

July 2007

The Effect of Smart Cards on Library Use: The Griffin Technical College Case

Wendy S. Wilmoth

Griffin Technical College, wwilmoth@griffintech.edu

Follow this and additional works at: <https://digitalcommons.kennesaw.edu/glq>

 Part of the [Library and Information Science Commons](#)

Recommended Citation

Wilmoth, Wendy S. (2007) "The Effect of Smart Cards on Library Use: The Griffin Technical College Case," *Georgia Library Quarterly*: Vol. 44 : Iss. 2 , Article 5.

Available at: <https://digitalcommons.kennesaw.edu/glq/vol44/iss2/5>

This Article is brought to you for free and open access by DigitalCommons@Kennesaw State University. It has been accepted for inclusion in Georgia Library Quarterly by an authorized editor of DigitalCommons@Kennesaw State University. For more information, please contact digitalcommons@kennesaw.edu.

WILMOTH WHITE PAPER

The Effect of Smart Cards on Library Use: The Griffin Technical College Case

by Wendy S. Wilmoth

The AxisCard smart card has been in use on a trial basis at Griffin Technical College since the beginning of fall quarter 2005. Several classes received the card and were encouraged to use it in the hopes that it will increase their usage of the library and its resources. This study, using a quasi-experimental design, evaluates the card's effect on usage of library services and resources, AxisCard online features, physical facilities and print resources. The survey was administered to two groups. The first group received the AxisCard in fall 2005. The second group is a nonequivalent control group of students, taking the same courses in the winter, who did not have the AxisCard. A chi-square determined that there was very little statistical difference between the groups in most categories, however use of GALILEO and some print resources showed a significant difference. The percentages of students indicating that they never used certain library resources show promise for further study.

A simultaneously administered satisfaction survey indicated general usage of most card services, high satisfaction, and a desire for more services, especially from home. AxisCard is recommended as a useful resource for academic libraries and other academic services.

Introduction

In 2005, the Library Council of the Georgia Department of Technical and Adult Education (DTAE) chose the Griffin Technical College Library as a test site for use of the AxisCard, a technology designed to facilitate ease of use of library resources, solve the problem of multiple passwords, and save important personal information that is repeatedly entered into online forms. Griffin Tech was chosen for three reasons: its central location which facilitates visits by representatives of all colleges, its medium size, making the project relevant to both larger and smaller colleges, and its reputation for being a leader in library technology for the DTAE system. The test of the AxisCard had been underway for an entire academic quarter, so the Griffin Tech library management decided to evaluate how the card has affected library usage in general.

Literature Review

Rumsey (2002) defined a smart card as "a plastic card, similar to a credit card, with an embedded microchip" (p. 38). It is distinguished from the more prevalent "mag-stripe" card by its vastly increased storage capability and its microprocessor (Myhill, 1998). Smart cards have been in use, primarily as identification and debit cards, in colleges and universities since a few pilot projects were

implemented in the mid-1990s. The first university smart card system was implemented at the University of Exeter (U.K.) in 1996. Managed by a local bank, it was used as a pass card for campus buildings and services, a debit card, and a library card. At the end of the initial pilot project, there was high student approval of the card system (Myhill, 1998). At Florida State University, the card has also been used for vending machines, laundromats, telephone services, and for purchase at local stores. FSU has found the greatest benefit of the card to be the ease and convenience of disbursing financial aid. Use of the card has eliminated lines at the financial aid office through direct deposit of loans into student accounts (Wiens, 2001).

Smart card use in libraries appears to be moving in a different direction, and more slowly, than in the rest of academe. In the mid-1990s, a consortium of European libraries began using the TOLIMAC (Total Library Management Concept) system to provide easy access to fee-based information services through libraries. The card also has debit card capabilities and can be used to pay for the services. The primary advantage of using a smart card is security for the patron. Since the patron information is stored on the card and encrypted, information

providers do not have access to it and cannot track users (Rumsey & Spoiden, 2000). Exeter's smart card was used to check out materials, pay fines, and use photocopiers (Myhill, 1998).

