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Janet H. Clarke  
janet.clarke@stonybrook.edu

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## Partnering with IT to Help Disadvantaged Students Achieve Academic Success

JANET H. CLARKE

*Stony Brook University Libraries, Stony Brook, New York, USA*

*This case study will describe how the Stony Brook University Libraries instruction program partnered with another student support service (student computing office) to nurture a relationship with the Educational Opportunities Program (EOP) over several years to provide their students with the library research and computer skills needed to succeed in college. EOP is a state-funded program aimed at economically disadvantaged students whose high school education has not fully prepared them for college success.*

*KEYWORDS academic libraries, collaboration, economically disadvantaged students, EOP, partnerships, student outreach*

When we think of information literacy in higher education, we usually connect it with the academic curriculum as its primary location, as articulated by the Association of College and Research Libraries standard on information literacy competencies in higher education: “Achieving competency in information literacy requires an understanding that this cluster of abilities is not extraneous to the curriculum but is woven into the curriculum’s content, structure, and sequence” (“Information literacy,” 2000). Library literature abounds with innovative ways to incorporate information literacy skills and competencies through course-integrated sessions and even stand-alone credit-bearing courses whose main focus is information literacy. In fact, because we spend so much time in these instructional priorities, we sometimes have to limit or cut less rigorous or extracurricular requests, such as

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Received ■.

Address correspondence to Janet H. Clarke, Stony Brook University Libraries, Frank Melville Jr. Memorial Library, W-1514, Stony Brook, NY 11794-3300. E-mail: janet.clarke@stonybrook.edu

tours and sessions that are not tied to specific research assignments. With tighter budgets and fewer staff, it becomes more imperative that we be strategic about outreach efforts that are not directly related to the research and learning missions of the institution. The tough economy has also made college admissions at public universities more competitive, as more students opt for the more affordable public institutions (Mangan, 2008). In such an environment, one group that may be especially vulnerable is economically disadvantaged students. While they may be served by a student support service, like state-funded educational opportunity programs, they are not the usual candidates for information literacy instruction because, as a group, they don't fall neatly into the curricular structure.

That is, unless the library or the student support service reaches out.

This case study explores how the Stony Brook University Libraries instruction program nurtured a relationship with the Educational Opportunities Program (EOP) on campus over several years to provide incoming EOP students with the basics of library research skills to increase student self-confidence and academic success. In fostering this partnership, the library teamed up with a second student support service, the student computing service (IT), to create a learning block of information literacy and information technology skills for these students. The goals of increasing their self-confidence and sharpening their skills for academic success were mutually shared by EOP, IT, and the library.

## HISTORICAL BACKGROUND OF EOP

Following the civil rights movement and student protests in the late 1960s for a more relevant and democratic academic curriculum, colleges and universities began to address the needs of minority and economically disadvantaged students. Economically disadvantaged students are “from families characterized by historical, educational, economic and cultural disadvantage” and are “ineligible for admission under traditional standards, but demonstrate potential for completing a college program” (Stony Brook University Educational Opportunity Program, 2012). Economically disadvantaged students often lack role models for academic success, expectations, and support systems or encouragement to pursue higher education (Jenkins, 1976; Hefner & Rhodes, 1987; Douglass & Thomson, 2008; Bastedo & Jaquette, 2011). The digital divide may have limited the access and availability of technology<sup>1</sup> and library resources and experiences in their high schools (Tyckoson, 2000; Arko-Cobbah, 2004). Many of these students are first-generation, low-income students or from immigrant families with financial, language, and cultural issues. These students have socioeconomic and cultural disadvantages, “come with a special set of circumstances, . . . and need self-confidence” (Mallory, 1969, pp. 38–39; Tyckoson, 2000; Engle & O'Brien, 2007).

