to teachers or other school staff	
Meeting with building or district committees/teams/task forces; i.e. curriculum, technology, planning, school improvement	
Assisting individual or groups of teachers to access or utilize state-initiative information (Sunshine State Readers, FCAT, SUNLINK, etc.)	
Evaluating students' work (grading or correcting papers)	
Information Access and Delivery	
Performing basic library media center activities (i.e. checking in and out, re-shelving, processing, retrieving)	
Identifying materials for instructional units developed by teachers	
Providing assistance in accessing (i.e. searching, research process, citations, copyright, critical thinking, evaluation of online sources, etc.) to individuals or groups	
Providing reading incentive activities (i.e. booktalks, storytimes, reading contents, Battle of the Books, reader's advisory services, author visits)	
Program Administration	
Managing library media center technology (computers, computer network, library automation)	
Managing computers/technology throughout the entire school (labs or computers located outside the media center)	
Administering electronic reading programs such as Accelerated Reader and Reading Counts, etc.	
Managing collection development (selection, weeding, ordering, cataloging)	
Managing/Maintaining/Repairing audiovisual equipment	
Promoting the media program through displays, bulletin boards, newsletters, contests, monthly theme activities, etc.	
Managing interlibrary loans	
Managing the finances of the media center including budgeting, purchase requisitions and reporting	
Meeting with building and district library media center staff	
Meeting with library media center staff outside the district	

Meeting with principal and/or other building or district administrators	
Attending faculty or staff meetings	
Duties unrelated to school library media center services (i.e. monitoring recess, lunch, restrooms, playgound duty, etc.)	
Participating in professional development activities (workshops, online or face-to-face courses, professional conferences, etc.)	

VI. LIBRARY MEDIA CENTER USE PER TYPICAL WEEK

1. Please record information in the table below for each of the types of library media center use in a typical week.

If these figures must be estimated and it is easier to estimate them for a month or year, please do so. If you estimate for a month, please divide by four. If you estimate for a year, please divide by the number of weeks your library media center is open annually.

Library Media Center Use in a Typical Week	Number
Number of scheduled and unscheduled visits to the school library media center by **individuals** (students, teachers, administrators, parents, other) **for media skills instruction**	
Number of scheduled and unscheduled visits to the school library media center by **classes or other groups** (groups of teachers, administrators, parents, or others) **for media skills instruction**	
Number of scheduled and unscheduled visits to the school library media center by **individuals** (students, teachers, administrators) **to use media center technology**	
Number of scheduled and unscheduled visits to the school library media center by **classes or groups** (groups of teachers, administrators, parents, or others) **to use media center technology**	
Number of scheduled and unscheduled visits to the school library media center by **individuals** (students, teachers, administrators) **for other reasons (recreational reading, individual research or materials selection, etc.)**	
Number of scheduled and unscheduled visits to the school library media center by **classes or groups** (groups of teachers, administrators, parents, or others) **for other reasons (recreational reading, individual research or materials selection, etc.)**	
Total number of books and other materials **checked out** during the most recent full week	
Number of materials **used in the library media center** during a typical week (estimate based on re-shelving count)	
Number of **interlibrary loans** (ILLs) weekly on average provided by your library media center **to** other libraries in the district *(Note: This number may be less than a whole number. For example, if only 1 ILL is provided per month, the number per week would be .25.)*	
Number of **ILLs** received weekly on average by library media center **from** other libraries in the district	
Number of **ILLs** provided weekly on average by library media center **to** other libraries **outside the district**	
Number of loans received weekly on average by library media center **from** other libraries **outside the district**	

2. In a typical week, what percent of the classes that visit the library media center are:

Flexibly scheduled (e.g. scheduled for varying time periods according to need): _____%

Regularly scheduled (e.g. scheduled for previously specified times): _____%

3. In a typical week, how many hours in total are students online for any purpose in the library media center? (*Any student online counts as "students online." You may estimate hours online for typical day and multiply by five. Maximum would be the number of hours your media center is open per week.*)

_____ hours spent online

VII. LIBRARY MEDIA CENTER TECHNOLOGY

1. Please record the following information in the table below. Please distinguish between the number of computers in your school that are located in or under the supervision of your library media center (3rd column in table) and computers from which networked library media center resources may be accessed (4th column in table).

Computers located in or under the supervision of the library media center but not in the library media center *may include those in a separate computer lab. These should be counted together with the computers located in the library media center (3rd column)*

Number of other computers in the school--*may be located in classrooms, administrative offices, a separately administered computer lab, mini-lab, or any other school space not under the supervision of the library media center (4th column).*

Line	Number of Computers	Number of Computers Located in or Under Library Media Center Supervision	Number of Other Computers in School
1	Total Number of Computers		
2	Number of Standalone Computers		
3	Number of Computers with Internet connection		
4	Number on a Local Area Network (LAN) (A LAN is a network of computers linked locally, usually within one building.)		
5	Number on a Wide Area Network (WAN) (A WAN is a network of computers linked over large physical distance, for example, your district.)		
6	Number with access to the school library media center catalog		
7	Number with access to SUNLINK on the World Wide Web		
8	Number with access to other online school library media center databases		
9	Number with CD-ROM drives		

10	Number with networked access to CD-ROM resources		
11	Number of computers connected to a modem or directly to the Internet		
12	Number of computers connected directly or networked to a printer		
13	Number of computers with any accommodations for persons with disabilities (voice synthesizer, magnified screen, alternative keyboard, trackball, etc.)		

2. For the total number of computers located in or under library media center supervision reported in the table above (row 1, 3rd column), identify the number of each of the following types.

Number of PCs by Type	Number of PCs	Number of Macs by Type	Number of Macs
Pentium I		G3	
Pentium II		G4	
Pentium III		iMac	
Pentium IV		PowerMac	
Other		Other	
Older/Obsolete		Older/Obsolete	
Total Number of PCs		TOTAL Number of Macs	

3. Which one of the following represents the **fastest** Internet service connection speed available on any of the computers in or under library media center supervision? (If you are unsure of the connection speed, the information should be available from your media supervisor or technology specialist.) (**CHECK ONE ONLY**)

- ☐ None
- ☐ 14.4K or less
- ☐ 28.8K
- ☐ 56K (via dial-up)
- ☐ 56K (via dedicated line)
- ☐ ISDN
- ☐ T-1
- ☐ Other: _____
- ☐ Don't Know

4. Does your library media center have:

An automated circulation system	☐ Yes	☐ No
An automated catalog	☐ Yes	☐ No
An automated district wide catalog (other than SUNLINK)	☐ Yes	☐ No
An automated catalog accessible through the Internet (other than SUNLINK)	☐ Yes	☐ No
A telephone	☐ Yes	☐ No
A fax machine	☐ Yes	☐ No
One or more CD-ROM drives	☐ Yes	☐ No
A CD-ROM server	☐ Yes	☐ No
A video and/or data projector	☐ Yes	☐ No
A digital camera	☐ Yes	☐ No
A satellite dish	☐ Yes	☐ No
One or more laptops	☐ Yes	☐ No
A DVD player	☐ Yes	☐ No
An audio CD player	☐ Yes	☐ No
An MP3 (or other digital audio) player	☐ Yes	☐ No

A CD-ROM burner	☐ Yes	☐ No
A photocopier	☐ Yes	☐ No
Wireless networking	☐ Yes	☐ No
Keyboarding devices (AlphaSmarts, Dreamwriters, etc.)	☐ Yes	☐ No
Handheld computers (PDAs, Palms, iPaqs, etc.)	☐ Yes	☐ No
Email access for the library media specialist	☐ Yes	☐ No
Email access for teachers	☐ Yes	☐ No
Email access for students	☐ Yes	☐ No
Web resources page(s) designed/maintained by media staff	☐ Yes	☐ No

Circulation system/program used (if any)? (Follett, Athena, Winnebago, etc.)

_____

Catalog system/program used (if any)? (Follett, Athena, Winnebago, etc.)

_____

5. Does your school have a board adopted Internet access policy or acceptable use policy?

☐ Yes ☐ No

6. Please describe your library media center's conditions/restrictions of student Internet access. (**CHECK ALL THAT APPLY**)

☐ No restrictions
☐ With parental permission and/or acceptable use agreement
☐ Restricted for grades: (**SPECIFY**) _____
☐ Other restrictions: _____

7. Is any Internet filtering service or program used in your school or district?

☐ Yes ☐ No **(SKIP TO Q.8)**

7a. If yes, please provide the name of the filter/system _____

8. Does your school have a website?

☐ Yes ☐ No **(SKIP TO Section VIII Q.1)**

8a. Does the main page of the school website have a link to the library media center?

☐ Yes ☐ No

8b. Does the main page of the school website or the library media center web page link to SUNLINK?

☐ Yes ☐ No

VIII. LIBRARY MEDIA CENTER COLLECTION

1. Does your library media center subscribe to any online licensed services?

Online periodical services (e.g. BigChalk, H.W. Wilson)?	☐ Yes	☐ No
CD-ROM services (e.g. SIRS, Newsbank)?	☐ Yes	☐ No
Other full text services (e.g. encyclopedias)?	☐ Yes	☐ No

2. Are any of your licensed online databases accessible from teachers' and students' home computers?

Teachers	☐ Yes	☐ No
Students	☐ Yes	☐ No

3. Please record information on all your holdings (in or not in circulation) available for use by teachers and/or students.

Collection	Number
Print volumes	
Current print subscriptions to magazines	
Current print subscriptions to newspapers	
Electronic subscriptions (received through Internet access)	
Encyclopedias and reference titles on CD-ROM or laserdisc	
Video materials (cassettes, DVDs, or laserdiscs)	
Computer software packages for use in school library media center by students	

4. How many volumes did you purchase for the library media center in the 1999-2000 school year in total and for each of the following Dewey decimal categories?

Volumes Purchased in School Year 1999-2000	Number
Total number of volumes purchased	
616/Medicine and health	
629.4/Space	
320/Government	

5. How many volumes did you weed from your collection in the 1999-2000 school year?

_____

6. Do you feel your collection is thoroughly weeded at this time?

☐ Yes **(SKIP to Q.7)** ☐ No

6a. If no, what is the **primary** reason for not weeding? **(CHECK ONE)**

☐ Lack of time
☐ Lack of knowledge
☐ Lack of support from administration
☐ Lack of resources to replace weeded materials
☐ Won't meet SACS standards
☐ Other _____

7. Which of the following titles (in print or electronic version) are available in your school library media center? **(CHECK ALL THAT APPLY AND RECORD COPYRIGHT DATE)**

	Copyright Date
☐ Elementary School Library Collection	_____
☐ Children's Catalog	_____
☐ Junior High School Catalog	_____
☐ High School Catalog	_____

8. Which of the following selection tools do you regularly use? **(CHECK ALL THAT APPLY)**

☐ Booklist
☐ Hornbook
☐ School Library Journal
☐ Publisher's Catalog
☐ SUNLINK or SUNLINK Weed-of-the-Month
☐ Other _____

9. Which reading programs or reading assessment tools are used in your school? **(CHECK ALL THAT APPLY)**

☐ Accelerated Reader
☐ Reading Counts
☐ Lexiles
☐ None
☐ Other _____

10. On a scale of 1 to 5, how important are the library media staff and resources to the reading program in the school. **(CHECK ONE)**

☐ 1. Of critical importance: Reading program relies on media center resources
☐ 2. Of importance
☐ 3. Neither important nor unimportant
☐ 4. Not of great importance, but involved
☐ 5. Not important: Media program and resources are completely independent of reading initiatives

IX. LIBRARY MEDIA CENTER OPERATING EXPENDITURES AND CAPITAL OUTLAY

1. Please report your library media center's expenditures, capital outlay and totals for 1999-2000, including funds from both the school budget and other sources (e.g. grants, donations, PTAs). You may round to the nearest $100.

1999-2000 Operating Expenditures	School Budget	All Other Sources
Books		
Newspapers and magazines		
Electronic format materials (software, CD-ROM, laser disc)		
Non-print materials (audio, video, microform)		
Electronic access to information (online databases, searching, Internet access)		
Other operating expenditures from media center budget		
TOTAL Operating Expenditures		

1999-2000 Capital Outlay	School Budget	All Other Sources
Equipment (computers, CD-ROM drives, VCRs)		
Other capital purchases (furniture, shelving)		
TOTAL Capital outlay		

X. OTHER (OPEN ENDED QUESTIONS)

Please help us tell the Florida school library media program story:

1. What is the most exciting thing that happened to your library media program or in your library media center in the past two years?

2. What specifically has your library media program/staff done to help with the FCAT and to help raise FCAT scores?

3. Is there anything else your school library media program or staff has done specifically to improve student achievement (reading, math, science, social studies, writing, etc.)?

4. Is there anything you'd like to tell us about your library media program? (Special programs, services, activities, collections, staffing, budget, facilities, equipment, fundraisers, *anything*?)

☐ Yes ☐ No **(SKIP TO Q.5)**

4a. If yes, please describe it in a few words:

5. May we contact you for more information?

☐ Yes, by phone at: _____

☐ Yes, by email at: _____

☐ No

THANK YOU for completing the questionnaire!

If you have any questions please contact Dr. Donna Baumbach by phone at (407) 384-2079 or by email at baumbach_d@firn.edu.

If you completed the survey online at http://www.sunlink.ucf.edu/survey, special thanks!
You do not need to return this form; however, you may want to file it for future reference.

If you did not complete the survey online, **you may want to make a copy for your files before mailing.**
Please return completed questionnaire in the accompanying postage-paid envelope or address it to:

Donna Baumbach
University of Central Florida
ITRC & SUNLINK Project Offices
12443 Research Parkway, Suite 400-402
Orlando, FL 32826

Oops!

There's a slight error in the survey.

Please use your data from the most recent school year (2000-2001) to answer Section VIII, Questions 4 and 5 (items purchased and weeded), and Section IX, Question 1 (budget information) instead of data from the 1999-2000 school year.

Sorry for the Confusion!

Your School Library Media Center, the FCAT, and Student Achievement

By Dr. Donna Baumbach

The word "FCAT" is on the minds (and tongues) of most educators, many parents and students, and Florida legislators. What do school library media specialists and media programs contribute to the effort to help students succeed on the FCAT? Do others know that you play a vital role? Are there other things you could do to make your resources and your program more valuable to your community?

On the recent Florida Library Media Survey (Spring, 2002), one of the open-ended questions asked:

"What do you do to assist teachers and students with the FCAT? Specifically, what role does the media program play in the effort to raise FCAT scores?"