In the library world, it appears that public libraries are leading the way in creating innovative functions for smart cards. Public libraries in Cornwall County, U.K. issued the cards to a targeted population in 2001. Functions of the cards included not just library services but a host of municipal and county services including bus fares and parking lot fees. (Jenkins, 2004). The Englewood (Colorado) public library began using the PubliCARD SmartGuardian system in 1999 to limit children's access to the internet while protecting adults' access. SmartPassky, also developed by PubliCARD, stores passwords for auto-login, favorites, and frequently used information such as names, addresses, and credit card numbers, for use on enabled computers ("PubliCARD", 1999).

There are several examples of positive feedback on smart cards. As Myhill (1998) mentioned, the pilot project at Exeter was very well received, with ninety percent of surveyed students recommending the program be continued. The TOLIMAC system was also well received by patrons who participated in a quasi-experimental study of the patrons' ability to learn the system, combined with debriefing interviews (Rumsey & Spoiden, 2000). This study found that speed of document delivery and the debit function were popular among patrons. Administrator interviews suggest a success at Florida State University (Wiens, 2001). A survey of two groups of students, one with the cards and one without, conducted by Lee, Cheng, and Depickere (2003) found that many students at two universities in Australia and Singapore had a very favorable view of the cards and intended to

continue using them if they already have them and begin using them at some point in the near future if they do not, provided they do not disrupt the students' routines.

Everything is not perfect, though. Rumsey (2002) noted that the card has been dropped at some of the original implementation sites. A possible explanation of this is the limited use of the cards and the discontinuation of the underwriting of the program by local banks. Vandooren (1998) noted that the cost of the individual cards is much higher than mag-stripe and barcode cards, making initially issuing cards and replacing lost ones costly.

AxisCard, the technology being tested at Griffin Tech, is similar to SmartGuardian and SmartPassky. Like SmartPassky, it saves auto-logins, remembers favorites, and stores personal information for use in filling out online forms with an "auto-fill" function that fills out forms at the click of a mouse. In contrast to SmartGuardian's access-blocking function, it allows libraries to direct users' attention to recommended sites (Offshoot Systems, 2005).

Evaluation of systems like AxisCard can add to the body of research on favorable/unfavorable views of smart cards by examining how they affect not just perceptions, but also actual use of those services they access and the academic success of students who use the technology. Griffin Tech, as a test site for the entire technical college system in Georgia, is an ideal subject for such a study.

Background

In September of 2005, the AxisCard was issued only to students in several core curriculum courses. These courses were chosen because they are taught with a different group of students each quarter, and because they all require a research project that

would ideally prompt students to visit the library. The library installed AxisCard readers and software on all publicly accessible computers. Functions of the card at Griffin Tech include storage of login information for multiple websites, storage of bookmarks for frequently visited sites, storage of personal information to automatically fill out online forms, storage of library-recommended URLs, and storage of multiple user profiles for use of online resources. The card serves as the official student identification for these students, though it is not currently used as a smart card anywhere else on campus. Library employees have also been issued AxisCards and have been trained to operate the card system.

The test period for this project was fall quarter, which ended on December 14, 2005. In winter quarter 2006 card usage was evaluated to determine whether it should be expanded to all Department of Technical and Adult Education campuses.

Purpose

The purpose of this study is to determine whether the AxisCard has had an effect on use of the library's technologies, resources, and services, and whether the effect is significant enough and positive enough to recommend adoption of the AxisCard by all DTAE libraries. A significant effect is defined as one shown to be statistically significant by the administration of a chi square. A positive effect is defined as an increase in usage of the library's technologies, resources, and services, especially those directly associated with AxisCard. A secondary purpose of this study is to determine student perceptions of the card.

