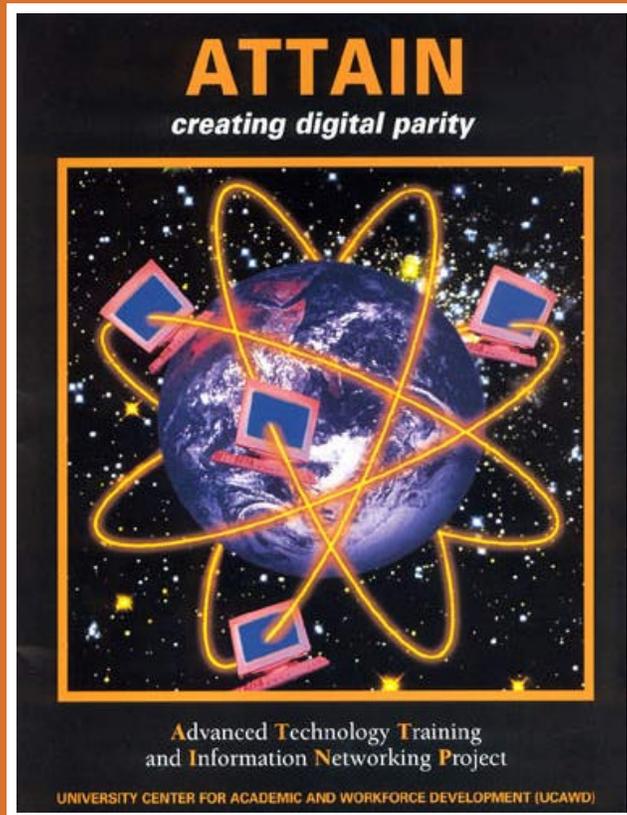


BRIDGING THE DIVIDE



A PRELIMINARY REPORT ON THE IMPLEMENTATION OF ATTAIN LABS IN SUNY EDUCATIONAL OPPORTUNITY CENTERS AND COMMUNITY-BASED ORGANIZATIONS

MAGI Educational Services, Inc.
May 2003

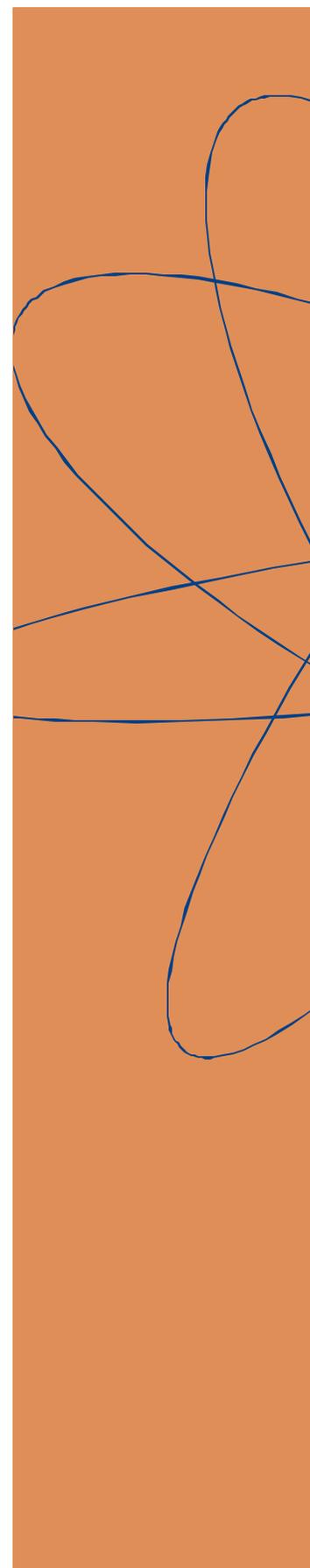
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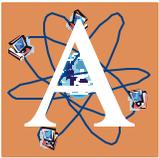
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A PRELIMINARY REPORT ON THE IMPLEMENTATION OF ATTAIN LABS IN SUNY EDUCATIONAL OPPORTUNITY CENTERS AND COMMUNITY-BASED ORGANIZATIONS