Responses to that question are listed here. Some ideas may be new to you; others will reinforce that you are not alone in your efforts to provide critical support for teachers and students.

If you can identify and implement just one new idea, you will make a substantial contribution to improved test scores.

Whatever you do, you must let others know of the important role you and your program play in student achievement. The FCAT gives us an opportunity to make the connection between student achievement and the school library media center.

The following are some of your answers, grouped by theme or category. . .

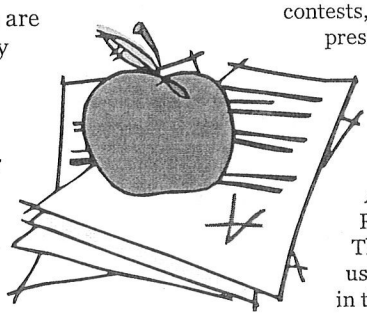
Reading and Reading Incentive Programs

We provide Reading Counts to help improve reading comprehension. One of our media specialists identifies course-specific reading passages and writes FCAT type questions for FCAT practice in the classrooms.

We purchase and implement AR and STAR upgrades to determine reading levels and therefore instruction levels in reading for students.

We now have many of our books Lexiled so students can have that as a guide in book selection. It also assists staff in directing students to books that they will be successful reading.

We promote new books and reading through booktalks, displays, contests, and PowerPoint presentations.



We work with struggling readers in the use of the Accelerated Reading program. This is our way to use our expertise in this area to encourage and provide individual guidance. We work one-on-one with struggling readers to help them increase their reading skills. Teachers send students to us who are in need of extra help.

We handle the Sunshine State Young Readers' program (book talks, prizes, rewards, and meetings). We also take care of the FRA program (PowerPoint presentations, reading books to students, booktalks, and voting). We help with FCAT computer programs. We make badges and ID cards with pictures for the sunshine state book club. We also hang their pictures on our wall.

We enter and maintain all data for AR. Work on promoting AR and reading throughout the year (bulletin boards, reward parties, booktalks, student book reviews).

We administered SRI (Lexile tests) to all students and Lexiled the library collection. We also participated in student reading initiatives like SSRA and booktalking competitions. Also, "Battle of the Books" which encourages reading of the SSRA titles.

We constantly promote reading through our Reading Counts initiative, displays, and bibliographies.

We distribute free SUNLINK bookmarks that help students, teachers and parents find materials in our school by reading and interest level.

Collection Development

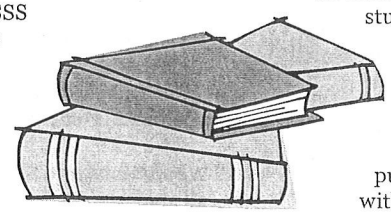
We order professional books requested by the district and our teachers. We provided math through literature books to students. We purchased easy read nonfiction books to help struggling readers keep up with their classes.

A substantial amount of money has been spent over the past two years to upgrade our book collection of both high-interest/low reading level material (to appeal to "reluctant" readers) and also our more sophisticated readers (i.e., Oprah's Book Club, books for the college-bound, etc.).

I wrote a reading enhancement grant for nonfiction books. We received the books and rotated

them throughout the classrooms for students to increase their comprehension in nonfiction books.

By working with teachers, we evaluate the existing collection and lessons. Using recommendations from teachers, we work to fill areas of the collection that need to be updated and revised. We then use these resources to incorporate SSS and FCAT skills into media/ technology lessons.



Grant money was used to purchase paperback books and "bins" to create rotating libraries to be checked out by classroom teachers. These rotating libraries provided much needed materials to help the teachers address the school improvement goal directed at improving FCAT reading skills.

We weeded the collection to make it more relevant and attractive. We are getting more funding now to replace materials.

We increased our collection of young adult titles. Fiction circulation has DOUBLED!

We developed FCAT skill shelves for teachers with trade/picture books that coordinate with particular FCAT skills in reading (i.e., cumulative story, atmosphere, foreshadow) and acquired materials that coordinate to math and science benchmarks/curriculum (software recommended by our Everymath series; picture books on math concepts).

Professional Development

We train teachers to use FCAT Explorer, and maintain computer equipment to help them practice in the classroom.

We have helped train teachers to use programs like NCS Learn, Compass, NovaNet, and A+ to prepare our students to obtain skills in math, writing, and reading.

I am a trainer for FCAT Reading in my school and my district. I give workshops on specific strategies that teachers can use to improve the FCAT scores.

I attended AR state workshops and gave inservice to all Language Arts teachers.

We created pamphlets for parents, students, and teachers describing how to access and use both Edutest and FCAT Explorer.

We encouraged the purchase of and assisted with the set-up and teacher training for Reading Counts, EDL, and CCC.

We have conducted school-wide faculty inservice on strategies in teaching reading comprehension. This involved a detailed presentation including a multimedia presentation, handouts of strategies samples, and follow-up with all teachers who scheduled classes into the Media Center.

Technology Access and Support

We provided access to the FCAT Explorer site in the media center. I have entered all of the names of the fourth and fifth graders into the FCAT Explorer website. I have given lessons and demonstrations on how to use the website as well as provided the students with their password and user name information.

We provide FCAT practice on the computers in the media center. Teachers can bring classes and students can use the computers before school.

We have linked several FCAT sites to our library media center home page.

The mobile laptop with wireless hub has allowed language arts and math instructors to have students take practice FCAT tests online and get immediate feedback. This portable lab has had the side benefit of freeing up the regular computer lab for our dual enrollment classes.

We make available for home use a CD-ROM product named FCAT Simulation.

One of the ways in which we assisted with FCAT was to subscribe to online databases to provide informational sources of texts. Students in all subject areas are able to access sources from home, classrooms, and the Media Center. Information skills activities to locate, select, analyze, and synthesize information from multiple sources and draw conclusions met specific Grade 10 FCAT reading requirements.

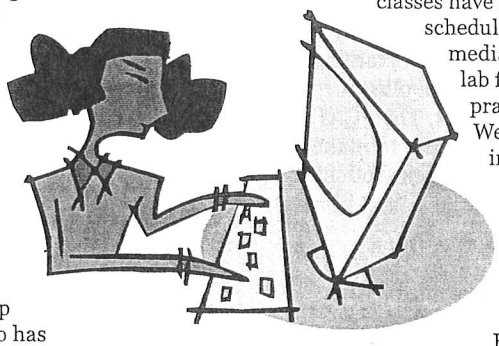
Our students have been participating in Homeroom.com, an online program providing tests and practice of skills necessary for taking the FCAT.

We installed FCAT preparation software in LMC computer lab and purchased FCAT software for student use at home.

We help to implement ClassWorks throughout the school to provide remediation based on practice FCAT tests and standards based computer educational activities.

We have purchased $25,000 of software in reading, writing, and math.

We entered all students' names into the website KnowZone (www.kz.com). At teacher request, classes have been scheduled into the media center lab for FCAT practice online. We provided instruction and assistance on the use of KnowZone and FCAT Explorer.



Collaboration

We support the classroom teachers by having reading incentive programs, writing assignments, multimedia assignments, and information literacy instruction.

We implemented a community-wide read of Paul Fleischman's novel *Seedfolks*. Through this we hope to get students, parents, and teachers (along with members of our community) to focus on reading.

I personally worked with our 10th grade teachers in assessing their students' scores and what areas they needed.

We provide graphic organizers to teachers to assist them in planning Media Center class visits and follow-up activities.

I meet with teachers to assess their needs and purchased materials to help them in their efforts to improve the FCAT scores and to reinforce their efforts in developing life long readers.

We keep several notebooks by grade level and subject of FCAT practice tests prepared by our teachers. These tests present a bank of knowledge available to new and returning teachers.

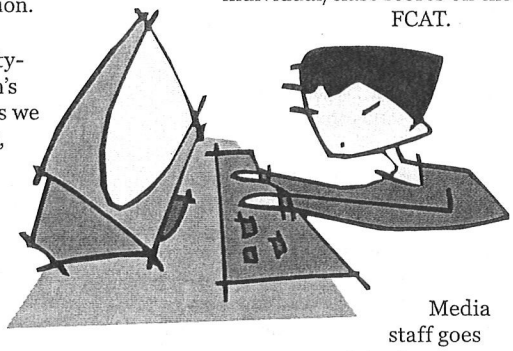
We began a big-buddy reading program for the first graders. (This involves first and fifth graders reading together.)

We work with both teachers and students to help integrate research skills into all areas of the curriculum. We have in place a Research Cycle and Rubric to help facilitate the development of research skills.

The media specialist worked with the GSE instructor to develop a list of books and books on tape to use with her students.

High school students have developed a Book-Buddy program where they check out children's books to read to their elementary school buddy.

3 out of 4 Wednesdays (early release) we meet as learning committees (resource teachers, media specialist) with various grade levels to plan/implement/evaluate essential skills needed by students to raise individual/class scores on the FCAT.



Media staff goes into classrooms to assist teachers with reading daily for 1.5 hours.

We plan with teachers. We get any resources they need from our school, other schools in the district, or other schools across the state by using SUNLINK.

Video Support

We maintain a daily TV bulletin board. Each month we produce 4 slides of Reading Strategies, 2 slides of FCAT words in reading and math, and 2 slides for the "Math Problem of the Week."

We encourage and promote student writing on the morning news.

We videotaped teachers reviewing FCAT skills and show them school-wide twice weekly.

We broadcast practice FCAT question strategies over our in-school channel.

We promote FCAT procedures and vocabulary through our morning news show every day.

We do weekly FCAT Brain Twisters on the morning announcements for each grade level. Questions are in FCAT format; students submit their answers and we pull a winner from each grade level on Fridays.

We run spots on our in-house television show PSAs (public service announcements) that tell the importance of reading (all researched and developed by students).

We present "word of the week" each week. My students produce a short video presentation depicting the word to be shown on our morning show. We also encourage students to draw their interpretation of the week's word and write a sentence using the word. We show them on the morning show on Fridays.

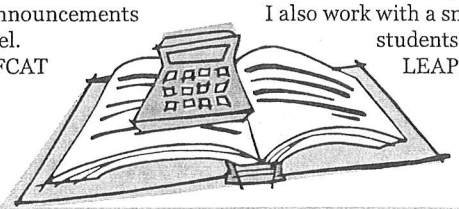
The media center staff has helped create video study guides for the math and reading portions of the FCAT. These videos were presented to the entire school population via the closed circuit TV.

Media Center Lessons and Activities

We participated in Balanced Literacy workshops and use activities from it such as Word Wall activities.

I constantly encourage reading and when I read a book or story in the library media center, I promote discussions and questions in order to increase reading comprehension. I have also been teaching the 3rd, 4th, and 5th graders some basic research skills to promote information literacy.

I have been using KIDS Discover World Almanac with 4th and 5th graders. Each 4th grade lesson objective is to use the ALMANAC as a resource for strengthening reading and math skills. 5th graders are guided through the series' worksheets that focus on locating, interpreting and answering items to reinforce reading and math skills. I also work with a small group of students with the GREAT LEAPS Program.



We incorporate FCAT strategies and Sunshine State Standards into our lessons so that we help support what the classroom teachers are doing.

Last year the media center was open two days after school to provide reading materials to any students wanting to come with the targeted group being very low readers.

We had students develop custom school year and summer reading lists based on their Lexile score.

We teach a sequence of information skills allowing the students to learn about and use a wide variety of reference sources including almanacs, encyclopedias, thesauri, dictionaries, atlases, electronic sources, etc. We also do literature appreciation with grades K–3 exposing students to a variety of literacy genres.

For the past two years we have created and implemented a program called "Fabulous Fridays R&R—Research and Reading." Over the course of several Fridays, we meet with each tenth grade English class and give them a guided, hands-on tour of the SIRS online database. Then we distribute copies of an article printed from SIRS along with a worksheet. Working together with the students, we have them find the bibliographic information for the article, and then the students read silently and answer the worksheet questions about main idea and supporting details.

A variety of sources including extended hours grants have been utilized to keep the media open after school. Students use these after school hours to complete class projects or receive tutoring from other teachers and students.

We host an FCAT after-school tutoring program.

We tutor the lower 25% students in fifth grade for 45 minutes a day.

I teach a reading class, emphasizing FCAT type skills, for 90 minutes everyday.

Assessment

We wrote and maintained a database of student scores and aggregated the data to a per-teacher level to identify weak points.

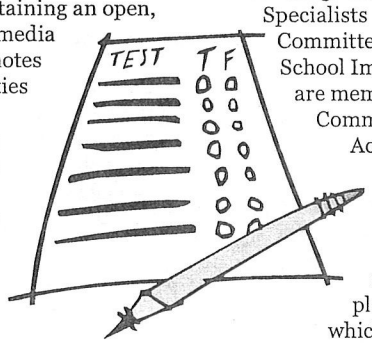
We administer the SRI to all students in the fall and spring, plus struggling students mid-year.

We use FCAT reading scores to create an Excel spreadsheet of all student scores (converted data to grade levels) so that I have a better idea of the child's reading ability. This data is then helpful to me as I assist students in locating reading material.

Other Ideas and Comments

When asked questions from students rather than give them the answer, I ask questions that trigger critical thinking.

I believe that maintaining an open, flexibly scheduled media center, which promotes student opportunities to read; to engage in research; and to use technology has been our greatest contribution to the FCAT.



We brought in a senior citizen (RSVP) tutoring program for ESOL students.

We obtained a grant to provide students in reading, ESE and ESOL classes with free dictionaries.

We established RIF program to provide students in reading, ESE, ESOL, and preschool classes with free books.

I teach an FCAT preparation class; provide materials to parents, teachers and students; produce the morning announcements which make students aware of the programs available for FCAT prep (which include information for both students and parents); broadcast messages from the district personnel; and provide and set up equipment for speakers who come to our school to explain any new FCAT expectations (i.e. scoring) to the faculty.

We send letters home to parents explaining Lexile scores and what they can do to help their student improve his/her reading comprehension.

I also served as chair of the SAC and encouraged SAC budget be directed to teacher inservice for improving FCAT scores. I regularly attend workshops and meetings concerning student achievement.

In recent years we have attended FETC and FAME sessions that focused on FCAT reading strategies. In our school we work with the Language Arts department to implement targeted strategies.

I attend School Advisory Committee meetings and both Media Specialists are on the Achievement Committee that formulates the School Improvement Plan. We are members of the Reading Committee and the Low Achievers Committee under the Achievement Committee.