Methodology

As an evaluation, this design must contain certain elements. The most important element, in fact the one

without which evaluation can't take place, is the intervention. In this case, the intervention is the issuance of the AxisCard. The intervention must be intended to produce some change in behaviors or situations. The response variable is use of the library's technologies, resources, and services. In this case the intended result (or change in response variable) is increased use of the library's technologies, resources, and services.

The research design of this evaluation project is quasi-experimental, since there will be no random sampling of subjects, or random assignment to groups. Fortunately, the quasi-experimental design of the project makes sampling simple. There are 135 students who have been issued cards. The identities of these students have been well documented, and they are relatively easy to reach for survey purposes. This group is the experimental group. For the control group, students enrolled in the winter-quarter sections of these same courses were used. The assumption is that they are at roughly the same point in their academic careers and have virtually identical assignments to those of the experimental group, making them a nonequivalent control group as described by Babbie (2004). A nonequivalent control group has not been chosen randomly from the same pool as the experimental group, but has been carefully selected to have similar characteristics, thereby eliminating as much bias as possible without random selection and assignment. Another assumption must be that these students have never used a smart card in a college setting, since most colleges do not use the cards.

A questionnaire was created to survey the groups. The questionnaire asks respondents to indicate how often they use thirteen separate library resources with the following response choices for each option:

Appendix A: Frequency and Significance

Internet Access

	Every Day	Once/twice a week	Once/twice a month	Once/twice a quarter	Never	Total
AxisCard	5	19	10	17	11	62
No AxisCard	8	19	4	10	21	62
Total	13	38	14	27	32	124

Degrees of freedom: 4
 Chi-square = 8.20355107855108
 For significance at the .05 level, chi-square should be greater than or equal to 9.49.
 The distribution is not significant.
 p is less than or equal to 0.10.

GALILEO Databases

	Every Day	Once/twice a week	Once/twice a month	Once/twice a quarter	Never	Total
AxisCard	2	5	16	20	19	62
No AxisCard	0	4	5	12	40	61
Total	2	9	21	32	59	123

Degrees of freedom: 4
 Chi-square = 17.3406082462742
 p is less than or equal to 0.01.
 The distribution is significant.

Library Catalog

	Every Day	Once/twice a week	Once/twice a month	Once/twice a quarter	Never	Total
AxisCard	0	1	8	8	45	62
No AxisCard	0	1	7	11	42	61
Total	0	2	15	19	87	123

Degrees of freedom: 1
 Chi-square =
 For significance at the .05 level, chi-square should be greater than or equal to 3.84.
 The distribution is not significant.
 p is less than or equal to 1.

Noodle Tools

	Every Day	Once/twice a week	Once/twice a month	Once/twice a quarter	Never	Total
AxisCard	0	2	7	19	34	62
No AxisCard	0	2	2	7	49	60
Total	0	4	9	26	83	122

Degrees of freedom: 1
 Chi-square =
 For significance at the .05 level, chi-square should be greater than or equal to 3.84.
 The distribution is not significant.
 p is less than or equal to 1.

Subject Guides on the Library's Web Site

	Every Day	Once/twice a week	Once/twice a month	Once/twice a quarter	Never	Total
AxisCard	1	2	11	10	38	62
No AxisCard	0	4	6	9	43	62
Total	1	6	17	19	81	124

Degrees of freedom: 4
 Chi-square = 3.49852845621679
 For significance at the .05 level, chi-square should be greater than or equal to 9.49.
 The distribution is not significant.
 p is less than or equal to 1.

Appendix A: Frequency and Significance (Continued)

Newspapers

	Every Day	Once/twice a week	Once/twice a month	Once/twice a quarter	Never	Total
AxisCard	2	2	2	12	44	62
No AxisCard	2	5	7	7	41	62
Total	4	7	9	19	85	124

Degrees of freedom: 4

Chi-square = 5.48516389011745

For significance at the .05 level, chi-square should be greater than or equal to 9.49.