Federal- and state-funded programs, such as TRIO, Upward Bound, Search for Education, Elevation, and Knowledge (SEEK), and Educational Opportunities Program (EOP), were established on public and private campuses nationwide to provide support to these students. These kinds of programs are “intended to integrate preparatory academic skills with social bonding experiences that will enhance the students’ connections with peers and selected faculty and staff” (Goodwin, 2002, p. 87). For example, Upward Bound (one of the federal TRIO programs) focuses on students’ *preparation for* transition into college by focusing on writing, analytical, and research skills in high school (Garcha & Baldwin, 1997; Simmons-Welburn, 2001; Simmons-Welburn & Welburn, 2001) while EOP (a state-funded program) focuses on *access to* public institutions for economically disadvantaged students. New York State was the first to establish its EOP program for public institutions in 1968. Today there are more than a dozen states with equivalent programs. These programs are an “effort to narrow the opportunity gap that existed due to the perceived inequities within institutions of higher education” (Goodwin, 2002, p. 10). New York State also established the Higher Education Opportunity Program (HEOP) in 1969 to partner with private institutions of higher education “to supplement existing efforts to aid students who demonstrated potential to complete postsecondary programs, but who were economically and educationally disadvantaged” (Goodwin, 2002, p. 10). Though economically disadvantaged students are not limited to any one racial or ethnic group, they have historically been low-income minorities, such as African Americans and Latinos.<sup>2</sup> HEOP’s students, for example, are overwhelmingly composed of underrepresented students (Goodwin, 2002, p. 87). “Many of our students are not just first-generation college students, but we have many students who are first-generation Americans” (Tulenko & Hamilton, 2010).

Because of the large number of minorities in these programs, the mission of “recruitment, enrollment, retention, and graduation” of these students helps fulfill the parent institutions’ goal of a diversified student body. The inherent disadvantages and characteristics of low income, first-generation college students means lower first- to second-year retention rates than the overall student body (Dalton, Moore, & Whitaker, 2009; Tyckoson, 2000; see also Engle & O’Brien, 2007). Moreover, retention of low-income, first-generation students is especially challenging at large public universities. However, colleges and universities that have student support services, such as EOP, have much higher retention rates, suggesting that if these services were adopted universitywide, overall retention rates might improve (Engle & O’Brien, 2007, p. 41). Indeed, retention and graduation rates for students in these programs are impressive (Dalton et al., 2009; Engle & O’Brien, 2007). Keels (2004), who did a study of successful retention programs, notes SUNY-New Paltz’s EOP Freshman Year Experience for contributing to a retention rate of 85% which was higher than the non-EOP student retention

rate of 81% for the entire college in 2002. When considering that the retention rates for 360 colleges and universities in the Consortium for Student Retention Data Exchange (CSRDE) Report for 1994–2000 was 75% for both black and Hispanic students, SUNY-New Paltz's achievement is noteworthy.

## ROLE OF LIBRARIES

To many of these students, college or university is a new environment and culture. In 2001, Goodwin completed a longitudinal study of a cohort of HEOP students at an Ivy League university in upstate New York she calls "Ivy University" (Goodwin, 2002). These students "made a valiant effort to quickly adapt to the culture of college . . . and [see] some type of connection or 'fit' within the institution" (p. 155). They needed to "find the means and space to exercise agency and develop a praxis" (p. 13). Life at Ivy University, Goodwin continues, "was anchored by the creation of a 'home' space which could accommodate comfortable relationships with peers, enhance academic and career goals, and provide opportunities for some pleasure" (p. 155). Interestingly, she found that in searching for "safe" "survival spaces" on campus, the students identified the library as "an invaluable location for studying, socializing and communication" (p. 143). The public computer area of the library was especially popular because many of the HEOP students did not own a computer, but this space also became "a social and communication hub" where they "displayed a measure of comfort and freedom that was not noticeable in other spaces on the campus" (p. 144). While this was characteristic of the incoming freshmen cohort, Goodwin subsequently found that by the time this cohort moved closer to graduation, many had identified other "home" spaces on or off campus.