Executive Summary

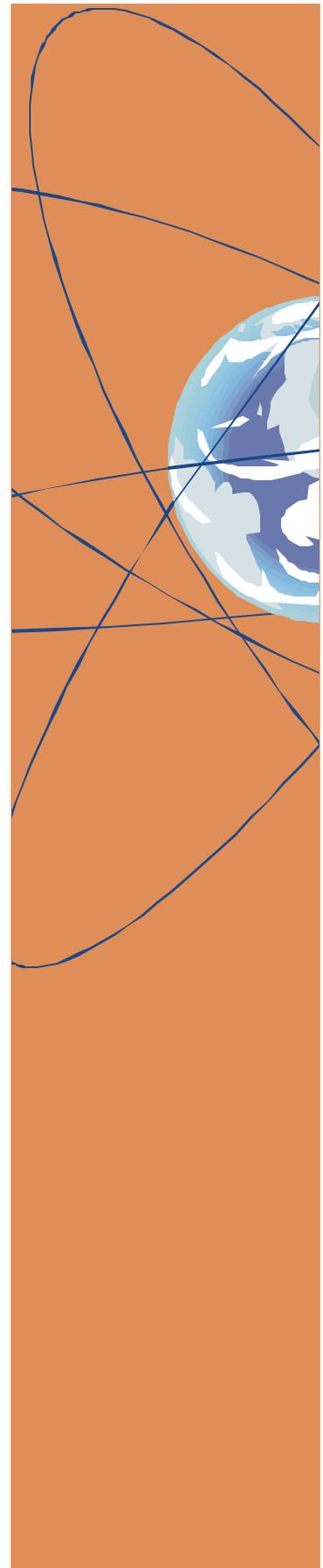


Adult students from low-income communities bring to any education and training program the full impact of the economic and social inequities that exist in their environments and are often unable to benefit from the program to the same degree as other adult students. Compounding this reality is the expanding *digital divide*—the computer and technology skills of disadvantaged adult learners compared with adult learners in other segments of society. Without these technology skills, today's adults are fated to a cycle of low-wage jobs combined with periods of sustained unemployment.

Advanced Technology Training and Information Networking (ATTAIN) Labs, funded by the New York State Legislature and implemented by the State University of New York's Educational Opportunity Centers, in partnership with Instructional Systems, Inc. (ISI), stand out as attractive solutions to meeting the technology training needs of these adult students and ensuring them an equal footing in competing for jobs and additional training that demand computer and technology literacy.

The ATTAIN Labs are now in their second year of implementation. Currently, 14 labs operate in New York State—6 in New York City and 8 labs in other urban centers across New York State. Ten labs are housed in EOC sites, 1 in a SUNY Career Counseling and Outreach Center, and 3 are located in community-based organizations. Over 5,000 adult students have been served to date by these labs. An additional 9 labs are scheduled to open over the course of the next year.

The intent of this report is to provide the Legislature, SUNY EOC officials, ISI staff, and other interested parties with facts and informed judgments, surmised



from multiple evaluation activities, concerning the implementation and preliminary outcomes of the ATTAIN Labs. In general, we find that the labs have succeeded in *seeding* advanced computer and technology capability in targeted disadvantaged regions across New York State, regions that serve significant numbers of low-income adult students. With the funds provided via this initiative, significant investments were made in state-of-the-art, Internet-connected computers, printers and other peripherals that support an array of exciting academic and career preparation programs.

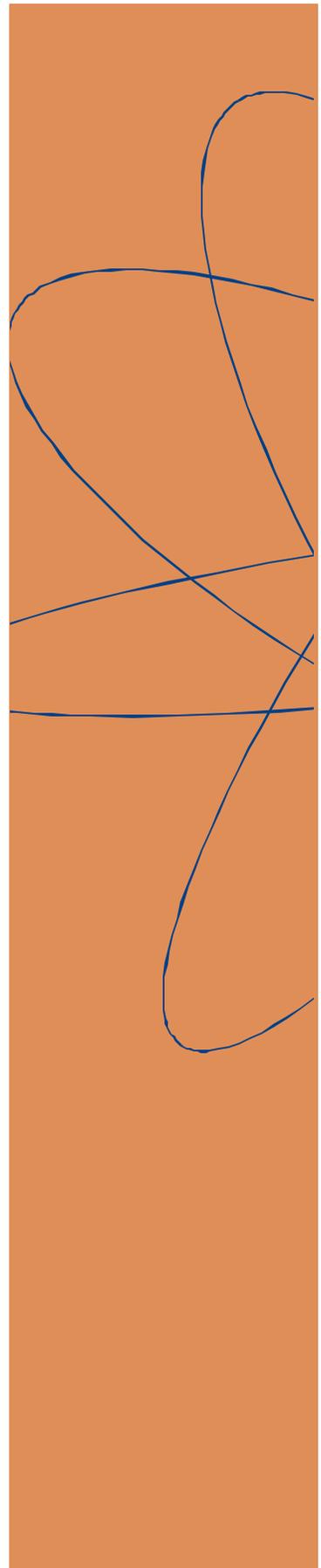
The reader should note that the findings represent a reasonable attempt to examine the ATTAIN Initiative—the deployment of state-of-the-art computer labs and some of the early impacts of this technology. However, a second, more in-depth evaluation will be necessary to provide information and evidence concerning the full implementation of local ATTAIN Labs and their effects on participating organizations, adult students, and the region as a whole.