The distribution is not significant.

p is less than or equal to 1.

Print Journals / Magazines

	Every Day	Once/twice a week	Once/twice a month	Once/twice a quarter	Never	Total
AxisCard	2	1	6	15	38	62
No AxisCard	0	8	9	8	36	61
Total	2	9	15	23	74	123

Degrees of freedom: 4

Chi-square = 10.2214788213823

p is less than or equal to 0.05.

The distribution is significant.

Read Books in the Library

	Every Day	Once/twice a week	Once/twice a month	Once/twice a quarter	Never	Total
AxisCard	0	2	11	15	34	62
No AxisCard	1	2	6	14	38	61
Total	1	4	17	29	72	123

Degrees of freedom: 4

Chi-square = 2.71934287856538

For significance at the .05 level, chi-square should be greater than or equal to 9.49.

The distribution is not significant.

p is less than or equal to 1.

Checked Out Books

	Every Day	Once/twice a week	Once/twice a month	Once/twice a quarter	Never	Total
AxisCard	0	1	4	18	39	62
No AxisCard	0	2	4	8	48	62
Total	0	3	8	26	87	124

Degrees of freedom: 1

Chi-square =

For significance at the .05 level, chi-square should be greater than or equal to 3.84.

The distribution is not significant.

p is less than or equal to 1.

Used Group Study Rooms

	Every Day	Once/twice a week	Once/twice a month	Once/twice a quarter	Never	Total
AxisCard	1	4	2	9	46	62
No AxisCard	0	2	4	8	48	62
Total	1	6	6	17	94	124

Degrees of freedom: 4

Chi-square = 2.43471005423446

For significance at the .05 level, chi-square should be greater than or equal to 9.49.

The distribution is not significant.

p is less than or equal to 1.

every day, once or twice a week, once or twice a month, once or twice a quarter, and never. A satisfaction survey was added to assess the AxisCard holders' attitudes toward the card and its usefulness. Questions addressed the services students used, services students would like to have available, and whether students would recommend the card.

The questionnaire was pre-tested on the library staff in January 2006 for fine-tuning. The questionnaire was then edited and presented to the experimental group in February. The questionnaire was administered to the experimental group by library staff in their current quarter classes. The nonequivalent control group was surveyed in March, at the end of their quarter in the courses. The questionnaire was administered during class time.

Unfortunately it was not possible to survey a total census of the students as had been planned. Several students had dropped out of school for the winter quarter. Additionally, many students who were in one of the courses in the fall were in another of the selected courses in the winter, and therefore already had the AxisCard. The sample therefore resembles an available subjects sample. Fortunately, however, these two phenomena resulted in experimental and control groups of almost exactly the same size.

Data Analysis

Few questions went unanswered by respondents. The Scantron process was used to determine percentages, while frequencies were computed in an Excel spreadsheet. Because the Scantron machine rounds up to the nearest tenth, in some cases the total percent on the sheet equals 100.1. The Georgetown University online chi-square calculator was used to determine significance. Frequency

and significance tables are included in this article as Appendix A.

The results were statistically significant in only two cases: GALILEO Databases and print journals and magazines. Reports of usage of the GALILEO databases were higher in all positive usage categories (every day, once or twice a week, once or twice a month, once or twice a quarter) among AxisCard holders. Only 31.1 percent of AxisCard holders reported never using GALILEO databases compared with 65 percent of the non-AxisCard holders.

The reporting of print journals and magazines suggests a more complicated pattern of use. While no non-AxisCard users reported using the journals and magazines every day, they outpaced the AxisCard holders in the "once or twice a week" and "once or twice a month" categories. AxisCard holders reported more "once or twice a quarter" usage, but slightly more (62.3 percent to 58.3 percent) of the AxisCard holders reported never using journals and magazines at all.