That these incoming students viewed the library as a safe, welcoming, "home" space in navigating their new academic environment creates unique opportunities for libraries to reach out to them. Historically, libraries have had a commitment to supporting diversity through collections and services, if somewhat unevenly or slowly in incorporating diversity initiatives as a core service (Walter, 2005). While libraries have been slow to partner with other support services across their campuses to provide more cohesive and robust services to minority and/or disadvantaged students, some have been involved from the beginnings of these federal- and state-funded support initiatives. For example, when New York's EOP was first established at Brooklyn College in 1968, library skills were identified as one of two basic skills, along with writing skills, that the summer prefreshman program would focus on (Trent, 1969). Similarly, the Library Association of the City University of New York (LACUNY) conference in 1969 was devoted to the "New College Student," focusing on challenges to university libraries in meeting

the needs of economically disadvantaged students. Among others, Trent (1969), Mallory (1969), Shaughnessy (1975), State University of New York (1980), and Hefner and Rhodes (1987) explore the early opportunities taken and responses made by libraries to reach out to these students through the various state- or federally funded programs. These varied in depth, from taped tours of the library (Shaughnessy, 1975) to five-week graded courses (SUNY, 1980) to librarians directly employed by the EOP offices (Shaughnessy, 1975).

Josey in Shaughnessy (1975) identified four characteristics of effective service programs:

- Staff awareness and empathy with disadvantaged student needs.
- Wider range of appropriate library resources.
- Innovative, action-oriented programming.
- Close contact with faculty who teach this group of students.

Many of these characteristics are echoed in a 1987 policy recommendation on the role of the library in educating basic skills students by the Association of College and Research Libraries (ACRL) Community and Junior Colleges Libraries Section (CJCLS). Recognizing that “librarians must take an active role in the education process which will bring basic skills students up to appropriate levels,” the CJCLS identified four areas of focus for libraries:

- Staff development for greater awareness of cultural differences and the issues that pertain to disadvantaged students.
- Collection development: appropriate and relevant resources.
- Programs and services: instruction and programs with different learning styles in mind
- Visual accessibility: signage should assist patrons; terminology in handouts should be clear; there should be greater awareness of student need for assistance when students are reluctant to ask (Mosley, 1987).

Students from historically and educationally disadvantaged backgrounds “are seen as the information-poor and are identified as the group who would benefit most from information management skills” (Hefner & Rhodes, 1987). Discussing students in the context of South Africa’s legacy of apartheid, Arko-Cobbah (2004) makes a general call for providing institutional and governmental infrastructures to address the needs of undergraduate students who had inadequate preparation at the high school level, because these information literacy skills become “more crucial when it comes to helping learners from disadvantaged communities who are disadvantaged in linguistic, writing, and other skills due to an inferior system of education as part of apartheid practices” (p. 270).

Inasmuch as the academic library is a symbol of the institution of higher education, libraries can take an active role in helping economically disadvantaged students acquire the skills to help them master what Goodwin identifies as “the academic code.” Most of the literature agrees that the library needs to be especially welcoming and affirming of these students (Garcha & Baldwin, 1997), especially mindful of their “first encounter” with higher education to help mitigate their anxieties (Hassig, 2003), and make the student feel “that he or she is important, and has the ability to succeed” (Rockman, 1978). Writing of at-risk students, Jacobson (2000) suggests that libraries need to address their “affective, or emotional, needs” as well as their “cognitive, or intellectual, needs” (p. 109).

Collections and services were geared to meet the needs of “disadvantaged” students in the 1960s and 1970s, and became more broadly defined in the 1980s and 1990s to address the needs of “multicultural,” “culturally diverse,” minority, and international student constituents (Goss, 1983; Huston, 1994; Li, 1998; Oka, LaGuardia, & Griego, 1994; Osborne & Poon, 1995; Switzer, 2008).