The Key Findings of the evaluation are summarized below, organized according to the three evaluation questions.

1. Are all the organizational pieces in place?
2. Who is using the ATTAIN Labs?
3. Are users satisfied?

ARE ALL THE ORGANIZATIONAL PIECES IN PLACE?

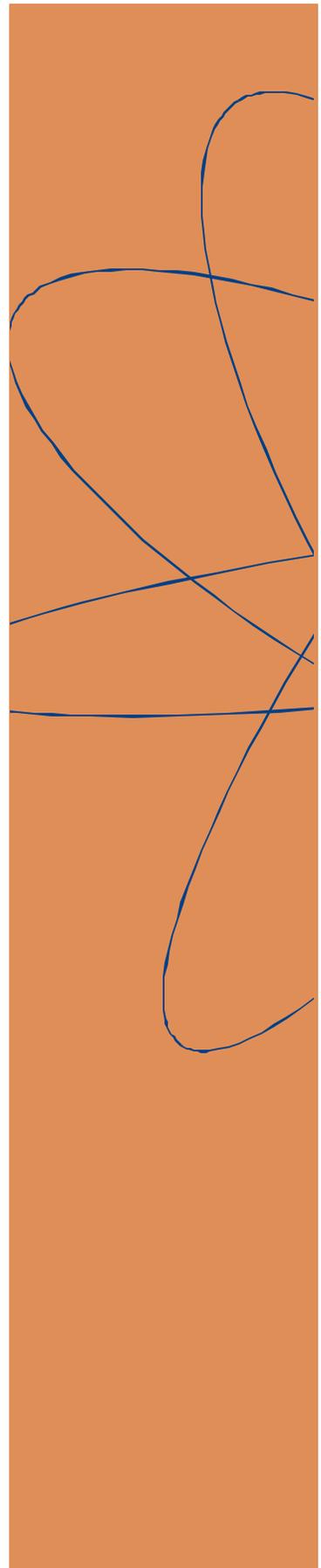
- Program leaders were successful in shaping the direction of ATTAIN and setting it on its proper course.
- ATTAIN sites engaged in a variety of planning activities to prepare for and maintain the effective implementation of the project.
- ATTAIN “staff” at the participating organizations were well qualified and experienced in adult education and technology applications.



- ⊞ Although a modest amount of professional development was provided to staff, it generally prepared them well for their ATTAIN responsibilities.
- ⊞ ATTAIN sites received the necessary hardware and software support to guarantee the effective implementation of the project.
- ⊞ ATTAIN sites provided the “peopleware” to support the successful implementation of the project.
- ⊞ ATTAIN sites are seeking other sources of funding to support the project including foundation, federal, and community partner funds.
- ⊞ ATTAIN has the strong backing of organization staff.
- ⊞ ATTAIN sites used various strategies for keeping staff, adult students, and the general community informed about the project, and for receiving input on key activities.
- ⊞ ATTAIN sites followed the “*build it and they will come*” approach to marketing the project.

WHO IS USING THE ATTAIN LABS?