While statistical significance across the distribution was somewhat disappointing, a look at the percentages of students reporting that they never use the library resources is worthy of mention (Appendix B). In all but one of the electronic resource categories, more non-AxisCard holders reported never using the resources than did AxisCard holders. The lone exception was the category of the library catalog. A slightly higher percentage of card holders reported never using the catalog than did non-card holders. In the physical, or non-electronic categories, there were a few noticeable differences between the reports of the card holders and the non-card holders. More of the non-card holders (61.7% to 52.5%) reported that they never read books

in the library. More of the non-card holders (77 % to 62.3%) reported that they never checked out books. More of the non- AxisCard holders (49.2% to 31.1%) reported that they never used the library tables for study. Finally, more of the non-AxisCard holders (46.7% to 29.5%) reported that they never asked the librarians a question.

The satisfaction survey gave a good picture of students' attitudes toward the card (Appendix C). Of AxisCard holders, 77% reported that they would recommend the card to other students. The most used service was the storage of passwords (40.32% of respondents chose this non-mutually

exclusive option), followed by personal bookmarks/favorites (30.65%) and library recommended bookmarks/favorites and stored user profiles (20.97% each). Auto form-fill followed at 19.35 %, followed by "other" (9.67%).

Students indicated a strong desire to use other services not currently provided at Griffin Tech. Over sixty-one percent wanted access to their BANNER accounts with the card, followed by use in vending machines at 43.55%, access to photocopiers (41.93%), storing word processing files (41.94%), and customized desktop (38%). Printing from computers was next at 32.26 %.

Appendix A: Frequency and Significance (Continued)

Used Library Tables for Study

	Every Day	Once/twice a week	Once/twice a month	Once/twice a quarter	Never	Total
AxisCard	4	13	9	17	19	62
No AxisCard	2	9	8	13	30	62
Total	6	22	17	30	49	124

Degrees of freedom: 4
 Chi-square = 4.45548401178653
 For significance at the .05 level, chi-square should be greater than or equal to 9.49.
 The distribution is not significant.
 p is less than or equal to 1.

Used Audiovisual Resources

	Every Day	Once/twice a week	Once/twice a month	Once/twice a quarter	Never	Total
AxisCard	1	0	4	8	49	62
No AxisCard	2	2	1	9	47	61
Total	3	2	21	17	96	123

Degrees of freedom: 4
 Chi-square = 4.22597277739758
 For significance at the .05 level, chi-square should be greater than or equal to 9.49.
 The distribution is not significant.
 p is less than or equal to 1.

Asked a Librarian a Question

	Every Day	Once/twice a week	Once/twice a month	Once/twice a quarter	Never	Total
AxisCard	6	8	15	16	17	62
No AxisCard	1	6	14	12	28	61
Total	7	14	29	28	45	123

Degrees of freedom: 4
 Chi-square = 7.14428521933035
 For significance at the .05 level, chi-square should be greater than or equal to 9.49.
 The distribution is not significant.
 p is less than or equal to 0.20.

“Other” was last with 8.06%. Seventy-four percent indicated a desire to use the AxisCard at home. Comments were generally positive; however, seven of the fourteen comments mentioned that the respondents had not used the card. Other comments included a desire for expanded services, a desire for

support for a wider variety of browsers, and difficulty among some respondents in using the card.

Conclusion

AxisCard use at Griffin Tech shows promise. Some significant change in library use has been recorded by this study. The card seems to have some

effect on use of GALILEO and print journals and magazines. The effect on use of the journals and magazines seems to be rather complicated, and further study of this phenomenon could produce some reasons for it. Perhaps more AxisCard users report that they never use these resources at all because they are more likely to

**Appendix B:
Percentages**

Internet Access

	Daily	1x / 2x a week	1x / 2x a month	1x / 2x a quarter	Never	Total %
AxisCard	2.9	7.3	13	22.8	54	100
No AxisCard	2	8.2	9.4	15.7	64.7	100