In terms of outreach and partnership with EOP and other student support services, libraries have reported on some best practices over the years. Some characteristics of successful outreach are highlighted here:

- Close coordination with academic subject courses (Rockman, 1978).
- Partnership with multicultural student centers (Walter, 2005).
- Individualized connections with the target students (Love, 2009).
- Informal, unstructured introduction to allay anxieties and discomfort of target students (Hassig, 2003).
- Highly structured, rigorous instruction to model and convey good academic skills (Rockman, 1978; SUNY, 1980).
- Awareness of different learning issues and incorporation of hands-on activities to accommodate different learning styles (Jacobson, 2000).
- Contribution to higher retention rates (Dalton et al., 2009; Garcha & Baldwin, 1997; Keels, 2004; Love, 2009; Simmons-Welburn & Welburn, 2001).

## STONY BROOK UNIVERSITY

Stony Brook University is a midsized comprehensive university with a “very high research activity” classification by the Carnegie Foundation. There are approximately 16,000 undergraduates, of whom about 2,500 are freshmen. With a total enrollment of nearly 25,000, SBU is the most diverse of the four State University of New York (SUNY) system’s university centers.

The purpose of Stony Brook University’s EOP service “is to fulfill New York State’s commitment to provide access to higher education for economically disadvantaged students who possessed the potential to succeed in

college, but whose academic preparation in high school has not fully prepared them to pursue college education successfully. The primary mission of the EOP is to facilitate the recruitment, enrollment, retention, and graduation of these students. This is accomplished by providing EOP/AIM students with an array of educationally related support services” (SBU EOP, 2012). It is one of the largest EOP programs in the 64-campus SUNY system, admitting 120–180 students each year, but its students nevertheless comprise less than 1% of the entering freshman class at SBU. However, EOP’s graduation rate is consistently higher than the university’s overall rate of 65% (C. Hamilton, personal communication, February 7, 2012; Stony Brook University Registrar’s Office, 2012) and Stony Brook graduates 65% of its Latino students and 70% of its black students, “more than almost any other public university in the country” (Tulenko & Hamilton, 2010) (see Tables 1 & 2).

SBU Libraries has an active instruction program, one that is highly course-integrated, with more than 80% of its events tied to a course that is listed in the official bulletin. However, information literacy instruction is not formally integrated into the overall curriculum. The courses that receive information literacy instruction are the result of instruction faculty initiation or library outreach. Given this structure, we would not see the EOP students as a cohort if we did not work with the EOP office directly.

ACRL (2000), Jacobson (2000), and Arko-Cobbah (2004) all stress the symbiotic relationship between information literacy and information technology. When we began working with EOP in 2002, many students did not have their own computers, and some did not have the technical skills or knowledge of certain types of software or applications that would be required of all incoming freshmen, such as the Blackboard course management system or the protocols of logging off after a session or protecting one’s passwords. Because the main student computing center is located in the library building, the library building was also identified as a place to access technology. Yet students nevertheless felt intimidated about using the library to do effective research (EOP Survey, 2010). These two concerns—one technical in nature,

**TABLE 1** Comparison of SBU Undergrads Overall and EOP Students

	SBU Undergrads Overall	SBU EOP Students
SAT scores	1,130–1,330	850–1,250
Freshman Enrollment	2,500	120-180
Graduation Rate	65%	77%
Ethnic Distribution		
White/other	60%	10%
Black	6%	30%
Hispanic	10%	30%
Asian	24%	30%

Source: EOP Office; Stony Brook University Office of Institutional Research.

**TABLE 2** Six-year Graduation Rates

Graduation Rate	SBU Freshmen	EOP
2008	62%	74%
2009	67%	73%
2010	65%	70%
2011	67%	77%

*Source:* Stony Brook University Office of Institutional Research.

the other academic (but also involving more and more technical skills)—presented an excellent partnership opportunity for IT and the library. At SBU, it was clear that these two skill sets, while distinct, went hand-in-hand.

### TECHNOLOGY AND LIBRARY SESSIONS

The EOP-IT-library partnership started in 2002 to carve out time during EOP's intensive five-week pre-freshman summer program for technology and information literacy skills. Since then, library and IT sessions have always been grouped together, so the students have a solid two-hour block of hands-on training on these skills. The technology session covers the human resources management system, universal login, email, course management system (Blackboard), computing centers, printing, acquiring software and hardware, and remote access.