We are concentrating on collaborative planning with teachers which provides students with meaningful resource based activities; promoting daily reading inside and outside of school hours; and providing a media collection which supports the curriculum and not the test are my contributions to increased student achievement.

❖ ❖ ❖

Participating Schools by District

Usable surveys were received from the following schools:

Alachua

- A. L. Mebane Middle
- Abraham Lincoln Middle
- The Alachua Learning Center
- Archer Community
- C.W. Norton Elementary
- The Caring & Sharing Learning
- Charles W. Duval Elementary
- Eastside High
- The Einstein Montessori
- Expressions Learning Arts Academy
- F. W. Buckholz High
- Gainesville High
- Genesis School
- Glen Springs Elementary
- Hawthorne Middle
- Hidden Oak Elementary
- High Springs Elementary
- Idywild Elementary
- IRBY Elementary
- J.J. Finley Elementary
- Joseph Williams Elementary
- Lake Forest Elementary
- Littlewood Elementary
- Love To Learn Educational Center
- Marjorie Kinnan Rawlings Elementary
- Micanopy Area Cooperative School
- Myra Terwilliger Elementary
- Newberry Elementary
- Oak View Middle
- Oasis Enrichment Academy
- The One Room School
- Prairie View Elementary
- Santa Fe High
- Spring Hill Middle
- W. Travis Loften High
- Westwood Middle
- William S. Talbot Elementary

Baker

- J. Franklin Keller Intermediate

Bay

- A. Crawford Mosley High
- A. D. Harris High
- Bay Haven Academy
- Bay High
- Bozeman Learning Center
- Cedar Grove Elementary
- Everitt Middle
- Haney Technical Center
- Hiland Park Elementary
- J.R. Arnold High
- Jinks Middle
- Lucille Moore Elementary
- Lynn Haven Elementary
- Merritt Brown Middle
- Millville Elementary
- Mowat Middle
- Northside Elementary
- Oakland Terrace Elementary
- Parker Elementary
- Patronis Elementary
- Patterson Elementary
- Rosenwald Middle
- Rutherford High
- Smith Elementary
- Southport Elementary
- St. Andrew School
- Surfside Middle
- Tyndall Elementary
- Waller Elementary
- West Bay Elementary

Bradford

- Bradford Middle
- New Horizons Learning Center
- Southside Elementary
- Starke Elementary

Brevard

- Andrew Jackson Middle
- Apollo Elementary
- Astronaut High
- Atlantis Elementary
- Audubon Elementary
- Bayside High
- Campus Primary Developmental Research
- Cape View Elementary
- Central Middle
- Clearlake Middle
- Cocoa Beach Jr./Sr. High
- Cocoa High
- Coquina Elementary
- Croton Elementary
- Delaura Middle
- Discovery Elementary
- EauGallie High
- Edgewood Middle
- Endeavour Elementary Magnet
- Enterprise Elementary
- Explorer Elementary & Middle
- Fairglen Elementary
- Freedom 7 Elementary School of International Studies
- Gardendale Elementary
- Gemini Elementary
- Golfview Elementary
- Harbor City Elementary
- Herbert Hoover Middle
- Imperial Estates Elementary
- Indialantic Elementary
- James Madison Middle
- John F. Kennedy Middle
- John F. Turner Elementary
- Jupiter Elementary
- L. B. Johnson Middle
- Lewis Carroll Elementary
- Lockmar Elementary
- Longleaf Elementary
- Meadowlane Elementary
- Melbourne High
- Merritt Island Senior High
- MILA Elementary
- Oak Park Elementary
- Ocean Breeze Elementary

Brevard continued

- Odyssey Charter
- Palm Bay Academy Charter
- Palm Bay Elementary
- Palm Bay High Adult Education
- Palm Bay High
- Pinewood Elementary
- Port Malabar Elementary
- Ralph M. Williams Elementary
- Riviera Elementary
- Rockledge Educational Horizons Charter
- Rockledge High
- Ronald McNair Magnet
- Roy Allen Elementary
- Royal Palm Charter
- Sabal Elementary
- Satellite High
- Sculptor Elementary Charter
- Sea Park Elementary
- Sherwood Elementary
- South Lake Elementary
- Space Coast Middle
- Stepping Stones / Milestones Community Charter
- Suntree Elementary
- Surfside Elementary
- Theodore Roosevelt Elementary
- Thomas Jefferson Middle
- Titusville High
- Tropical Elementary
- West Melbourne Educational Horizons Charter
- West Shore Jr./Sr. High

Broward

- A. C. Perry Elementary
- Apollo Middle
- Atlantic West Elementary
- Attucks Middle
- Bair Middle
- Banyan Elementary
- Bennett Elementary
- Bethune Mary Elementary
- Blanche Ely High
- Boulevard Heights Elementary
- Boyd Anderson High
- Broadview Elementary
- Castle Hill Annex
- Castle Hill Elementary
- Challenger Elementary
- Chancellar Charter School of North Lauderdale
- Chapel Trail Elementary
- Charles Drew Elementary
- Charles W. Flanagan High Annex
- Charter School of Excellence
- City of Pembroke Pines Charter High
- Coconut Creek High
- Coconut Palm Elementary
- Colbert Elementary
- Collins Elementary
- Coconut Creek Elementary
- Cooper City High
- Coral Park Elementary
- Coral Springs Elementary
- Coral Springs High
- Coral Springs Middle
- Country Hills Elementary
- Country Isles Elementary
- Cresthaven Elementary
- Croissant Park Elementary
- Cross Creek School
- Crystal Lake Middle
- Cypress Elementary
- Dania Elementary
- Davie Elementary
- Deerfield Beach High
- Dillard High
- Driftwood Elementary
- Driftwood Middle
- Eagle Point Elementary
- Eagle Ridge Elementary
- Embassy Creek Elementary
- Everglades Elementary
- Fairway Elementary
- Falcon Cove Middle
- Flamingo Elementary
- Floranada Elementary
- Forest Glen Middle
- Forest Hills Elementary
- Ft. Lauderdale High
- Gator Run Elementary
- Griffin Elementary
- Hallandale Elementary
- Hallandale High
- Harbordale Elementary
- Hawkes Bluff Elementary
- Henry Perry Middle
- Hollywood Central Elementary
- Hollywood Hills Elementary
- Hollywood Hills High
- Hollywood Park Elementary
- Horizon Elementary
- Indian Ridge Middle
- Indian Trace Elementary
- James S. Hunt Elementary
- James S. Rickards Middle
- J.P. Taravella High
- Lakeside Elementary
- Lauderhill Middle
- Lauderhill Paul Turner Elementary
- Learning Resources Department
- Lloyd Estates Elementary
- Lyons Creek Middle
- Maplewood Elementary
- Margate Middle
- Martin Luther King Elementary
- McArthur High
- McFatter Technical Center
- McNab Elementary
- McNicol Middle
- Meadowbrook Elementary
- Miramar Elementary
- Miramar High
- Mirror Lake Elementary
- Morrow Elementary
- New River Middle
- Nob Hill Elementary
- Norcrest Elementary
- North Andrews Gardens Elementary
- North Broward Academy of Excellence
- North Fork Elementary
- North Lauderdale Academy High
- North Lauderdale Elementary
- North Side Elementary
- Northeast High

Nova Dwight Eisenhower Elementary
Nova High
Nova Middle
Oakland Park Elementary
Oakridge Elementary
Palm Cove Elementary
Palmview Elementary
Park Springs Elementary
Park Trails Elementary
Parkside Elementary
Pasadena Lakes Elementary
Pembroke Lakes Elementary
Pembroke Pines Elementary
Pine Ridge Alternative Center
Pinewood Elementary
Pioneer Middle
Piper High
Plantation High
Plantation Middle
Pompano Beach Elementary
Pompano Beach High
Pompano Beach Middle
Ramblewood Elementary
Ramblewood Middle
Riverglades Elementary
Riverland Elementary
Riverside Elementary
Robert C. Markham Elementary
Royal Palm Elementary
Sanders Park Elementary
Sandpiper Elementary
Sawgrass Elementary
Sawgrass Springs Middle
Sea Castle Elementary
Seagull School
Sheridan Hills Elementary
Sheridan Park Elementary
Silver Lakes Elementary
Silver Lakes Middle
Silver Trail Middle
South Broward High
South Plantation High
Stanahan High
Stephen Foster Elementary
Stirling Elementary
Stoneman Douglas High
Sunland Park Elementary
Sunrise Middle
Sunshine Elementary
Tamarac Elementary
Tedder Elementary
Village Elementary
Virginia S. Young Elementary
Walter C. Young Middle
Watkins Elementary
Welleby Elementary
West Hollywood Elementary
Westchester Elementary
Western High
Western HS 10th Grade Annex
Westpine Middle
Westwood Heights Elementary
Whiddon-Rogers Education Center
Whispering Pines School
Wilton Manors Elementary
Winston Park Elementary

Calhoun

Blountstown Middle
Carr Elementary

Charlotte

Charlotte High
Charlotte Technical Center
Christa McAuliffe Elementary
Deep Creek Elementary
East Elementary
Kingsway Elementary
L. A. Ainger Middle
Lemon Bay High
Liberty Elementary
Meadow Park Elementary
Murdock Middle
Myakka River Elementary
Neil Armstrong Elementary
Peace River Elementary
Port Charlotte High
Port Charlotte Middle
Punta Gorda Middle
Sallie Jones Elementary
Vineland Elementary

Citrus

Academy of Environmental Sciences
Citrus High
Citrus Springs Elementary
Citrus Springs Middle
CREST
Crystal River High School
Crystal River Primary
Floral City Elementary
Forest Ridge Elementary
Hernando Elementary
Homosassa Elementary
Inverness Middle
Inverness Primary
Lecanto High
Lecanto Middle
Pleasant Grove Elementary
Withlacoochee Technical Institute

Clay

Clay High
Clay Hill Elementary
Doctors Inlet Elementary
Fleming Island Elementary
Green Cove Junior High
Grove Park Elementary
Keystone Heights Elementary
Keystone Heights High
Lake Asbury Elementary
Lakeside Elementary
Lakeside Junior High
Middleburg High
Montclair Elementary
Orange Park High
Orange Park Junior High
RideOut Elementary
Ridgeview Elementary
Ridgeview High
Robert M. Paterson Elementary
Thunderbolt Elementary
Tynes Elementary
W.E. Cherry Elementary
Wilkinson Junior High

Collier

Barron Collier High
Big Cypress Elementary
Corkscrew Middle
Golden Gate Elementary
Gulf Coast High
Gulfview Middle
Highlands Elementary
Immokalee Middle
Lake Park Elementary
Manatee Middle

Collier continued

Naples High
Naples Park Elementary
Poinciana Elementary
Shadowlawn Elementary

Columbia

Columbia High
Niblack Elementary

Dade

The 500 Role Model Academy
American Senior High
Arvida Middle
Barbara Goleman High
Barbara Hawkins Elementary
Bel-Aire Elementary
Biscayne Elementary
Blue Lakes Elementary
Bowman Foster Ashe Elementary
Broadmoor Elementary
Carol City Elementary
Charles R. Drew Middle
Charles Wyche Elementary
Coconut Grove Elementary
Comstock Elementary
Coral Gables Elementary
Coral Reef Elementary
Coral Reef Senior High
D. A. Dorsey Educational Center
Devon Aire Elementary
Dr. Michael M. Krop Senior High
Eneida Hartner Elementary
Ernest R. Graham Elementary
Ethel F. Beckford / Richmond Elementary
Everglades K–8 Center
Felix Varela Senior High
Frances S. Tucker Elementary
Frank C. Martin Elementary
G.W. Carver Middle
Hammocks Middle
Henry Flagler Elementary
Henry H. Filer Middle
Hialeah-Miami Lakes Senior High
Hialeah High
Hibiscus Elementary
Highland Oaks Middle
Holmes Elementary
Homestead Middle
Homestead Senior High
Horace Mann Middle
Howard Doolin Middle
Howard Drive Elementary
Hubert O. Sibley School
Jack D. Gordon Elementary
Joe Hall Elementary
Joella C. Good Elementary
John G. Dupuis Elementary
John I. Smith Elementary
Jose Marti Middle
Kinloch Park Middle
Lake Stevens Elementary
Lake Stevens Middle
Lawton Chiles Middle
Leewood Elementary
Leisure City K-8 Center
Lillie C. Evans Elementary
Martin Luther King Elementary
Mast Academy
Meadowlane Elementary
Miami Central Senior High
Miami Edison Senior High
Miami Lakes Middle
Miami Northwestern Senior High
Miami Palmetto Senior High
Miami Shores Elementary
Miami Springs Elementary
Miami Senior High
Myrtle Grove Elementary
Nautilus Middle
Norland Middle
North County Elementary
North Dade Center for Modern Language
North Dade Middle
North Glade Elementary
North Miami Beach High
North Miami Elementary
North Miami Middle
North Twin Lakes Elementary
Norwood Elementary
Oliver Hoover Elementary
Opa Locka Elementary
Palm Lakes Elementary
Palmetto Elementary
Parkway Middle
Paul W. Bell Middle
Phyllis Ruth Miller Elementary
Pinecrest Prep
Rainbow Park Elementary
Redondo Elementary
Richmond Heights Middle
Ruben Dario Middle
School for Applied Technology
South Dade High
South Miami Senior High
South Pointe Elementary
Southside Elementary
Southwest Miami High
Southwood Middle
Sunset Elementary
Sunset Park Elementary
Thena C. Crowder Elementary
Tropical Elementary
Vineland Elementary
Virginia A. Boone-Highland Oaks Elementary
Westview Middle
William Turner Technical Arts High
William Lehman Elementary
Winston Park Elementary
W. R. Thomas Middle
Youth Coop Charter
Zora Neale Hurston Elementary

DeSoto

DeSoto High
DeSoto Middle
West Elementary

Duval

A. Philip Randolph Academies
Abess Park Elementary
Andrew A. Robinson Elementary
Arlington Heights Elementary
Arlington Middle
Baldwin Middle/High
Bank of America Satellite Learning Center
Biltmore Elementary