GALILEO Databases

	Daily	1x / 2x a week	1x / 2x a month	1x / 2x a quarter	Never	Total %
AxisCard	3.3	8.2	26.2	31.1	31.1	99.9
No AxisCard	0	6.7	8.3	20	65	100

Library Catalog (Web Safari)

	Daily	1x / 2x a week	1x / 2x a month	1x / 2x a quarter	Never	Total %
AxisCard	0	1.6	13.1	11.5	73.8	100
No AxisCard	0	1.7	11.7	16.7	70	100.1

Noodle Tools

	Daily	1x / 2x a week	1x / 2x a month	1x / 2x a quarter	Never	Total %
AxisCard	0	3.3	9.8	31.1	55.7	99.9
No AxisCard	0	3.4	3.4	10.2	83.1	100.1

Subject Guides on the Library’s Web Site

	Daily	1x / 2x a week	1x / 2x a month	1x / 2x a quarter	Never	Total %
AxisCard	1.6	3.3	18	16.4	60.7	100
No AxisCard	0	4.9	9.8	14.8	70.5	100

Newspapers

	Daily	1x / 2x a week	1x / 2x a month	1x / 2x a quarter	Never	Total %
AxisCard	3.3	3.3	3.3	19.7	70.5	100.1
No AxisCard	3.3	8.2	9.8	11.5	67.2	100

Journals / Magazines

	Daily	1x / 2x a week	1x / 2x a month	1x / 2x a quarter	Never	Total %
AxisCard	1.6	1.6	9.8	24.6	62.3	99.9
No AxisCard	0	13.3	15	13.3	58.3	99.9

Read Books in the Library

	Daily	1x / 2x a week	1x / 2x a month	1x / 2x a quarter	Never	Total %
AxisCard	0	4.9	18	24.6	52.5	100
No AxisCard	1.7	3.3	10	23.3	61.7	100

Checked Out Books

	Daily	1x / 2x a week	1x / 2x a month	1x / 2x a quarter	Never	Total %
AxisCard	0	1.6	6.6	29.5	62.3	100
No AxisCard	0	3.3	6.6	13.1	77	100

Used Group Study Rooms

	Daily	1x / 2x a week	1x / 2x a month	1x / 2x a quarter	Never	Total %
AxisCard	1.6	6.6	3.3	14.8	73.8	100.1
No AxisCard	0	3.3	6.6	11.5	78.7	100.1

Used Library Tables for Study

	Daily	1x / 2x a week	1x / 2x a month	1x / 2x a quarter	Never	Total %
AxisCard	6.6	19.7	14.8	27.9	31.1	100.1
No AxisCard	3.3	16.4	11.5	19.7	49.2	100.1

Used Audiovisual Resources

	Daily	1x / 2x a week	1x / 2x a month	1x / 2x a quarter	Never	Total %
AxisCard	1.6	0	6.6	11.5	80.3	100
No AxisCard	3.3	1.7	1.7	13.3	80	100

Asked a Librarian a Question

	Daily	1x / 2x a week	1x / 2x a month	1x / 2x a quarter	Never	Total %
AxisCard	9.8	11.5	23	26.2	29.5	100
No AxisCard	1.7	10	21.7	20	46.7	100.1

use electronic versions, having already logged in with AxisCard. Maybe the reverse is true of the non-card holders. They may see no compelling reason to use the computers since they do not have the enhanced services of AxisCard, and instead use the print resources. In spite of the lack of significant change in most of the categories, the decreased percentage of students in several categories reporting that they never use the resources contains some hope that the AxisCard may be having a small effect that can be increased with careful work and involvement by the library staff. In many of the categories, more of the non-card holders reported never using the resources than did the card holders. Whether this is a direct result of card issuance remains to be seen.