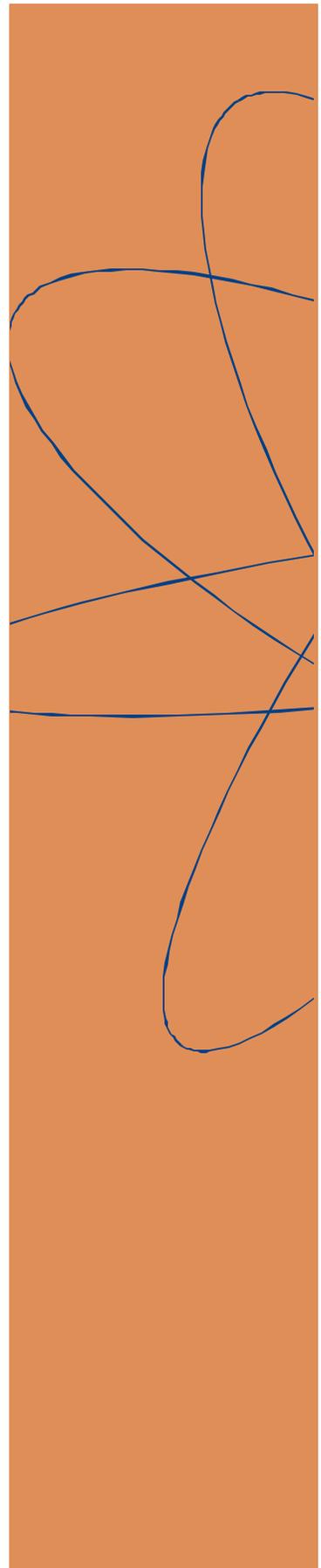
- ⊞ Since the opening of the first ATTAIN Lab in 2001, over 5,000 adult students statewide have used the advanced technology offered.
- ⊞ ATTAIN Lab users were representative of their communities.
- ⊞ ATTAIN Lab users were frequent users.



- ⊞ ATTAIN Lab users felt comfortable using the Lab technology.
- ⊞ The courses offered in the ATTAIN lab matched students' needs.
- ⊞ The ISI coursework was, by far, the single largest software package used.
- ⊞ ATTAIN Labs were open to adult students and staff at times conducive to their schedules.
- ⊞ At this time, family members of adult learners and individuals from the community are not accessing the technology resources in the ATTAIN Labs.

ARE USERS SATISFIED?

- ⊞ Adult students give high marks to the ISI courseware and other technology applications.
- ⊞ Student satisfaction with other aspects of ATTAIN also ran high.
- ⊞ Students benefited from their use of the ATTAIN Lab.
- ⊞ The ATTAIN Lab helped some students become more self-sufficient.
- ⊞ The large majority of adult students—87%—would recommend the ATTAIN Lab to others.



I N T R O D U C T I O N



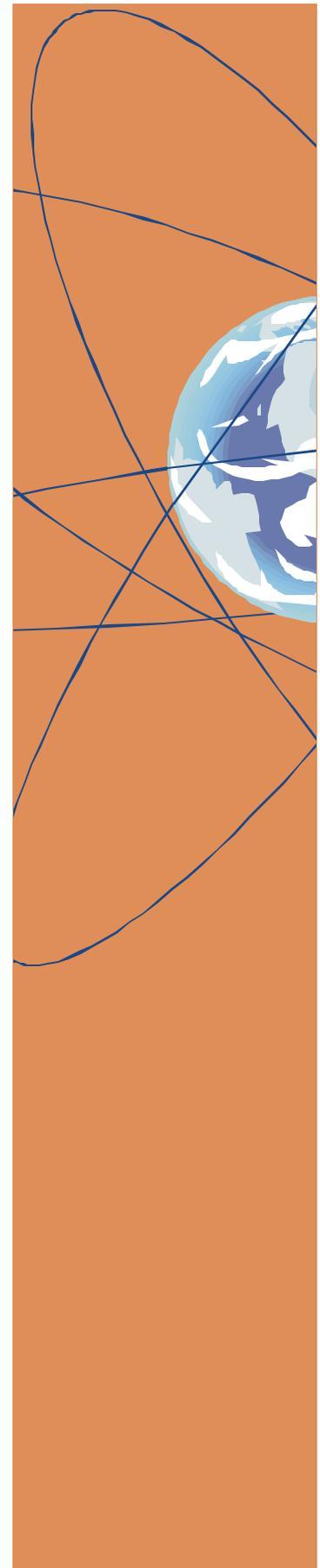
...I do plan on going to heaven...And when I see Martin, I'm going to say, 'Martin, it took us a long, long time to get here, longer than we wanted it to, but, Martin, it's finally beginning to happen—that thing that would make the dream you had in '63 come true—has been put into our hands, so it's up to us to take it, make it available to our [citizens], and stand back and watch them fly.