Brentwood Elementary
Cedar Hills Elementary
Chets Creek Elementary
Crown Point Elementary
Crystal Springs Elementary
Darnell-Cookman Middle
Duncan U. Fletcher High
Edward White High
Englewood High
Enterprise Learning Academy
Fishweir Elementary
George Washington Carver Elementary
Greenfield Elementary
Gregory Drive Elementary
Highlands Middle
Hogan-Spring Glen Elementary
Holiday Hill Elementary
Jacksonville Beach Elementary
Jean Ribault Middle
John E. Ford Elementary
John Stockton Elementary
Joseph Finegan Elementary
Kirby-Smith Middle
Lake Lucina Elementary
Landmark Middle
Landon Middle
Mamie Agnes Jones Elementary
Mandarin High
Mandarin Middle
Mayport Middle
Nathan B. Forrest Senior High
Neptune Beach Elementary
Norwood Elementary
Oak Hill Elementary
Oceanway Elementary
Ortega Elementary
Parkwood Heights Elementary
Pickett Elementary
R. V. Daniels Elementary
Ramona Blvd Elementary
Reynolds Lane Elementary
Richard L Brown Elementary
Robert E. Lee High
Rutledge H. Pearson Elementary
S. A. Hull Elementary
Sadie T. Tillis Elementary
Saint Clair Evans Academy
Samuel Wolfson Senior High
San Mateo Elementary
San Pablo Elementary
Sandalwood High
Seabreeze Elementary
Stanton College Preparatory School
Stonewall Jackson Elementary
Terry Parker High
Timucuan Elementary
Twin Lakes Academy
Venetia Elementary

Escambia

A. A. Dixon Elementary
A. K. Suter Elementary
A. V. Clubs Center
Allie Yniestra Elementary
Barrineau Park School
Bellview Elementary
Bellview Middle
Beulah Academy of Science
Beulah Elementary
Blue Angels Elementary
Bratt Elementary
Brentwood Middle
Brown Barge Middle
C. A. Weis Elementary
Cordova Park Elementary
Edgewater Elementary
Escambia Charter
Escambia High
Ferry Pass Elementary
George S. Hallmark Elementary
Hellen Caro Elementary
J. H. Workman Middle
J. M. Tate Senior High
Jackie Harris Pyramid School
Jim Allen Elementary
Jim C. Bailey Middle
L. D. Mcarthur Elementary
Lincoln Park Elementary
Longleaf Elementary
Molino Elementary
Montclair Elementary
Myrtle Grove Elementary
Navy Point Elementary
N. B. Cook Elementary
Northview High
O. J. Semmes Elementary
Pine Forest High
Pine Meadow Elementary
Pleasent Grove Elementary
R. C. Lipscomb Elementary
Ransom Middle
Reinherdt Holm Elementary
Ruby J. Gainer Charter
Scenic Heights Elementary
Sherwood Elementary
Sid Nelson Community Learning
W. J. Woodham High
Warrington Elementary
Warrington Middle
Washington Senior High
West Pensacola Elementary

Flagler

Buddy Taylor Middle
Flagler Palm Coast High
Indian Trails K–8 Center
Old Kings Elementary

Franklin

Apalachicola High

Gadsden

Carter Parrmore Middle
Chattahoochee Elementary Magnet
Chattahoochee High Magnet
George W. Munroe Elementary
Greensboro Elementary
Greensboro High
Gretna Elementary
Havana Elementary
Havana Middle
Havana Northside High
James A. Shanks High
St. John's Elementary
Stewart Street Elementary

Glades

Moore Haven Elementary
Moore Haven Senior High

Gulf
- Port St. Joe Elementary
- Wewahitchka Elementary
- Wewahitchka High

Hamilton
- Central Hamilton Elementary
- Hamilton County High
- North Hamilton Elementary

Hardee
- Bowling Green Elementary
- Hardee Senior High

Hendry
- Central Elementary
- Clewiston High
- LaBelle Elementary
- LaBelle High
- Westside Elementary

Hernando
- Brooksville Elementary
- Chocachatti Elementary
- D.S. Parrott Middle
- Deltona Elementary
- Eastside Elementary
- Fox Chapel Middle
- Frank W. Springstead High
- Hernando High
- John D. Floyd Elementary
- Moton Elementary
- Pine Grove Elementary
- Powell Middle
- Spring Hill Elementary
- West Hernando Middle
- Westside Elementary

Highlands
- Avon Park High
- Avon Park Middle
- Cracker Trail Elementary
- Hill-Gustat Middle
- Lake Country Elementary
- Lake Placid High
- Lake Placid Middle
- Park Elementary
- Sebring High
- Sebring Middle
- Sun 'n Lake Elementary

Hillsborough
- Adams Middle
- Alonso High
- Anderson Elementary
- Apollo Beach Elementary
- Armwood High
- Bay Crest Elementary
- Bellamy Elementary
- Benito Middle
- Bing Elementary
- Blake High
- Bloomingdale High
- Boyette Springs Elementary
- Brandon High
- Brooker Elementary
- Buchanan Middle
- Buckhorn Elementary
- Burns Middle
- Cannella Elementary
- Chamberlain High
- Chiaramonte Elementary
- Clair Mel Elementary
- Claywell Elementary
- Coleman Middle
- Colson Elementary
- Crestwood Elementary
- Cypress Creek Elementary
- DeSoto Elementary
- Dickenson Elementary
- Dover Elementary
- Durant High
- East Bay High
- Edison Elementary
- Eisenhower Middle
- Ferrell Middle School of Technology
- Folsom Elementary
- Forest Hills Elementary
- Franklin Middle
- Gaither High
- Gibsonton Elementary
- Gordon Burnett Middle
- Grady Elementary
- Greco Middle
- H. Mintz Elementary
- Hillsborough High
- Hunter's Green Elementary
- Jackson Elementary
- King High
- Kingswood Elementary
- Lake Magdalene Elementary
- Learning Gate Charter
- Leto High
- Lewis Elementary
- Lockhart Elementary
- Lopez Elementary
- Lutz Elementary
- Mabry Elementary
- Madison Middle
- Mango Elementary
- Maniscalco Elementary
- McDonald Elementary
- McLane Middle
- Memorial Middle
- Mendenhall Elementary
- Metropolitan Ministries
- Miles Elementary
- Mitchell Elementary
- Monroe Middle
- Morgan Woods Elementary
- Nature's Classroom Summer Program
- North Tampa Alternative School
- Northwest Elementary
- Oak Grove Elementary
- Orange Grove Middle Magnet
- Pepin Academy
- Pierce Middle
- Pinecrest Elementary
- Pizzo Elementary
- Plant Senior High
- Pride Elementary
- Progress Village
- Randall Middle
- Rebirth Academy Charter
- Redlands Christian Migrant Association
- The Richardson Academy
- Riverhills Elementary
- Riverview High
- Robinson High
- Rodgers Middle
- Roosevelt Elementary
- Schwarzkopf Elementary
- Shore Elementary
- Sickles High
- Sligh Middle

Sulphur Springs Elementary
Tampa Bay Academy
Tampa Bay Blvd Elementary
Tampa Bay Technical High
Tampa Palms Elementary
Temple Terrace Elementary
Terrace Community Charter
Thonotosassa Elementary
Tinker Elementary
Tomlin Middle
Trinity Charter
Turkey Creek Middle
USF Charter School at MOSI
Valrico Elementary
Van Buren Middle
The Village of Excellence Academy
Walker Middle
West Tampa Elementary
Wharton High
Williams Middle
Wilson Elementary
Wilson Middle
Wimauma Elementary
Woodbridge Elementary
Yates Elementary

Holmes

Bethlehem High
Bonifay Elementary
Bonifay Middle
Holmes County High
Ponce de Leon Elementary
Ponce de Leon High
Poplar Springs School

Indian River

Beachland Elementary
Citrus Elementary
Crossroads Academy
Dick Howser Center
Fellsmere Elementary
Gifford Middle
Indian River Academy
J. A. Thompson Elementary
Midway Magnet Center
Olso Middle
Pelican Island Elementary
Rosewood Elementary
Sebastian River High
Sebastian River Middle
Vero Beach Center
Vero Beach Elementary
Vero Beach High

Jackson

Frank M. Golson Elementary
Graceville High
Malone High
Marianna High
Marianna Middle
Riverside Elementary
Snead's High

Jefferson

Howard Middle
Thomas Jefferson Elementary

Lake

Astatula Elementary
Cypress Ridge Elementary
Eustis Elementary
Eustis High
Eustis Middle
Leesburg High
Milestones Community Middle
Minneola Elementary
Mount Dora High
Rimes Elementary
Round Lake Elementary
Seminole Springs Elementary
Tavares Middle
Umatilla Elementary
Umatilla High
Umatilla Middle
The Villages Elementary of Lady Lake

Lee

Bayshore Elementary
Bonita Springs Elementary
Bonita Springs Middle
Caloosa Elementary
Caloosa Middle
Cape Coral High
Cape Elementary
Cypress Lake Center for the Arts
Diplomat Middle
Dunbar High
Estero High
Fort Myers High
Gateway Elementary
Gulf Elementary
Gulf Middle
Hancock Creek Elementary
Lee Middle
Lehigh Elementary
Lehigh Senior High
Michigan Montessori International Academy
New Directions Center
North Ft. Myers High
Orangewood Elementary
Pelican Elementary
Pine Island Elementary
Pinewoods Elementary
Richard Milburn Academy
Royal Palm Exceptional School
Sanibel Elementary
Skyline Elementary
Sunshine Elementary
Tanglewood/Riverside School
Trafalgar Middle
Villas Elementary

Leon

Amos P. Godby High
Astoria Park Elementary
Augusta Raa Middle
Bond Elementary
Buck Lake Elementary
Chaires Elementary
Deerlake Middle
DISC Adolescent
Fairview Middle
Frank Hartsfield Elementary
Ft Braden Elementary
James Rickards High
Kate Sullivan Elementary
Killearn Lakes Elementary
Lawton Chiles High
Leonard Wesson Elementary
Lincoln High
Roberts Elementary
Sabal Palm Elementary
School of Arts and Science
Sealey Elementary
Springwood Elementary

Levy
- Chiefland Elementary
- Chiefland Middle
- Joyce Bullock Elementary
- Yankeetown School

Liberty
- Liberty County High

Madison
- Madison County Central
- Madison County High

Manatee
- A. Lee Middle
- Ballard Elementary
- Bayshore High
- Blackburn Elementary
- Blanche Daughtrey Elementary
- Braden River Middle
- Florine Abel Elementary
- J. Hartley Blackburn Elementary
- Lincoln Middle
- Louise R. Johnson Middle
- Manatee High
- Myakka City School
- Orange Ridge-Bullock Elementary
- Palmetto High
- Samoset Elementary
- Sara S. Harllee Middle
- Southeast High
- Tara Elementary
- William H. Bashaw Elementary
- William M. Rowlett Magnet Elementary

Marion
- Bellview-Santos Elementary
- Bellview Middle
- College Park Elementary
- Dr. N.H. Jones Elementary
- Dunnellon Elementary
- Dunnellon High
- Dunnellon Middle
- East Marion Elementary
- Eighth Street Elementary
- Emerald Shores Elementary
- Evergreen Elementary
- Fessenden Elementary
- Future Leaders of the World
- Greenway Elementary
- Howard Middle
- Lake Weir High
- Lake Weir Middle
- Madison Street Elementary
- Maplewood Elementary
- Marion Charter
- Marion County Federal Programs
- NIKE Academy
- North Marion High
- North Marion Middle
- Reddick-Collier Elementary
- Romeo Elementary
- Saddlewood Elementary
- Shady Hill Elementary
- South Ocala Elementary
- Sparr Elementary
- Stanton-Weirsdale Elementary
- Storefront School
- Sunrise Elementary
- Vanguard High
- Ward-Highlands Elementary
- West Port High
- West Port Middle
- Wyomina Park Elementary

Martin
- Bessey Creek Elementary
- Crystal Lake Elementary
- Felix A. Williams Elementary
- Indiantown Middle
- J.D. Parker Elementary
- Jensen Beach Elementary
- Palm City Elementary
- Pinewood Elementary
- Port Salerno Elementary
- Sea Wind Elementary
- South Fork High
- Warfield Elementary

Monroe
- Coral Shores High
- Gerald Adams Elementary
- Glynn Archer Elementary
- Horace O'Bryant Middle
- Island Montessori Charter
- Key Largo School
- Key West High
- Marathon High
- Montessori Charter
- Plantation Key School
- Stanley Switlik Elementary
- Sugarloaf School

Nassau
- Atlantic Elementary
- Bryceville Elementary
- Callahan Elementary
- Fernandina Beach Middle
- Hillard Middle
- Hilliard Elementary
- Southside Elementary
- West Nassau High
- Yulee Middle
- Yulee Primary

Okaloosa
- Addie R. Lewis Middle
- Annette P. Edwins Elementary
- Antioch Elementary
- Bluewater Elementary
- C.W. Ruckel Middle
- Clifford Meigs Middle
- Destin Middle
- Elliott Point Elementary
- Ft. Walton Beach High
- James E. Plew Elementary
- Lance C. Richbourg Middle
- Laurel Hill School
- Liza Jackson Preparatory School
- Longwood Elementary
- Max Bruner Middle
- Shalimar Elementary
- Valparaiso Elementary
- W. C. Pryor Middle

Okeechobee
- Central Elementary
- Everglades Elementary
- Okeechobee High
- South Elementary
- Yearling Middle

Orange
- Aloma Elementary
- Apopka 9th Grade Center
- Apopka High
- Apopka Memorial Middle
- Audubon Park Elementary

Avalon Elementary
Bay Meadows Elementary
Blankner School
Bonneville Elementary
Boone High
Brookshire Elementary
Carver Middle
Catalina Elementary
Cheney Elementary
Clarcona Elementary
Clay Springs Elementary
Colonial 9th Grade Center
Colonial High
Columbia Elementary
Conway Elementary
Conway Middle
Corner Lake Middle
Cypress Creek High
Cypress Park Elementary
Cypress Springs Elementary
Deerwood Elementary
Dillard Street Elementary
Discovery Middle
Dommerich Elementary
Dr. Phillips High
Dr. Phillips 9th Grade Center
Dream Lake Elementary
Endeavor Elementary
Evans 9th Grade Center
Fern Creek Elementary
The Florida High School
Gateway School
Gotha Middle
Grand Avenue Elementary
Hiawassee Elementary
Hidden Oaks Elementary
Hope Charter
Howard Middle
Ivey Lane Elementary
John Young Elementary
Lake Como Elementary
Lake Silver Elementary
Lake Sybelia Elementary
Lakemont Elementary
Lancaster Elementary
Lawton Chiles Elementary
Liberty Middle
Little River Elementary
Magnolia School
McCoy Elementary
Meadow Woods Elementary
Meadowbrook Middle
Nap Ford Elementary
Northlake Park Community School
Oakridge High
Olympia High
Palm Lake Elementary
Palmetto Elementary
Passport School Inc.
Pershing Elementary
Piedmont Lakes Middle
Pine Castle Elementary
Princeton Elementary
Ridgewood Park Elementary
Riverdale Elementary
Riverside Elementary
Robert Hungerford Prep High
Rock Springs Elementary
Rosemont Elementary
Sadler Elementary
Shingle Creek Elementary
Silver Star Center
Southwest Middle
Springlake Elementary
Sunrise Elementary
Three Points Elementary
Timber Creek High
Union Park Elementary
Union Park Middle
University High
Ventura Elementary
Walker Middle
Washington Shores Elementary
Waterford Elementary
West Orange High
West Orange 9th Grade Center
William Frangus Elementary
Winter Park High
Winter Park 9th Grade Center
Zellwood Elementary