This is followed by the library session,<sup>3</sup> whose goals are to:

- Connect in-person with incoming program students.
- Familiarize them with library layout and service points.
- Give them clear demonstrations of relevant resources.
- Incorporate some element of active learning pedagogy.
- Empower them to use the library for academic success.

The instruction is divided into two sites of learning: one in the classroom and one in the stacks. The in-class portion covers:

- Peer-reviewed and popular sources.
- Course reserves.
- Database searching and navigation.
- Citing and citation tools.
- Upcoming workshops of interest.
- Catalog searching.

The stacks portion takes this last item, catalog searching, and reinforces it with an active exercise designed by one of the librarians.<sup>4</sup> Students do an author

search using their own names<sup>5</sup> and identify a book that is available in the Main Stacks. Books in other locations are ineligible for this exercise due to time constraints. When the students have the information ready on index cards provided during the session, they go into the stacks and retrieve the books.<sup>6</sup>

The librarian waits in a designated spot near a workstation with a book truck and “checks in” each book the students bring, verifying each student’s name. If a student is unsuccessful, the librarian uses a workstation to resolve the problem with the student and reinforces the catalog searching lesson. This is a lively activity that enables a one-on-one interaction with librarian and student, with assistance from the EOP student TAs who accompany students to different floors to make sure no one gets lost in the unfamiliar and cavernous stacks.

This simple exercise aims to accomplish the following:

- How to do an author search.
- How to read a catalog record for key information like location information, availability, exactness of call numbers.
- What a Library of Congress call number looks like if they have previously only used the Dewey system.
- Where to locate main public service points, like circulation and reserve desks.
- Where to locate other resources of interest, like the video and DVD collection.
- How to resolve a problem when the item they are looking for is not found.

In addition to these concrete objectives, there are some less tangible but equally valuable outcomes:

- Students have an opportunity to meet other library staff during the exercise.
- Seeing their own name, or one close to it, in a book cover tickles their ego.
- The relative uniqueness of their individual names ensures that not everyone will be seeking the same item, a critical flaw of many ill-designed scavenger hunts.
- Students become familiar with the peculiar geography and signage of the stacks area, which comprises three stories.
- There is a high rate of success in completing the exercise,<sup>7</sup> making these students’ first library task a positive experience.
- A successful library interaction can boost their confidence, as described by Tyckoson (2000).

The two-hour learning block addresses different learning issues, including passivity, being less focused on attention to task, and having less problem-solving experience,<sup>8</sup> and incorporates different learning styles such as visual, auditory, and kinesthetic. By using various pedagogical methods, including student-centered, hands-on, active learning, one-on-one, and

written survey, we facilitate different ways for students to engage, learn, and express themselves, as discussed by Rockman and Jacobson.

## OUTCOMES

Our surveys suggest that students came away with some useful tools for academic success as well as greater confidence in their abilities to navigate the academic landscape, which is especially meaningful for EOP students:

- Students learned and had hands-on experience with some of the resources and tools demonstrated during the computer and information literacy sessions.
- Students felt empowered about being equipped with technology and information literacy skills.
- Librarians established personal points of contact with students.
- Library contributed to getting students off to a good academic start at SBU.

## KEY COMPONENTS OF PARTNERSHIP WITH IT, EOP, AND LIBRARY

In over a decade of working with IT and EOP, the library has made some refinements and identified the key components of this three-way partnership.

### Tied Library Instruction with Technology Instruction

The library and IT capitalized on the building blocks of technology skills in benefiting information literacy skills and designed back-to-back sessions of two-hour blocks to ensure a seamless learning experience for the incoming EOP students.

### Coordinated with IT Partners on Content

We experienced a positive benefit of coordinating with our colleagues in IT on the teaching content where we overlap. For example, the IT session covered, among other things, Blackboard for course access and the universal login for access to various university portals. The library discussed these same topics in demonstrating access points for library resources. So it was imperative that we reduced redundancy or, conversely, inadvertent omission. We learned by sitting in on each other's sessions and sharing lesson plans so that we would complement rather than contradict or repeat each other. It was a way to optimize both sessions. The more we fine-tuned our coordination, the better the student responses were.