The satisfaction survey indicated wide usage of the password storage and book-marking features of the card. Since over 9% of responses indicated that other services were used it might be advisable to survey students again in a few months and use an open-ended addendum to that question. It would be interesting to see if the students have discovered features of which we were not aware, or if this is the result of a misunderstanding of the other response options.

Among the desired services, students indicated a strong preference for access to their registration and academic records through BANNER, a student-record system. The main functions in BANNER that would require a smart card are login and password storage. Every response option for desired services except for "other" had response rates higher than thirty percent of all respondents, indicating that students might use these services enthusiastically if they were offered. About eight percent desired other services. Again, a repeat survey could be done with an open-ended response option to

determine what specific services the students desired.

Students indicated by a wide margin that they want to have AxisCard access at home. This makes sense. Many services such as password storage, automatic form fill, and stored user profiles are not used just in the library. This is another service that should be adopted if funding permits.

Finally, over three quarters of card holders indicated that they would recommend the card to other students. We consider this to be a resounding endorsement of the card.

Although the satisfaction survey indicates a positive response, further research is recommended. It may be

advisable to conduct a more qualitative study of the AxisCard. In a focus group or interview environment, researchers may learn about barriers to both AxisCard use and library use that they may not have considered before. Also, expansion of the AxisCard to other on-campus uses may raise its profile and make students more likely to use it both inside the library and out.

Although there have not been significant changes in library use as a result of the card in many categories, the arguable "crowning jewel" of Georgia's library resources, GALILEO, has had increased use among card holders. This is a positive step in making more students aware of this

Continued on page 27

Appendix C: Satisfaction Survey

% of 62 respondents	Frequency	
Which Smart Card (AxisCard) services have you used?		
40.32%	25	Stored Passwords
30.65%	19	Personal Bookmarks/favorites
20.97%	13	Library-recommended bookmarks/favorites
19.35%	12	Stored Personal Information for filling out forms
20.97%	13	Stored user profiles
9.67%	6	Other
Would you recommend Smart Card (AxisCard) to another student?		
77.42%	48	Yes
4.84%	3	No
17.74%	11	No Data
What services would you like to be able to use with the card?		
41.93%	26	Access to photocopiers
32.26%	20	Printing from computers in the student labs
37.10%	23	Log in to campus computers with a customized desktop
43.55%	27	Use in vending machines in the student break area
61.30%	38	Access BANNER account for registration/grade reports
41.94%	26	Storing word processing files
8.06%	5	Other
Would you like to be able to use the card from your home computer?		
74.19%	46	Yes
8.06%	5	No
17.74%	11	No Data

Secretary

Elizabeth Bagley

Elizabeth Leslie Bagley has served as Director of Library Services at Agnes Scott College in Decatur since March 2006. Previously, she worked in Georgia's public higher educational arena as an associate university librarian at Georgia State University Libraries and as library director at Dalton State College and South Georgia College. Before joining academic libraries, Liz held public services and children's programming positions in two public library systems. She received her undergraduate degree in English from Mount Holyoke College in Massachusetts and a Master's degree in library and information management from Emory University. Her professional activities include serving as Chair of the GALILEO Steering Committee from 1999-2000 and as a member of that committee for six years. She also has been active on the GIL Steering Committee, RACL (Regents' Academic Committee on Libraries), an ALA University Libraries section committee, and as an accreditation reviewer for SACS (the Southern Association of Colleges and Schools). A GLA member since 1987, Liz served previously as the organization's secretary (1996-1997). Her other service to the Georgia Library Association includes chairing the Academic Library Division; reviewing books for *GLQ*; creating a history panel on rural libraries for the GLA Centennial; and co-chairing the Nominating Committee.