Osceola

Boggy Creek Elementary
Celebration School
Cypress Elementary
Deerwood Elementary
Denn John Middle
Discovery Intermediate
F.U.T.U.R.E
Four Corners Elementary
Four Corners Middle
Gateway High
Hickory Tree Elementary
Highlands Elementary
Horizon Middle
Kissimmee Elementary
Kissimmee Middle
Lakeview Elementary
Michigan Avenue Elementary
Mill Creek Elementary
Narcoossee Community
Neptune Middle
New Beginnings Educational Complex
New Dimensions High
Osceola High
P.M. Wells Charter
Parkway Middle
Poinciana High
Professional/Technical High
Reedy Creek Elementary
Ross E. Jeffries Elementary
St. Cloud High
St. Cloud Middle
Thacker Avenue Elementary
Transition Center
Ventura Elementary

Palm Beach

Academy School of Florida
Acreage Pines Community Elementary
Atlantic High
Beacon Cove Intermediate
Bear Lakes Middle
Belle Glade Elementary
Binks Forest Elementary
Boca Raton Elementary
Boca Raton High
Boca Raton Middle
Boyton Beach High
C.A.R.P
Calusa Elementary
Chancellor Charter
Citrus Cove Elementary
C. O. Taylor / Kirklane Elementary

Palm Beach continued

- Congress Middle
- Conniston Community Middle
- Coral Reef Elementary
- Coral Sunset Elementary
- Crestwood Middle
- Cultural Arts Center of Boca Raton
- Cypress Trails Elementary
- Delray Beach Academy
- Dreyfus School Of Arts
- Dwight D. Eisenhower Elementary
- Eagle Academy
- Ed Venture Charter
- Forest Hill Elementary
- Forest Hill High
- Frontier Elementary
- Glades Academy of Agricultural
- Glades Central High
- Golden Grove Elementary
- Grove Park Elementary
- H. L. Johnson Elementary
- Hagen Road Elementary
- Heritage Elementary
- High Ridge School
- Highland Elementary
- Hope Learning of the Gardens
- Howell L.Watkins Middle
- Indian Pines Elementary
- Jerry Thomas Elementary
- John Leonard High
- Joseph R. Littles-Nguzo Saba School
- Jupiter Community High
- Jupiter High
- Jupiter Middle
- K. Cunningham / Central Point Elementary
- Lake Side Academy
- Lake Worth High
- Lake Worth Middle
- Lantana Middle
- Liberty Park Elementary
- Lighthouse Elementary
- Limestone Creek Elementary
- Logger's Run Middle
- Melaleuca Elementary
- Morikami Park Elementary
- New Horizons Elementary
- Noah's Ark International
- Odyssey Middle
- Omni Middle
- Palm Beach Gardens High
- Palm Beach Lakes High
- Palm Beach Maritime Academy
- Palm Beach Public Elementary
- Palm Springs Elementary
- Pioneer Park Elementary
- Polo Park Middle
- Potentials Charter
- Renaissance Learning Center
- Roosevelt Elementary
- Roosevelt Middle
- Rosenwald Elementary
- Royal Palm Beach High
- Sandpiper Shores Elementary
- Santa Luces Community High
- Suncoast High
- Sunrise Park Elementary
- Survivors Charter
- Timber Trace Elementary
- Toussaint L'Ouverture High
- U. B. Kinsey Elementary
- Verde Elementary
- Waters Edge Elementary
- Watson Duncan Middle
- Wellington Elementary
- Wellington Landings Middle
- West Gate Elementary
- West Riviera Elementary
- Westward Elementary
- Whispering Pines Elementary
- Woodlands Middle
- Wynnebrook Elementary

Pasco

- Anclote Elementary
- Bayonet Point Middle
- Chasco Elementary
- Chasco Middle
- Chester W. Taylor Elementary
- Cotee River Elementary
- Dayspring Academy
- Deer Park Elementary
- Deerwood Academy
- Gulf High
- Gulf Middle
- Gulfside Elementary
- Hudson High
- James M. Marlowe Elementary
- J.W. Mitchell High
- Lacoochee Elementary
- Moon Lake Elementary
- Pasco Elementary
- Pasco High
- Pasco Middle
- Pine View Middle
- Raymond B. Stewart Middle
- Richey Elementary
- Ridgewood High
- River Ridge Middle/High
- Sanders Memorial Elementary
- Seven Springs Elementary
- Seven Springs Middle
- Thomas E. Weightman Middle
- Trinity Elementary
- Wesley Chapel High
- Woodland Elementary
- Zephyrhills High

Pinellas

- Academie DaVinci
- Anona Elementary
- Azalea Elementary
- Azeala Middle
- Bardmoor Elementary
- Bauder Elementary
- Bay Point Elementary
- Bay Point Middle
- Bay Vista Fundamental Elementary
- Bear Creek Elementary
- Blanton Elementary
- Boca Ciega High
- Brooker Creek Elementary
- Calvin Hunsinger Exceptional Center
- Campbell Park Elementary
- Clearview Avenue Elementary
- Clearwater Discovery School
- Clearwater High
- Coachman Fundamental Middle
- Countryside High
- Cross Bayou Elementary

Curlew Creek
Curtis Fundamental Elementary
Cypress Woods Elementary
Disston Gifted Center
Dixie Hollins High
Dunedin Elementary
Dunedin High
Dunedin Highland Middle
East Lake High
Eisenhower Elementary
Fitzgerald Middle
Forest Lakes Elementary
Garrison-Jones Elementary
Gibbs High
Gulf Beaches Elementary
Gulfport Elementary
High Point Elementary
John Hopkins Middle
John M. Sexton Elementary
Joseph L. Carwise Middle
Kennedy Middle
Kings Highway Elementary
Lake St. George Elementary
Lakeview Fundamental Elementary
Lakewood Elementary
Lakewood High
Largo Central Elementary
Largo Middle
Lealman Intermediate
Leila Davis Elementary
Madeira Beach Elementary
Madeira Beach Middle
Marjorie Kinnan Rawlings Elementary
Maximo Elementary
McMullen-Booth Elementary
Mildred Helms Elementary
Mt. Vernon Elementary
North Shore Elementary
North Ward Elementary
Northwest Elementary
Oak Grove Middle
Oakhurst Elementary
Oldsmar Elementary
Oldsmar Elementary School
Orange Grove Elementary
Osceola High
Osceola Middle
Ozona Elementary
Palm Harbor Elementary
Palm Harbor Middle
Palm Harbor University High
Pasadena Fundamental
Paul B. Stephens School
Perkins Elementary
Pinellas Central Elementary
Pinellas Park Elementary
Pinellas Park High
Pinellas Park Middle
Plumb Elementary
Ponce de Leon Elementary
PTEC - St. Petersburg Campus
Rio Vista Elementary
Rivera Middle
Safety Harbor Elementary
Safety Harbor Middle
San Jose Elementary
Sandy Lane Elementary
Sawgrass Lake Elementary
Seminole High
Seminole Middle
Seventy-Fourth Street Elementary
Shore Acres Elementary
Skycrest Elementary
Skyview Elementary
South Ward Elementary
Southside Fundamental Middle
St Petersburg High
Starkey Elementary
Sunset Hills Elementary
Sutherland Elementary
Tarpon Springs Fundamental Elementary
Tarpon Springs Middle
Tyrone Elementary
Tyrone Middle
Walsingham Elementary
Westgate Elementary

Polk

Alta Vista Elementary
Alturas Elementary
Anna Woodbury Elementary
The Apple School
ARC - Academic Research Center
Auburndale Central Elementary
Auburndale High
Babson Park Elementary
Bartow Elementary Academy
Bartow Middle
Bennett Christiansen Academy
Carlton Palmore Elementary
Combee Elementary
Crystal Lake Elementary
Davenport School of the Arts
Denison Middle
Dixieland Elementary
Dundee Elementary
Dundee Ridge Middle
Eastside Elementary
Edgar L. Padgett Elementary
The Foundation School
Frostproof Middle Senior High
Garden Grove Elementary
George Jenkins High
Haines City High
Hartridge Academy
Highland City Elementary
Hillcrest Elementary
Homer K. Addair Career Academy
James E. Stephens Elementary
James W. Sikes Elementary
Jere L. Stambaugh Middle
John A. Snively Elementary
Kathleen Elementary
Kathleen High
Kingsford Elementary
Lake Alfred Elementary
Lake Gibson High
Lake Gibson Middle
Lake Region High
Lake Wales High
Lakeland Highlands Middle
Lawton Chiles Middle Academy
Lincoln Ave Academy
McLaughlin Middle
Medulla Elementary
MsKeel Academy
Mulberry High

Polk continued

North Lakeland Elementary School of Choice
Oscar J. Pope Elementary
Polk Avenue Elementary
Ridgeview Academy
Rochelle School of the Arts
Roosevelt Academy
Rosabelle W. Blake Academy
S.T.A.R. Charter
Sandhill Elementary
Scott Lake Elementary
Shelley S. Boone Middle
Sleepy Hill Middle
Southwest Elementary
Spook Hill Elementary
Traviss Technical Center
Wendell Watson Elementary
Westwood Middle
Winter Haven High

Putnam

Browning Pearce Elementary
C. H. Price Middle
Crescent City Jr./Sr. High
Interlachen Elementary
James A. Long Elementary
Middleton-Burney Elementary
Ochwilla Elementary
Palatka High
River Breeze Elementary
W. H. Beasley Middle
William D. Moseley Elementary

Santa Rose

Berryhill Elementary
Central High
Chumuckla Elementary
East Milton Elementary
First Coast Skills Academy
First Coast Technical High
Gulf Breeze Elementary
Gulf Breeze High
Holley-Navarre Intermediate
Jay High
Martin Luther King Middle
Milton High
Munson Elementary
Navarre High
Oriole Beach Elementary
Pace High
Pea Ridge Elementary
W. H. Rhodes Elementary
Woodlawn Beach Middle

Sarasota

Alta Vista Elementary
Ashton Elementary
Bay Haven Elementary
Booker High
Brentwood Elementary
Brookside Middle
Emma E. Booker Elementary
Englewood Elementary
Fruitville Elementary
Garden Elementary
Glenallen Elementary
Gocio Elementary
Gulf Gate Elementary
Laurel Nokomis School
McIntosh Middle
North Port High
Pine View School for the Gifted
Riverview High
Roy McBean Charter
Sarasota County Technical Institute
Sarasota High
Sarasota Middle
Sarasota School of Arts/ Sciences
Taylor Ranch Elementary
Toledo Blade Elementary
Tuttle Elementary
Venice Area Middle
Venice Elementary
Venice High
Wilkinson Elementary

Seminole

Altamonte Elementary
Altermese S. Bentley Elementary
Bear Lake Elementary
Boys Town
Carillon Elementary
Casselberry Elementary
Choices in Learning Charter
Contracted Services
Cyber High Charter
Devon Charter
English Estates Elementary
Forest City Elementary
Geneva Elementary
Goldsboro Elementary
Greenwood Lakes Middle
Hamilton Elementary
Highlands Elementary
Idyllwilde Elementary
Indian Trails Middle
John Evans Elementary
Keeth Elementary
Lake Brantley High
Lake Howell High
Lake Mary Elementary
Lake Mary High
Lake Orienta Elementary
Lawton Chiles Middle
Lawton Elementary
Longwood Elementary
Lyman High
Midway Elementary
Millennium Middle
Oviedo High
Partin Elementary
R. T. Milwee Middle
Rainbow Elementary
Rays of Hope Charter
Red Bug Elementary
Rock Lake Middle
Sabal Point Elementary
Sanford Middle
Seminole High
South Seminole Hospital
South Seminole Middle
Stenstrom Elementary
Sterling Park Elementary
Teague Middle
Tuskawilla Middle
UCF Seminole Child Development
Wekiva Elementary
Wicklow Elementary
Wilson Elementary
Winter Springs Elementary
Winter Springs High
Woodlands Elementary

St. Johns
- Alice B. Landrum Middle
- Bartram Trail High
- Cunningham Creek Elementary
- Fruit Cove School
- Gamble Rogers Middle
- Hastings Elementary
- J. A. Crookshank Elementary
- Julington Creek Elementary
- Ketterlinus Elementary
- M. K. Rawlings Elementary
- Mill Creek Elementary
- Murray Middle
- Ocean Palms Elementary
- Osceola Elementary
- Otis A. Mason Elementary
- Pedro Mendez High
- Rawlings-Ponte Vedra Palm Valley Elementary
- R. B. Hunt Elementary
- Sebastian Middle
- St. Augustine High
- Switzerland Point Middle
- W.D. Hartley Elementary

St. Lucie
- Bayshore Elementary
- Fairlawn Elementary
- Floresta Elementary
- Forest Grove Middle
- Frances K. Sweet Elementary
- Ft. Pierce Magnet
- Lawnwood Elementary
- Lincoln Park Academy
- Morningside Elementary
- Northport Middle
- Parkway Elementary
- Savanna Ridge Elementary
- Southport Middle
- St. Lucie Elementary
- St. Lucie West Centennial High
- Village Green Elementary
- White City Elementary
- Windmill Point Elementary

Sumter
- Bushnell Elementary
- Lake Panasoffkee Elementary
- North Sumter Intermediate
- North Sumter Primary
- South Sumter High
- South Sumter Middle
- The Villages Charter Elementary
- Webster Elementary
- Wildwood High
- Wildwood Middle

Swannee
- Branford Elementary
- Branford High
- Suwannee Elementary East
- Suwannee Elementary West
- Suwannee High

Taylor
- Taylor County High
- Taylor County Middle

Volusia
- Atlantic High
- Blue Lake Elementary
- Bonner Elementary
- Campbell Middle
- Creekside Middle
- Deland High
- Deland Middle
- Deltona Middle
- Edgewater Public Elementary
- Edith Starke Elementary
- Enterprise Elementary
- Freedom Elementary
- Friendship Elementary
- Galaxy Middle
- George W. Marks Elementary
- Halifax Behavioral Center
- Heritage Middle
- Holly Hill Middle
- Indian River Elementary
- Louise S. McInnis Elementary
- Mainland High
- New Smyrna Beach Middle
- Orange City Elementary
- Ormond Beach Elementary
- Ormond Beach Middle
- Ortona Elementary
- Osceola Elementary
- Osteen Elementary
- Palm Terrace Elementary
- Pierson Elementary
- Pine Ridge High
- Pine Trail Elementary
- R.J. Longstreet Elementary
- Read-Pattillo Elementary
- Reading Edge Academy
- Seville Public Elementary
- Silver Sands Middle
- Southwestern Middle
- Spruce Creek High
- Sugar Mill Elementary
- Sweetwater Elementary
- T. Dewitt Taylor Middle / High
- Tibercrest Elementary
- Tomoka Elementary
- Turie T. Small Elementary
- Volusia Pines Elementary
- W. F. Burns Oak Hill Elementary
- Walter A. Hurst Elementary
- Westside Elementary
- Woodard Avenue Elementary

Wakulla
- Crawfordville Elementary
- Medart Elementary
- Riversprings Middle

Walton
- Bay Middle
- Freeport Elementary
- Freeport Middle
- Maude Saunders Elementary
- Paxton High
- Walton High
- Walton Middle
- West DeFuniak Elementary

Washington
- Chipley High
- Roulhac Middle
- Vernon High

A.D. Henderson University School

Florida School for the Deaf and Blind

Florida State University School

Do District Library Media Supervisors/ Coordinators Make a Difference?