### Ensured Placement on Syllabus in First Week of Program

There was a logic to sequencing the technology and information literacy learning blocks before the rest of the academic curriculum because the former facilitated the latter. The information literacy skills built on the technology skills in an immediate and experiential way. In the beginning, we were not able to instruct all the students in one week because of staffing and classroom limitations. However, as our commitment to EOP grew, we changed our priority by planning earlier, getting staff commitment well in advance of summer, and securing the best rooms possible. Eventually, we went from a two to three week spread to all in one day. Spreading out over two to three weeks meant some students got the proper skills right at the outset of their campus immersion, while others did not get it until midway through their five-week program. Or, more likely, by the time these students came in for their training, they had already learned it on their own or developed some unorthodox or bad technology habits. Also, students were affected by the concentration and fatigue of academic coursework, which was well under way by then. So, we decided to harness the eagerness and anticipation of the students in the first week, before they became too overwhelmed with their new academic and social environments. In order to manage the logistics of the three-way coordination among EOP, IT and library staff in teaching 120–180 students in four different locations, we currently plan as early as five months ahead.

### Incorporated Pre- and Post-Session Meetings

These planning meetings and postsession assessment meetings helped us to understand EOP's mission better over the years. For example, some librarians had observed that some of the teaching assistants (TAs) had been too forceful in their interactions with students during sessions, such as mandating students to respond to librarian questions. We learned, however, that their goal was to instill good classroom behaviors and active learning protocols that are expected of students at SBU. When the librarians understood the goal, we were able to nuance it. Although the TAs were not under our supervision, we used this concern as an opportunity to dialogue with EOP staff which led to greater understanding of EOP's strategy for modeling academic regimen, a way to help these new students "master the academic code," as described by Goodwin. Through pre-session planning, we all agreed on what information literacy skills and learning outcomes would most benefit these students in the context of the EOP goals, though we varied on how the instruction would be delivered to accommodate different teaching styles. IT staff also participated in pre-session planning. A post-session assessment with librarians was extremely beneficial in identifying areas of success and also areas that needed improvements for the next year. These sessions gave us an opportunity to compare notes, identify logistical problems, discuss student evaluations and follow up with our IT and/or EOP partners.

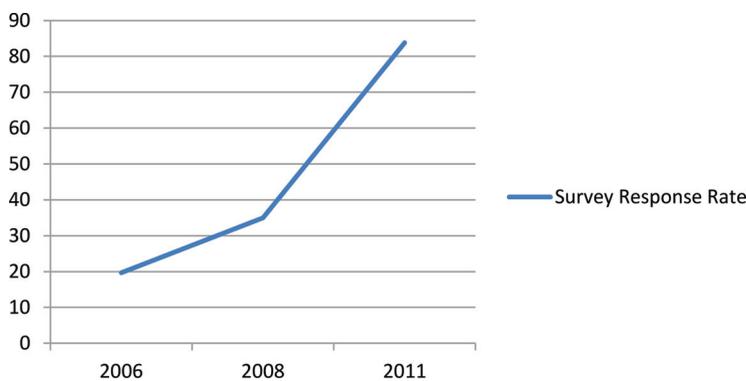
## Added an Active Learning Component

Initially, the structure of the sessions were deliberately left fluid for each librarian to construct because there were so many of us, up to eight librarians at times, and teaching this group was too new to us to have a standardized lesson plan. So some of us incorporated active learning activities, others utilized a more traditional method of delivery. But our pre- and post-session meetings made it clear that the most effective sessions had some active learning component, whether it was a hands-on database search, a group activity in identifying characteristics of a scholarly publication, or an OPAC/stacks exercise.<sup>9</sup>