Stephanie Middleton

Stephanie Middleton is Director of Library and Media Services at Columbus Technical College. She earned her Master of Library and Information Science from the University of South Carolina, 1994; and her Bachelor of Arts in Computer Science from LaGrange College. She has served as Catalog Librarian at West Georgia Technical College in LaGrange, 1998 – 2000; Systems Librarian 1994-1998, Computer Systems and Circulation Manager, 1991–1998, William and Evelyn Banks Library, LaGrange College. Her professional activities include: Georgia Educational Technology Conference 1995 – 98; National Educational Technology Conference 1996; International SIRSI Users Conference 1997, 1998; President Academic Special Group, Georgia Unicorn Users Conference 1996 – 98; President of Georgia Group; DTAE Library Council 1998-2007, Chair Library Automation Committee 1999 – 2006, Vice-Chair of Council 2001, Chair of Council 2002; American Library Association Conference 2001, 2002; COMO Georgia Library Association 1994 – 2006; Columbus Area Library Association 2002 – 2007, Treasurer 2002, 2003, Vice-President 2005; Azalea Storytelling Festival Committee 1998 – 2004, Executive Committee member; Southern Association of Colleges and Schools December 2002 – 2005; GALILEO Steering Committee 2002 – 2006; Georgia Council on Libraries 2003, 2004; GOLD Executive Committee 2004 – 2006.



SELA Representative

Michael Seigler

Michael Seigler has been the Director of the Smyrna Public Library since 1995. Prior to that he was an Associate Director at the Pine Mountain Regional Library System and Director of the Atlanta Law School Library. Michael is active in several library associations. In the past he was chair of the FLA Junior Member Roundtable; GLA's Government Relations Committee; and the COMO Steering Committee. He served as president of the Metro Atlanta Library Association in 1998 and as president of GLA in 2000. Currently Michael is chair of GLA's Constitution and Bylaws Committee and co-chair of SELA's Constitution and Handbook Committee.



gla.georgialibraries.org

Smart Cards

Continued from page 21

resource and getting them to use it. Academic libraries appear to be slow in adoption of smart card technology in comparison to other academic units and public libraries. Technical and community college libraries have just begun to enter the smart card era. With the Griffin Tech project, technical and community college libraries in Georgia and elsewhere have a preview of how this technology would work for them, how best to implement it, and what problems to expect. AxisCard is recommended as a resource that students want, are able to use, and may use to further access library resources, facilities, and services. ►►

Wendy S. Wilmoth received her M.L.I.S. from Valdosta State University in 2006.

References:

- Babbie, E. (2004). *The practice of social research*. Belmont, CA: Wadsworth.
 Barnett-Ellis, P. and Charnigo, L. (2005). Wireless networks in medium-

sized academic libraries: A national survey. *Information Technology and Libraries*, 24 (1), 13-21.

Jenkins, S. (2004). Cornwall unlocks smartcard potential. *Public Library Journal*, 19 (2), 2-4.

Lee, C., Cheng, Y. & Depickere, A. (2003). Comparing smart card adoption in Singapore and Australian Universities. *International Journal of Human-Computer Studies*, 58(3), 307-25

Myhill, M. (1998). Smartcards in libraries: A brave new world. *The Electronic Library*, 16 (1), 17-23.

Offshoot Systems, L.L.C. (2005). *AxisCard: Your library web card*. Retrieved November 13, 2005 from www.axiscard.com.

PublicCARD shows SmartGuardian, SmartPassky. (1999, September). *Advanced Technology Libraries*, 28, 4-5

Rumsey, S. (2002). Smart cards in universities: Exciting technological development or damp squib? (Part 1). *Managing Information*, 9 (3), 38-9.

Rumsey, S. & Spoiden, A. (2000). Evaluation of Tolimac: A secure library management system for controlling access to, and payment for, electronic information services. *Journal of Librarianship and Information Science*, 32 (2), 64-71.

Vandooren, F. (1998). Access control, payment, and smart cards in libraries. *The New Review of Information Networking*, 4, 189-205.

Wiens, J. (2001). Establishing a successful smart card program. *College Planning & Management*, 4 (11), 18,20.