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Little has been written about the role of a district school library media supervisor or coordinator. Less appears in the literature about the impact that position may have on building level programs, on collections, on policies and procedures, on budgets or on student achievement. The state of Washington state professional association, the Washington Library Media Association (WLMA), in updating its school library staffing descriptions, describes the qualities and competencies for a district library media program supervisor; among them:

- Training and successful experience as a school library media specialist with qualities commensurate with those listed for Library Media Specialist;
- Masters Degree in library and information science, educational technologies or related field;
- Provides innovative and responsive leadership in the field of libraries and educational technologies;
- Supervises, develops, implements and campaigns for library budget;
- Projects a positive image for the library program
- Compiles data, analyzes statistics and prepares reports;
- Provides training and information to library staff;
- Works with district committees to integrate library media program with overall curriculum. (WLMA, 2002)

Position announcements and job descriptions generally emphasize the leadership role. But do these district leaders have any impact on school library media programs and collections?

In 2002, a statewide survey was conducted to determine the status of school library media programs in Florida's K–12 public schools, and to assess the role of the school library media specialist and school library media as they contribute to student achievement. In February, the survey form was sent to every public school library media center in the state of Florida (n=2815),

and a follow-up letter and duplicate form were sent to those schools that did not reply by April. Participation in the study was voluntary. Data could be entered on the survey form and returned to the researcher by postage-paid envelope, or it could be entered online.

Table 1. Return Rate by District Supervisor/Coordinator Status

	Not Returned	Returned	Total
Full-Time Supervisor/ Coordinator	880 (36.8%)	1511 (63.2%)	2391 (84.9%)
Part-Time Supervisor/ Coordinator	78 (41.27%)	111 (58.73%)	189 (8.4%)
No District Level Supervisor/ Coordinator	142 (60.43%)	93 (39.57%)	235 (6.7%)
Total	1100	1715	2815

- Hypothesis: "The rate of return was greater for districts with a full-time supervisor than without a supervisor."

  The return rate is 2.62 times (with 95% confidence interval (1.99, 3.45)) higher for district with full-time supervisor than without supervisor.

- Hypothesis: "The rate of return was greater for districts with part-time supervisor than without a supervisor."

  The return rate is 2.17 times (with 95% confidence interval (1.47, 3.21)) higher for districts with a part-time supervisor than without a supervisor.

- Hypothesis: "The rate of return was greater for districts with full-time supervisor than with a part-time supervisor or no supervisor."

  The return rate is 1.85 times (with 95% confidence interval (1.50, 2.28)) higher for district with full-time supervisor than with part-time supervisor or no supervisor.

1715 usable surveys were returned, a 60.43% rate. There was a significant difference in the rate of survey return from districts with full-time or part-time media supervisors/coordinators. This led to ex post facto examination of data to determine if the status of a district library media supervisor/ coordinator might correlate positively with other factors, and to determine if significant differences might exist between any variables measured in the Florida library media study when district library media supervisors/coordinators, either full- or part-time, are present. Although there is nothing to confirm a causal relationship, the data does point to areas for further study.

One survey item asked participants to describe the role of their district library media supervisor as full-time, part-time or none. In districts where the survey's responses were not clear (or for districts that did not participate), the state program specialist for library media services at the Florida Department of Education was asked to clarify the information. In reality, many districts have more than one full-time media staff person while other full-time district media supervisors/coordinators also serve as the full-time district technology coordinator, but still are considered by their school media specialists to be full-time library media supervisors/coordinators.

Table 2. Florida School Districts with District Library Media Supervisor(s)/Coordinator(s)

	Count	Percentage
Full Time Supervisor/Coordinator	35	50%
Part Time Supervisor/Coordinator*	20	29%
No District Level Supervisor/Coordinator	14**	20%

* District level person who has additional non-library/media responsibilities

** Includes two state schools designated as districts (lab schools, FSDB, etc.)

Although both titles and responsibilities vary from district to district, for the purpose of this study, a full-time library media supervisor/coordinator is defined as a professional employed at the district level with the primary responsibility for school library media centers and staff district-wide. A part-time library media supervisor/coordinator is defined as a district level professional who has responsibility for the library media program, but who also has additional, generally non-school library media related responsibilities. Table 2 indicates the numbers and percentages of districts by status of the district supervisor/coordinator: full-time, part-time or no identifiable district level library media supervisor/coordinator.

Only 50% of Florida school districts have a full-time library media supervisor or coordinator at the district level, while another 29% employ a part-time person at the district level with some responsibility for library media centers and staff. Although it might be assumed that the status district level staff (full-, part-, or no time) is related to district size, several of the smaller school districts do employ a full-time library media supervisor or coordinator. Two of those smaller districts had a 100% return rate on the survey.

All survey responses were entered into a FileMaker Pro database, exported to a Microsoft Excel file and then converted to a SAS data set. The data were analyzed first to determine if there were differences between factors in districts with supervisors/coordinators, full- or part- time, compared with districts with no district level staff. Then additional analysis was done to compare full-time to part-time, and full-and part-time to none.

Because it was not within the scope of the initial school library media study, no attempt has been made to collect data about the qualifications or duties of a district level library media supervisor/ coordinator. It should also be noted that all figures are averaged across the district, and findings may vary from school to school within a district. However, initial findings are intriguing and show that a district level library media supervisor/coordinator may impact school level programs in a variety of ways. It also indicates inequities between library media programs in districts without library media supervisors and with part-time library media supervisors.

Table 3. School Library Media Resources (Average per School) Correlated with Presence and Status of District Library Media Supervisor/Coordinator

	District Library Media Supervisor/Coordinator Position			District Library Media Supervisor/Coordinator			
	None	Part	Full	Full vs. None	Part vs. None	Full vs. Part	Supervisor (Full or Part) vs. None
Print Volumes	10478.0	11426.8	13856.9	< 0.05	—	—	< 0.05
Current Periodical Subscriptions	29.2	24.2	33.8	—	—	—	—
Current Newspaper Subscriptions	2.3	2.4	1.9	—	—	—	—
Electronic Subscriptions	23.4	14.7	8.7	—	—	—	—
Reference/Encyclopedias on CD or DVD	9.3	11.5	18.0	< 0.01	—	—	< 0.05
Video Materials (Tape or DVD)	573.4	492.7	650.1	—	—	< 0.01	—
Computer Software Packages for Use by Students in the Media Center	49.1	23.7	72.8	—	—	< 0.01	—
Total Volumes Purchased 2000–2001*	536.2	682.0	1003.3	< 0.01	—	< 0.01	< 0.01
Volumes in Specific Areas:							
• 616/Medicine & Health	9.9	12.1	18.7	< 0.01	—	< 0.01	< 0.01
• 620/Space	7.8	8.3	16.4	< 0.01	—	< 0.01	< 0.01
• 320/Government	6.0	7.1	9.8	< 0.05	—	—	< 0.05
Volumes Weeded 2000–2001**	357.9	467.2	459.2	—	—	—	—

The presence of a district library media supervisor/coordinator is positively correlated with the size of the collection. Results in Table 3 indicate that:

When a full-time or part-time district level school library media supervisor/coordinator is present:

- Schools have significantly more books in the collection.
- School library media programs have more reference materials on CD-ROM.
- The total number of books purchased annually for the school collection is higher.
- Significantly higher numbers of resources are purchased in areas that need to be kept current and have been pointed out as areas which need weeding and updating by SUNLINK's Weed of the Month program (such as medicine and health, space, and government during the 2000–2001 school year.)

Additionally, when the district position is full-time rather than part-time:

- More video materials are available at the school level.
- More computer software packages are purchased at the school level.
- More books are purchased annually including titles in areas recommended for re-examination by SUNLINK's Weed of the Month program.

Table 4. Budget (Average per School in Dollars) Correlated with Presence and Status of District Library Media Supervisor Coordinator

	District Library Media Supervisor/Coordinator Position			District Library Media Supervisor/Coordinator			
	None	Part	Full	Full vs. None	Part vs. None	Full vs. Part	Supervisor (Full or Part) vs. None
Budget for books	3869	4114	8220	—	—	—	—
Other sources for books	3379	4957	8157	< 0.05	< 0.05	—	< 0.05
Budget for newspapers/ magazines	955	763	1598	—	—	—	—
Other sources for newspapers/ magazines	26	107	204	< 0.01	—	—	< 0.01
Budget for electronic format materials	654	961	831	—	—	—	—
Other sources for electronic format materials	1297	917	1017	—	—	—	—
Budget for non-print	751	796	1112	< 0.01	—	< 0.05	< 0.01
Other sources for non-print	313	333	802	< 0.01	—	< 0.01	< 0.01
Budget for electronic access to information	555	609	646	—	—	—	—
Other sources for electronic access to information	635	240	519	—	—	< 0.05	—
School budget for operating expenditures	1436	1703	1995	< 0.05	—	—	< 0.05
Other sources for operating expenditures	592	792	1528	< 0.01	—	< 0.05	< 0.01
Total operating expenditures from school budget	7415	8111	9598	< 0.01	—	—	< 0.01
Total operating expenditures from other sources	4708	9829	9163	< 0.01	—	—	< 0.01
School budget for equipment	1162	6131	11187	—	—	—	< 0.05
Other sources for equipment	5072	11713	7224	—	—	—	—
School budget for capital purchases	296	1122	2648	< 0.01	—	—	< 0.01
Other budget for capital purchases	1430	2926	1568	—	—	—	—
Total capital outlay from school budget	1182	6001	11495	< 0.01	—	—	< 0.01
Total capital outlay from other sources	6409	9333	8122	—	—	—	—

Table 4 indicates that there are significant differences in several areas of the school budget for school library media materials and equipment when there is a district library media supervisor/ coordinator.

In schools in districts where there is a district staff person compared schools in districts without a district library media supervisor/coordinator, the book budget from other sources is significantly higher, and the operating budget from both the school budget and other sources is higher.

Where there is a library media supervisor/coordinator:

- More money from other sources than the school budget is spent on books;
- More money from other sources is spent on newspapers and magazines;
- More funds from other sources are spent on non-print (AV) materials;
- More is spent for equipment from the school budget;
- Both school budget and other sources for operating expenditures are higher;
- Operating expenditures from both school budget and other sources are higher;
- Both capital purchases and capital outlay are greater than when there is no district level library media supervisor/coordinator, and the budget for other capital purchases from other sources is higher.

When spending in districts with full-time library media supervisors/coordinators are compared to those with part-time supervisors/coordinators, more money is spent on periodicals, newspapers and non-print materials from other sources, supplementing the school budget.

Table 5. Average Percentage of the Total School Budget Correlated with Presence and Status of District Library Media Supervisor/Coordinator

	District Library Media Supervisor/Coordinator Position			District Library Media Supervisor/ Coordinator (P-Value)			
	None	Part	Full	Full vs. None	Part vs. None	Full vs. Part	Supervisor (Full or Part) vs. None
Budget for books	.186%	.114%	.186%	—	—	—	—
Other sources for books	.261%	.127%	.186%	—	—	—	—
Budget for newspapers/magazines	.065%	.021%	.036%	—	—	—	—
Other sources for newspapers/magazines	.001%	.004%	.005%	< 0.01	—	—	< 0.01
Budget for electronic format materials	.034%	.017%	.020%	—	—	—	—
Other sources for electronic format materials	.045%	.024%	.026%	—	—	—	—
Budget for non-print	.046%	.019%	.022%	—	—	—	—
Other sources for non-print	.014%	.009%	.017%	—	—	< 0.05	—
Budget for electronic access to information	.023%	.009%	.009%	—	—	—	—
Other sources for electronic access to information	.063%	.042%	.041%	—	—	—	—
School budget for operating expenditures	.034%	.020%	.039%	—	—	<0 .05	—
Other sources for operating expenditures	.014%	.009%	.017%	—	—	—	—
Total operating expenditures from school budget	.379%	.203%	.192%	—	—	—	—
Total operating expenditures from other sources	.351%	.257%	.213%	—	—	—	—
School budget for equipment	.051%	.188%	.265%	—	—	—	—
Other sources for equipment	.363%	.292%	.190%	< 0.01	—	—	< 0.01
School budget for capital purchases	.008%	.025%	.034%	—	—	—	—
Other budget for capital purchases	.082%	.078%	.040%	—	—	—	—
Total capital outlay from school budget	.050%	.177%	.305%	—	—	—	—
Total capital outlay from other sources	.449%	.286%	.205%	—	—	—	—

Table 5 depicts the elements of the library media budget as a percentage of the total school budget. In district with either a full-time or part time supervisor/coordinator compared to schools in districts with no library media supervisor;

- A larger portion of the periodical budget and funding for equipment comes from other sources than the school budget than in schools where there is no library media supervisor/coordinator.