## Improved Student Assessments

IT and library staff improved coordination of student assessment, so that the rate of response grew from 19.7% in 2006 to 84% in 2011 (see Figure 1). The library increased input into the survey. Due in large part to coordination issues, the library initially had little input into the assessment survey. However, as the partnership between IT and the library grew, the library managed to craft the survey tool to better assess specific learning outcomes, which in turn helped us to clarify what we needed to focus on in future sessions. The greater our coordination with IT on content and delivery, the better the student assessments (see Appendix). For example, 91% in 2008 answered that they “benefited” or “greatly benefited” from the information literacy session. In 2011, 96% answered they “benefited” or “greatly benefited”. In addition, with 84% of students responding to the survey in 2011, more than 95% answered correctly on each of the learning outcomes questions:

- Name one way to contact a librarian for research help.
- How can you find an article from the Library homepage?



**FIGURE 1** Survey response rate. (Color figure available online.)

- What are the possible consequences of plagiarizing?
- Where is the best place for college-level research?

### Engaged the TAs

During our post-session assessment meetings, we discovered some inconsistencies in the TA level of participation. Some were very engaged, taking an active role in the session, emphasizing certain content that the librarian was going over, like citation tools. Others were less engaged, some surreptitiously texting or even stepping out of the room altogether. Realizing that the most successful sessions were those with greater TA participation, we requested time during the TA training sessions. We discussed our mutual goals directly with the TAs and articulated what the TAs' role was during the technology and library sessions. This was an opportunity to empower them as active agents of learning and raise their level of expectation and participation. The TA training interaction was inspiring and energizing for both librarians and TAs and helped to ensure the proper "classroom climate" that Jacobson describes as being key (2000). We have formalized this connection with the TAs by participating in the TA training, which occurs over several months.

I cannot emphasize enough the benefits of articulating and understanding the common goal of the IT, library, and EOP staffs to provide the students a set of technology and research skills necessary to get a good academic footing in college. Through the pre- and post-session meetings, participation in TA training, and direct communication with program coordinators, the librarians were able to better structure and maximize the sessions to benefit student learning. We have not formally tracked these students on a long-term basis, in terms of their use of library resources and services. Some follow-up assessments are needed to get a more meaningful correlation of these technology and library sessions to improved research habits, academic success, and retention and graduation rates by this cohort.

### CONCLUSION

In a way, the academic library has been involved in outreach to economically disadvantaged students from the beginnings of EOP, but there is still a need to be proactive about this group. For example, at SBU, though the EOP service was established in 1968, the library did not have a structured place in their summer program until 2002. Also, it is easy for these students to fall through the cracks since they will be dispersed into the general undergraduate curriculum after their first year. Since there is no mandatory information literacy requirement in the undergraduate curriculum at SBU, it is most likely that we would never meet them as a cohort. That makes it all the more

imperative that the library reach out to this group at the beginning of their university experience.

The library's goal, of course, is to help these students feel at home in the academic library; to understand the library as a source of multiple resources and services, in physical and digital ways; and to see how the library can help them achieve academic success. The librarians and IT colleagues at Stony Brook University strive to create a positive and welcoming learning environment while reducing students' anxiety about college. As one student noted, the "workshop *helped me relax a bit* because now I feel as though I can navigate the SB websites" (emphasis added, EOP Survey, 2011). Indeed, as another student observed, technology and information literacy skills "should be provided for every freshman; it would help them all as well." While limited resources and insufficient institutional support preclude us from realizing this larger goal, we can reach out in strategic ways to support the academic success of our most vulnerable students. That doesn't mean that we will neglect the mainstay of the instruction program—course-related instruction. Rather, what it means is that the library has made a commitment to the successful integration of economically disadvantaged students to the college environment. This in turn can potentially impact the larger institutional goals of retention, graduation, and diversity.

## NOTES

1. With the Great Recession of 2007, economically impacted Americans have increased their use of technology at their libraries (De Rosa, 2011).
2. See Hefner and Rhodes (1987) for an illuminating discussion of educational disparity, especially in the South.
3. Over the years, we at times switched this order, having the technology session after the library's session. But we eventually decided that the sequencing of skills and information flowed better when they started with the technology session.
4. Science and Engineering Librarian, Dana Antonucci-Durgan, first introduced this activity.
5. Some librarians give a choice between the author search and a keyword search on a topic of interest.
6. Due to the logistics of managing a group of 120–180 on the same day, some of the sessions were held in other buildings on campus and didn't afford the opportunity for the stacks activity. In these cases, the librarian incorporated other active learning tools in class.
7. If student's last name is not in the catalog, they choose a name that is close to theirs in the author list.
8. Jacobson (2000).
9. Jacobson also speaks to the importance of hands-on experience in her discussion of at-risk students (2000).

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## APPENDIX

### Sampling from 2011 Survey on Open-Ended Question: “Please Provide Constructive Feedback on Today’s Workshop.”

#### TECHNOLOGY WORKSHOP:

It was an amazing time; for me learning about technology is great. I love computers.

I appreciate the help and support from today. I feel I benefited from knowing all of the Stony Brook University resources now.

This workshop highlighted very important things that I need to know about for the Fall.

Today’s technology workshop was very beneficial to me in several ways. I have gained a great deal of information that can allow me to adjust very well to the university in general.

Every piece of information in this workshop was very helpful. I am not accustomed to some of these resources, therefore it would take time for me to become familiar to it.

You probably saved my college career.

Information that was given to the students is very important and valuable.

I feel like after today, I definitely had an advantage over the other incoming freshmen, that aren’t EOP.

#### LIBRARY WORKSHOP:

Great information provided to help students in the first year as well as the rest of the years at Stony Brook.

Today’s library workshop was very interesting. Also I now know that it would benefit and help me through my school year.

It was really helpful. Now I know where to go for research.

Every part was helpful because you need all of the things [librarian] taught us to survive in Stony Brook.

As a new student, every information given was very helpful.

The library database will help me in the future with my assignment.

Sampling from 2010 Survey on Open-Ended Question: "Please Provide Constructive Feedback on Today's Workshop."

TECHNOLOGY WORKSHOP:

It was interesting to discover the useful tools that has been given to students.

There were a lot of things I did not know about my laptop and the available services to it that I now know.

LIBRARY WORKSHOP:

It rocked.

The workshop was extremely helpful for the EOP incoming freshman. I learned how I should always do things first and do not wait until the last minute.

It's good to know that I will be ahead of a lot of the other freshmen coming in the Fall.

The library workshop was just what I needed.

It was a big insight and showed me a lot that I didn't know.

For some odd reason, today's workshop helped me relax a bit because now I feel as though I can navigate the SB websites.

Sampling from 2009 Survey on Open-Ended Question: "Please Provide Constructive Feedback on Today's Workshop."

TECHNOLOGY WORKSHOP:

Today's workshops really helped me learn more about Stony Brook and its resources. Thank you.

This was a very informative workshop and I value what I have learned from this class.

This information will be very useful in the coming school year.

LIBRARY WORKSHOP:

I learned a lot about the libraries here at Stony Brook. I look forward to using the web and the libraries in my papers.

It was a refreshing reminder about online resources.

Another workshop on the library [would be helpful] because it was too brief and too much information to soak up.

Today's library workshop was very helpful. I will definitely use it for research.

Sampling from 2008 Survey on Open-Ended Question: "Please Provide Constructive Feedback on Today's Workshop."

TECHNOLOGY WORKSHOP:

Thanks a lot. I needed the help because I don't know a lot about computers.

Sampling from 2006 Survey on Open-Ended Question: "Please Provide Constructive Feedback on Today's Workshop."

LIBRARY WORKSHOP:

I feel more comfortable working with computers.

It was good to learn some of the things that I had no idea that Stony Brook offered.

I appreciate the given help. I think it would prove to be very helpful throughout my stay here at Stony Brook.

Today's library workshop is very helpful and every detail was given.

I have learned many new sites on how to search for information on where to go to get educational sources for research papers instead of just using Google.