Where a full-time rather than part-time library media supervisor/coordinator is on the district staff:

- A larger percentage of the expenditures for non-print resources comes from other sources than the school budget and more of the school budget is used for other operating expenditures than in library media centers with no district library media supervisor/coordinator.

Table 6. School Technology Resources (Average per School) Correlated with Presence and Status of District Library Media Supervisor/Coordinator

Technology	District Library Media Supervisor/Coordinator Position			District Library Media Supervisor/Coordinator			
	None	Part	Full	Full vs. None	Part vs. None	Full vs. Part	Supervisor (Full or Part) vs. None
Number of computers under media supervision	25.45	17.90	27.37	—	—	< 0.01	—
Number of other computers in the school	155.33	221.73	223.26	< 0.01	< 0.01	—	< 0.01
Number of standalone computers under media center supervision	4.05	3.64	7.24	< 0.01	—	< 0.01	< 0.01
Number of other standalone computers in the school	40.16	27.20	56.65	—	—	< 0.01	—
Internet capable computers under media center supervision	23.30	20.38	24.04	—	—	—	—
Other Internet capable computers in the school	129.99	206.36	187.96	< 0.01	< 0.01	—	< 0.01
Computers connected to the Internet under media supervision	27.40	18.45	22.96	—	—	—	—
Other computers connected to the Internet in the school	125.45	164.40	155.85	—	—	—	—
Computers on LAN under media center supervision	17.17	17.71	22.30	—	—	—	—
Other computers on LAN in the school	123.63	170.90	168.51	< 0.01	< 0.05	—	< 0.01
Computers on WAN under media center supervision	19.48	21.92	46.27	—	—	—	—
Other computers on WAN in the school	119.43	189.49	227.73	< 0.05	< 0.05	—	< 0.05
Number of computers in media center with access to online catalog	20.43	17.03	19.76	—	—	—	—
Number of other computers in the school with access to online catalog	57.68	136.28	137.66	< 0.01	< 0.01	—	< 0.01

Number of computers in media center with access to SUNLINK	25.97	16.71	21.38	-	-	-	-
Number of other computers in the school with access to SUNLINK	116.67	147.04	172.07	< 0.05	-	-	< 0.05
Computers under media center supervision with access to other online databases	18.83	10.27	17.97	-	-	< 0.01	-
Other computers in school with access to online databases	67.27	124.48	129.02	< 0.01	< 0.05	-	< 0.01
Computers with CD-ROM drives under media center supervision	21.80	22.82	27.91	-	-	-	None
Other computers in school with CD-ROM drives	119.26	205.24	196.69	< 0.01	< 0.01	-	< 0.01
Number of computers under media center supervision with access to networked CD resources	20.65	12.14	14.56	-	-	-	-
Other computers in school with access to networked CD resources	61.94	126.68	94.62	< 0.05	< 0.01	-	< 0.05
Computers with printer access under media center supervision	27.64	18.48	26.96	-	-	< 0.01	-
Other computers in the school with printer access	129.59	195.81	190.98	< 0.01	< 0.01	-	< 0.01
Computers under media center supervision with any accommodations for persons with disabilities	.58	.96	1.05	-	-	-	-
Other computers in the school with accommodations for persons with disabilities	1.64	12.47	13.86	< 0.01	-	-	< 0.01

Table 6 indicates the average numbers of computers and technology resources in K 12 schools in districts with full-time, part-time or no district level media supervisor/coordinators. Where there are full-time library media coordinators/supervisors, there are significantly more technology resources—especially in other areas of the school—to access information and library media center resources.

Where there is a district library media supervisor/coordinator:

- There are more standalone computers in the school library media center compared to those in schools with no district supervisor/coordinator.
- There are more computers in the school.
- More computers are connected to the LAN and WAN.
- More computers have CD-ROM drives and access to networked CD-ROMs than in schools in districts with no library media supervisor/ coordinator.
- More computers in the school have access to the Internet.
- More computers have access to the school's online catalog.
- More computers have access to SUNLINK and other online databases.
- There are more computers available in the school to accommodate learners with special needs.

Where there is a full-time supervisor/coordinator rather than a part-time library media supervisor/coordinator:

- There are more computers under library media supervision.
- There are more computers in the library media center with access to online databases.
- There are more computers in the library media center with printer access.

Where there is a part-time supervisor/coordinator as compared to no supervisor/coordinator:

- There are more computers and more Internet-capable computers in the school.
- There are more computers connected to the Internet, the WAN and the LAN.
- More computers have access to the school's online catalog and online databases.
- More computers have CD-ROM drives, networked CD-ROMs and printer access.

Table 7. Types of Computers (Average per School) Correlated with Presence and Status of District Library Media Supervisor/Coordinator

District Position	PC/Windows Computers*							Macintosh Computers*						
	Pentium I	Pentium II	Pentium III	Pentium IV	Other Windows	Obsolete PCs	Total PCs	G3	G4	iMac	PowerMac	Other Macs	Obsolete Macs	Total Macs
None	19.72	22.12	20.25	8.52	8.16	4.13	**51.12**	.88	.38	4.53	5.05	4.95	6.63	**13.55**
Part	24.30	25.20	30.55	4.39	4.56	5.62	**83.41**	1.24	.44	2.02	1.88	1.98	1.85	**8.92**
Full	16.14	21.55	28.36	7.83	7.38	6.60	**61.35**	6.86	1.58	16.61	13.57	5.97	11.04	**42.29**
District Library Media Supervisor/Coordinator														
Full vs. Part	—	—	—	—	—	—	—	<0.01	<0.01	<0.01	<0.01	—	—	<0.01
Part vs. None	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Full vs. Part	—	—	—	—	—	—	—	<0.01	<0.05	<0.01	<0.01	<0.01	<0.01	<0.01
Supervisor (Full or Part) vs. None	—	—	—	—	—	—	—	<0.01	<0.01	<0.01	<0.01	—	—	<0.01

Table 7 indicates numbers of computers by type in Florida's public schools when examined by district level school library media supervisor/coordinator positions: full-time, part-time and no district level library media supervisor/coordinator. Districts with full and part-time supervisors have significantly more Apple Macintosh computers than districts that have no district level staff, although there are generally less Macintosh computers than PC/Windows machines in schools.

Table 8. Technology Resources Correlated with Presence and Status of District Library Media Supervisor/Coordinator

Factor	District Library Media Supervisor/Coordinator Position			District Library Media Supervisor/ Coordinator			
	None	Part	Full	Full vs. None	Part vs. None	Full vs. Part	Supervisor (Full or Part) vs. None
Automated Circulation	96.7%	99.0%	99.3%	< 0.01	—	—	< 0.01
Automated Catalog	89.0%	98.0%	96.9%	< 0.01	< 0.05	—	< 0.01
Internet Accessible School Catalog	13.6%	28.6%	46.8 %	< 0.01	< 0.05	< 0.01	< 0.01
Automated District Catalog	10.0%	25.0%	55.2%	< 0.01	< 0.01	< 0.01	< 0.01
Telephone	94.4%	96.1%	98.4%	< 0.01	—	—	< 0.05
Fax	23.3%	12.7%	17.1%	—	—	—	—
CD-ROM Drives	96.7%	98.0%	98.2%	—	—	—	—
CD-ROM Server	33.0%	33.3%	38.2%	—	—	—	—
Video/Data Projector	70.3%	74.3%	83.0%	< 0.01	—	< 0.05	< 0.01
Digital Camera	80.2%	71.3%	81.7%	—	—	< 0.01	—
Satellite Dish	76.1%	45.5%	28.5%	(Negative) < 0.01	(Negative) < 0.01	(Negative) < 0.01	(Negative) < 0.01
Laptops	50.6%	46.1%	64.9%	< 0.01	—	< 0.01	< 0.05
DVD	26.1%	25.0%	32.1%	—	—	—	—
Audio CDs	81.1%	69.6%	81.3%	—	—	< 0.01	—
MP3	3.49%	5.05%	7.30%	—	—	—	—
CD-ROM Burner	39.3%	37.3%	43.3%	—	—	—	—
Photocopier	67.0%	57.8%	63.4%	—	—	—	—
Wireless Networking	14.0%	8.25%	18.0%	—	—	< 0.05	—
Keyboarding Devices	17.2%	17.0%	25.6%	—	—	—	—
Handheld Computers	11.1%	9.9%	11.4%	—	—	—	—
Email for Media Specialist	97.8%	97.1%	96.2%	—	—	—	—
Email for Teachers	90.1%	90.2%	91.4%	—	—	—	—
Email for Students	24.4%	23.5%	20.4%	—	—	—	—

Table 8 reviews other technology resources in school library media centers. While it is how technology is used that best determines educational outcomes, it must first be present in order for students and teachers to have access, learn to use it, and integrate it into the teaching and learning process.

Where there is a district level supervisor/coordinator full- or part-time:

- Schools are more likely to have an automated catalog and circulation system.
- The school library media centers online catalog is more likely to be accessible from home by students, parents and teachers.
- A district is more likely to have an automated district catalog of library media materials.

- School library media centers are more likely to have a telephone, fax machine, CD-ROM drives and servers, video and/or data projection, a digital camera, and laptop computers available for use.

Compared to districts with part-time library media supervisors, in districts where there is a full-time library media supervisor/coordinator:

- Schools are more likely to have Internet accessible school and district catalogs.
- Schools are more likely to have video and data projection systems, digital cameras, DVD players and wireless networking.

Comparing technology resources in schools with a part-time library media supervisor/coordinator to those in districts with no library media supervisor/coordinator:

- Schools are more likely to have an automated catalog and for that catalog be accessible from the Internet.
- Districts are more likely to have a district catalog.

Schools in districts with no district library media supervisor/coordinator are more likely to have a satellite dish than schools in other districts.

Table 9. Policies, Procedures and Other Related Factors Correlated with Presence and Status of District Library Media Supervisor/Coordinator

Factor	District Library Media Supervisor/Coordinator Position			District Library Media Supervisor/ Coordinator			
	None	Part	Full	Full vs. None	Part vs. None	Full vs. Part	Supervisor (Full or Part) vs. None
Information Skills Curriculum Is Used	38.2%	51.9%	61.3%	< 0.01	—	—	< 0.01
Board Approved Copyright Policy in Place	87.5%	89.5%	96.4%	< 0.01	—	< 0.01	< 0.01
Board Approved Collection Development Policy in Place	62.2%	76.0%	87.0%	< 0.01	< 0.05	< 0.01	< 0.01
Board Approved Technology Plan in Place	84.6%	85.4%	83.8%	—	—	—	—
Technology Plan Specifically Includes Media Center	77.8%	84.9%	81.2%	—	—	—	—
Board Approved Internet Access Policy or AUP in Place	96.6%	98%	96.8%	—	—	—	—
Internet Filtering in Place	92.1%	96.0%	93.3%	—	—	—	—
School Has Website	82.2%	93.1%	84.0%	—	< 0.05	(Negative) < 0.05	—
School Website Links to School Library Media Center	38.5%	57.0%	54.1%	< 0.01	< 0.05	—	< 0.01

School Media Center Web page Links to SUNLINK	21.8%	23.7%	22.5%	—	—	—	—
A WWW Resources Page is Maintained by the School Library Media Center Staff	34.8%	40.2%	37.6%	—	—	—	—
School Library Media Specialist Prepares and Present s Annual Budget Request	41.3%	36.1%	49.3%	—	—	< 0.01	—
Collection is Thoroughly Weeded	24.4%	29.6%	32.5%	—	—	—	—
Volumes Weeded	357.9	467.2	459.2	—	—	—	—
Classes Are Flexibly Scheduled	60.4%	48.7%	59.2%	—	—	—	—

When examining the data related to policies, procedures and other factors (Table 9), compared to districts where there is no district level supervisor/coordinator, where there is a district level supervisor/coordinator:

- Schools area more likely to have and use an established information skills curriculum.
- Schools are more likely to have board approved copyright and collection development policies.
- The school website is more likely to link to the library media center.

Where there is a part-time district level supervisor/coordinator compared to districts with none:

- Schools are more likely to have a collection development policy in place.
- Schools are more likely to have a website. (Schools in districts with part-time library media supervisors/coordinators are also more likely to have school websites than schools in districts with full-time library media supervisors.)
- The school website is more likely to link to the library media center.

Compared to districts with part-time library media supervisors, in districts where there is a full-time library media supervisor/coordinator:

- Schools are more likely to have copyright and collection development policies in place.
- School library media specialists are more likely to prepare and present an annual budget.

Conclusions

With some factors identified as statistically significantly different and positively correlated to the presence of a district supervisor/coordinator, the impact of those factors on student achievement becomes even more interesting and important. In *Powering Achievement: School Library Media Program Make a Difference* (2002), Keith Curry Lance and David Loertscher summarize the findings from studies in 9 states and over 3300 schools: "Strong school library media programs make a difference in academic achievement" (p. 3). Specifically:

- Reading scores tend to rise with levels of professional and support staff, size of the collection, spending on the collection, and the extent of school-wide networks that extend access to collection resources.

- Higher levels of librarian staffing are associated with longer library media center hours, higher levels of staff activity, higher students usage and higher test scores.

Michele Lonsdale (2003), in a comprehensive review of research related to school library media programs and student achievement adds:

- A strong computer network connecting the library's resources to the classroom and laboratories has an impact on student achievement.

- The quality of the collection has an impact on student learning.

- Test scores are higher when there is higher usage of the school library.

- A print-rich environment leads to more reading and free voluntary reading is the best predictor of comprehension, vocabulary growth, spelling and grammatical ability and writing style.

- The extent to which books are borrowed from school libraries (circulation) shows a strong relationship with reading achievement while borrowing from classroom libraries does not.

Although more research is needed to determine specific relationships, data presented here reveals that the presence of a district level school library media supervisor or coordinator makes a significant difference in collections, technology, budgets, staffing, policies, and activities of building level school library media programs and therefore ultimately on student achievement.

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Institutional Approval of Study and Informed Consent

This project/study and informed consent form were reviewed and approved by the University of Central Florida Institutional Review Board.

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Florida School Districts by Size

Districts	Students	District Rank
Very Large		
Dade	374,806	01
Broward	262,027	02
Hillsborough	169,682	03
Palm Beach	159,862	04
Orange	156,905	05
Duval	126,919	06
Pinellas	114,251	07
	1,364,452	
Large		
Polk	81,163	08
Brevard	71,718	09
Seminole	62,718	10
Volusia	62,339	11
Lee	60,661	12
Pasco	52,632	13
Escambia	44,648	14
	435,879	
Medium		
Marion	39,319	15
Manatee	38,250	16
Osceola	37,744	17
Sarasota	37,048	18
Collier	36,475	19
Leon	31,802	20
Okaloosa	30,858	21
Lake	30,626	22
St. Lucie	30,552	23
Alachua	29,599	24
Clay	29,013	25
Bay	26,033	26
Santa Rosa	23,228	27
St. Johns	20,918	28
	441,465	
Medium Small		
Hernando	17,939	29
Charlotte	17,302	30
Martin	16,790	31
Indian River	15,417	32

	Students	District Rank
Medium Small		
Citrus	15,221	33
Putnam	12,629	34
Highlands	11,303	35
Nassau	10,435	36
Columbia	9,560	37
Monroe	9,266	38
Hendry	7,584	39
Gadsden	7,431	40
Jackson	7,311	41
Flagler	7,144	42
	165,332	
Small		
Okeechobee	6,919	43
Sumter	6,378	44
Levy	6,253	45
Walton	5,968	46
Suwannee	5,797	47
Hardee	4,782	48
DeSoto	4,714	49
Wakulla	4,680	50
Baker	4,490	51
Bradford	4,096	52
Taylor	3,629	53
Holmes	3,537	54
Madison	3,439	55
Washington	3,373	56
Gilchrist	2,669	57
Dixie	2,264	58
Gulf	2,218	59
Calhoun	2,212	60
Hamilton	2,152	61
Union	2,130	62
Jefferson	1,709	63
Franklin	1,442	64
Liberty	1,321	65
Glades	1,099	66
Lafayette	1,030	67
	88,296	

Districts	Students
Special Districts	
FSU Lab School	1,409
UF Lab School	1,197
Deaf/Blind School	717
FAMU Lab School	515
FAU Lab School	478
Dozier/Okeechobee	419
	4,735
Total Number of Students	**2,500,161**

(Source: Dr. Wendy Cullar, Information Services for Education)

Table 1. Budget Information
Very Large Districts

	Elementary	Middle	High	Combination	Mean
Budget for books	3990	39466	10134	3833	11795
Other sources for books	11234	6462	11315	3430	10075
Budget for newspapers/ magazines	608	7898	2133	977	2280
Other sources for newspapers/ magazines	136	160	365	107	173
Budget for electronic format materials	683	514	1386	815	780
Other sources for electronic format materials	1114	674	1380	143	1041
Budget for non-print	786	1235	2563	1044	1223
Other sources for non-print	540	1738	1827	500	962
Budget for electronic access to information	112	274	2686	726	695
Other sources for electronic access to information	168	330	2267	0	550
School budget for operating expenditures	1493	2262	3893	1114	2067
Other sources for operating expenditures	2604	1634	1236	429	2140
Total operating expenditures from school budget	6602	9098	22103	7678	10145
Total operating expenditures from other sources	7465	7911	12312	3259	8235
School budget for equipment	23121	5261	20191	2820	17570
Other sources for equipment	8172	5432	8782	259	7342
School budget for capital purchases	1520	1031	12420	1406	3394
Other budget for capital purchases	561	2446	7076	1446	2686
Total capital outlay from school budget	7083	6104	31180	10495	17309
Total capital outlay from other sources	7912	6566	13186	13868	8990

Table 2. Budget Information
Large Districts

	Elementary	Middle	High	Combination	Mean
Budget for books	4643	4766	6460	5042	4950
Other sources for books	5745	6270	8770	3554	6210
Budget for newspapers/ magazines	531	826	1434	1148	758
Other sources for newspapers/ magazines	157	307	562	275	259
Budget for electronic format materials	1238	1039	972	556	1129
Other sources for electronic format materials	1114	693	645	187	925
Budget for non-print	772	1368	1715	889	1068
Other sources for non-print	501	970	1157	650	698
Budget for electronic access to information	264	799	1975	566	672
Other sources for electronic access to information	108	432	1682	750	456
School budget for operating expenditures	1232	2378	4523	785	1982
Other sources for operating expenditures	788	717	837	84	751
Total operating expenditures from school budget	7740	10222	16906	10439	9705
Total operating expenditures from other sources	7750	7926	12408	5375	8286
School budget for equipment	4054	2627	3502	2175	3653
Other sources for equipment	6006	5831	5776	6561	5956
School budget for capital purchases	1435	1160	677	100	1202
Other budget for capital purchases	2803	3099	615	29	2469
Total capital outlay from school budget	4861	3514	4142	2106	4382
Total capital outlay from other sources	6448	6166	6028	5397	6268

Table 3. Budget Information
Medium Districts

	Elementary	Middle	High	Combination	Mean
Budget for books	3090	3329	3649	3051	3263
Other sources for books	3761	5425	18116	2745	6681
Budget for newspapers/ magazines	598	760	1573	1000	815
Other sources for newspapers/ magazines	64	45	392	45	124
Budget for electronic format materials	553	493	715	504	565
Other sources for electronic format materials	1293	496	1670	62	1118
Budget for non-print	840	1015	1187	1129	946
Other sources for non-print	513	351	1223	250	594
Budget for electronic access to information	50	688	2081	68	602
Other sources for electronic access to information	63	11010	701	370	2388
School budget for operating expenditures	1581	2491	3058	2456	2088
Other sources for operating expenditures	1406	571	621	180	1083
Total operating expenditures from school budget	6313	8028	15055	7237	8252
Total operating expenditures from other sources	5816	25378	33498	3420	14690
School budget for equipment	2390	2459	10068	931	3713
Other sources for equipment	8487	4983	17028	8367	9424
School budget for capital purchases	1419	435	9292	312	3122
Other budget for capital purchases	367	3576	25043	0	5985
Total capital outlay from school budget	3456	2814	12037	1110	4810
Total capital outlay from other sources	7838	7601	12044	8367	8586

Table 4. Budget Information
Medium Small Districts

	Elementary	Middle	High	Combination	Mean
Budget for books	3263	4537	3888	3806	3782
Other sources for books	3516	5129	6643	2891	4212
Budget for newspapers/ magazines	598	1181	1253	885	821
Other sources for newspapers/ magazines	118	247	399	466	220
Budget for electronic format materials	553	352	1884	312	712
Other sources for electronic format materials	845	495	879	3389	1178
Budget for non-print	545	1043	1312	1014	783
Other sources for non-print	474	357	650	600	500
Budget for electronic access to information	66	720	1159	1016	458
Other sources for electronic access to information	229	1110	2033	442	737
School budget for operating expenditures	1033	2146	1801	2015	1432
Other sources for operating expenditures	663	237	798	583	625
Total operating expenditures from school budget	6442	8380	8380	9838	7415
Total operating expenditures from other sources	5008	6388	8018	5285	5732
School budget for equipment	1921	11119	1793	1222	3435
Other sources for equipment	5355	13705	3766	9729	6631
School budget for capital purchases	268	5215	479	142	878
Other budget for capital purchases	156	1300	625	1031	478
Total capital outlay from school budget	2025	15914	2095	1500	4079
Total capital outlay from other sources	4657	14517	5490	9165	6752

Table 5. Budget Information
Small Districts

	Elementary	Middle	High	Combination	Mean
Budget for books	3817	7007	4455	4354	4756
Other sources for books	4178	1851	4675	2269	3274
Budget for newspapers/ magazines	736	823	1606	990	945
Other sources for newspapers/ magazines	69	28	0	355	98
Budget for electronic format materials	545	127	1632	723	680
Other sources for electronic format materials	681	345	537	712	593
Budget for non-print	838	629	514	645	707
Other sources for non-print	211	303	12	86	185
Budget for electronic access to information	203	200	1540	541	431
Other sources for electronic access to information	633	357	0	291	436
School budget for operating expenditures	983	705	2962	1614	1352
Other sources for operating expenditures	653	235	187	1116	577
Total operating expenditures from school budget	6460	11699	10220	8192	8496
Total operating expenditures from other sources	5130	2117	5413	4581	4396
School budget for equipment	4671	300	7371	1206	3403
Other sources for equipment	2278	8	21900	4220	4917
School budget for capital purchases	235	285	80	66	181
Other budget for capital purchases	150	0	11250	80	2118
Total capital outlay from school budget	4677	566	7428	1433	3644
Total capital outlay from other sources	2363	250	44200	4287	6805

Table 8

Comparison of Mean and Median Expenditures for All Resources, All Funding Sources			
EXPENDITURES	2001–2002		
	Number Responding	Mean	Median
Local			
Total All Local Funds	583	$15,707	$11,236
Federal			
Total All Federal Funds	155	$5,318	$3,000
Gift Funds			
Total All Gift/Fundraising	334	$2,492	$1,161
TOTAL ALL FUNDS			
Books	577	$9,565	$7,100
Periodicals	574	$1,423	$1,000
AV Resources/Equipment	484	$2,647	$1,531
Microcomputer Resources/Equipment	454	$6,426	$2,800
TOTAL EXPENDITURES	588	$18,385	$13,341

Table 10

LMC Collection Size and Local Expenditures by Grade Level—2001–2002								
	Elementary n = 187		Middle/Jr. High n = 170		High n = 181		Other n = 55	
	Median	Mean	Median	Mean	Median	Mean	Median	Mean
Collections:								
Size of Book Collection	11,000	11,792	11,100	11,707	13,552	14,864	11,000	11,565
Number of Books per Pupil	22	24	15	16	15	48	22	24
Volumes Added, 2001-2002	457	658	500	714	400	671	453	537
Volumes Discarded, 2001-2002	200	373	150	349	150	406	150	415
Size of Video Collection	215	303	200	341	350	563	250	172
Videos per Pupil	.46`	.59	.31	.44	.40	.63	.31	.57
Videos Added, 2001-2002	14	24	15	24	20	47	12	57
Videos Discarded, 2001-2002	0	5	0	7	0	8	0	8
Size of DVD Collection	0	1	0	2	0	3	0	2
Size of Audio Tapes/CD Collection	2	22	3	17	5	33	0	20
Size of Software Collection	5	29	0	15	0	8	0	17
Size of CD-ROM Collection	12	107	5	35	0	19	3	37
Expenditures:								
Books	$4,326.00	$5,750.51	$6,500.00	$8,569.11	$9,000.00	$15,130.00	$4,000.00	$7,490.85
Books per Pupil	$8.87	$11.17	$8.60	$11.11	$9.55	$15.44	$8.88	$12.26
Periodicals	650.00	789.31	1,170.00	1,270.66	1,700.00	2,239.40	1,000.00	1,313.36
Periodicals per Pupil	1.28	1.54	1.41	1.79	1.92	2.74	2.37	2.89
Audiovisual Resources	759.00	1,219.88	700.00	1,048.44	1,800.00	2,819.65	500.00	734.92
Audiovisual Resources per Pupil	1.40	2.27	0.95	1.48	2.00	3.10	1.05	1.48
Software and CD-ROM Resources	600.00	1,644.69	600.00	1,121.97	990.00	2,234.29	800.00	1,036.89
Software and CD-ROM Resources per Pupil	1.15	3.00	0.89	1.51	1.18	2.63	1.77	2.15
WWW Based Products	400.00	614.00	1,389.00	1,812.00	3,500.00	5,332.60	1,200.00	2,429.86
WWW Based Products per Pupil	0.79	1.53	1.59	2.00	3.78	5.52	2.22	4.27
*Total Materials Expenditures (TME)	$9,500.00	$12,444.72	$12,850.50	$16,868.11	$21,188.50	$30,715.24	$11,400.00	$14,425.80
TME per Pupil	$18.75	$23.76	$17.01	$22.92	$22.35	$32.78	$21.10	$28.94

Table 11

LMC Collection Size and Local Expenditures by Regions—2001–2002								
	Northeast n = 138		South n = 197		North Central n = 156		West n = 101	
	Median	Mean	Median	Mean	Median	Mean	Median	Mean
Collections:								
Size of Book Collection	12,500	14,120	11,165	12,074	10,619	12,196	12,000	12,731
Number of Books per Pupil	18	20	16	18	18	22	15	19
Volumes Added, 1999-2000	465	588	462	774	364	580	500	693
Volumes Discarded, 1999-2000	150	383	150	357	120	364	200	448
Size of Video Collection	200	356	360	496	200	364	150	263
Videos per Pupil	0.28	0.47	0.53	0.65	0.40	0.60	0.17	0.42
Videos Added, 1999-2000	10	24	20	45	15	29	6	35
Videos Discarded, 1999-2000	0	5	1	7	0	8	0	6
Size of DVD Collection	0	2	0	2	0	2	0	2
Size of Audio Tapes/CD Collection	0	31	8	25	2	24	0	12
Size of Software Collection	0	8	5	24	3	19	0	15
Size of CD-ROM Collection	0	35	10	88	10	46	3	22
Expenditures:								
Books	$7,337.50	$11,006.00	$5,985.00	$7,866.29	$5,161.00	$7,011.95	$5,000.00	$9,888.20
Books per Pupil	$10.02	$15.29	$7.68	$10.50	$9.48	$10.88	$8.00	$10.31
Periodicals	1,500.00	1,898.48	1,000.00	1,164.54	1,132.00	1,479.81	820.00	1,099.24
Periodicals per Pupil	2.00	2.53	1.33	1.72	1.89	2.59	1.10	1.47
Audiovisual Resources	1,225.00	2,007.02	993.00	1,539.92	750.00	1,330.46	500.00	1,222.58
Audiovisual Resources per Pupil	1.88	2.60	1.24	2.10	1.33	1.98	0.77	1.66
Software and CD-ROM Resources	1,094.00	2,359.30	985.00	1,673.06	530.00	1,430.74	500.00	1,133.91
Software and CD-ROM Resources per Pupil	1.58	2.73	1.04	2.77	1.05	2.26	0.95	1.43
WWW Based Products	2,900.00	4,534.74	1,400.00	3,473.26	1,600.00	2,570.53	1,000.00	2,386.47
WWW Based Products per Pupil	3.45	5.10	1.87	3.12	2.43	4.19	1.08	2.29
*Total Materials Expenditures (TME)	$14,417.00	$21,165.10	$14,025.00	$17,539.68	$12,567.50	16,133.74	$13,000.00	$19,199.07
TME per Pupil	$21.57	$28.15	$18.12	$24.85	$20.06	$35.86	$19.23	$23.18

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