— Ossie Davis
*Opening of the Bronx MLK
ATTAIN Lab,
October 31, 2002*



Adult education and workforce development staff face a fundamental dilemma in their day-to-day work: they seek to help low-skilled individuals, with little or no computer and technology savvy, increase their basic proficiencies in an economy that is demanding higher levels of skill and technology usage every day. Helping disadvantaged learners improve their academic and technology skills in an environment that has moved far ahead of them is akin to walking up the down escalator—taking one step forward and ending up two steps behind.

Since the Fall of 2001, however, the State University of New York's Educational Opportunity Centers (SUNY EOC), in partnership with Instructional Systems, Inc. (ISI), have deployed and operated Advanced Technology Training and Information Networking (ATTAIN) Labs at each of the state's 10 EOCs, 1 Career Counseling and Outreach Center, and 3 community-based organizations located in areas that historically have had little access to advanced technology applications. The strategy of combining access to high-



end technology with proven adult education instruction is designed to help individuals move ahead and stay ahead.

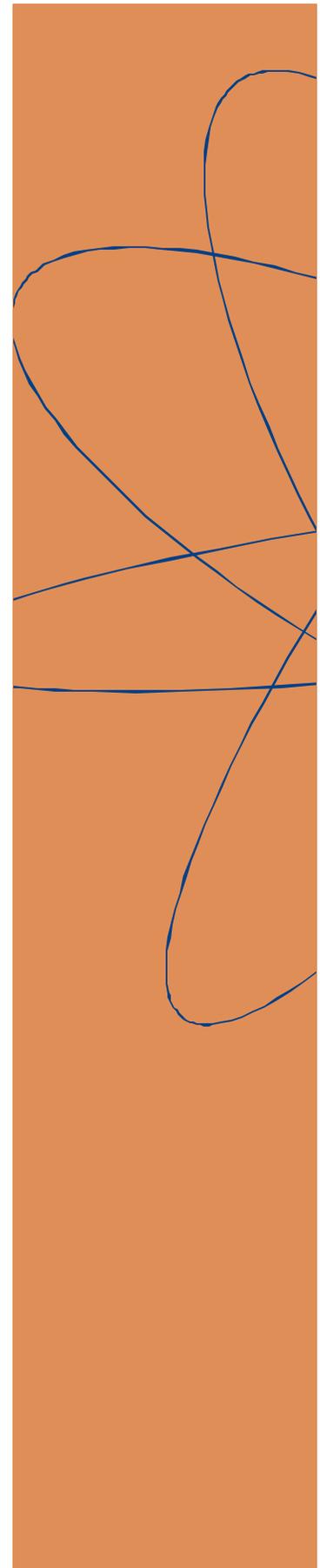
To realize this vision, SUNY EOC forged a partnership with Instructional Systems, Inc., (ISI), an instructional hardware and software company, that delivered a specialized array of products and services to the ATTAIN project. ISI's services included the installation and maintenance of hardware and software, upgrades, patches and security services; WAN/LAN services; web services such as individual web sites for each project site and online technical support mechanisms; and staff training on all courseware, software, hardware and data management systems.

In addition, ISI fostered a partnership with each individual site to assist in overall project management, where ISI staff provided local support for the project—from the planning phase, to installation and deployment. These services included individual assessments of physical sites, hardware and software assessments and recommendations, planning meetings, assistance managing and coordinating renovations and installation, and status reports.

The ATTAIN Initiative in New York

ATTAIN technology labs rely on a unique instructional model, ideally suited for the population being served; they feature

- ☒ individualized, self-paced learning,
- ☒ 30+ occupational, academic, and life skills courses,
- ☒ interactive, multimedia tools,
- ☒ e-communication tools (e-mail, message boards, discussion forums),
- ☒ full Internet access,
- ☒ built-in management and participant tracking systems, and
- ☒ advanced LAN/WAN delivery option combining high speed LAN and server technologies with high speed WAN and Internet access.



Although it appears simple enough on paper, installing a computer technology lab and related courseware quickly brings organizations face-to-face with the challenges of program implementation: staff training, program scheduling, facilities management, and program sustainability, to name just a few. And though from a distance putting in a computer lab and providing staff training and student orientation prior to opening its doors may appear to be a clear and unambiguous approach to enhancing teaching, learning, and workforce preparation, many challenges and barriers need to be overcome in order to realize the potential of these resources.

For the past two years, nearly 5,000 individuals have accessed ATTAIN Lab programs, applications, and services, and there is clear excitement within these communities about the potential of ATTAIN to effect broad scale change and bridge more than the digital divide. The project has now reached a point where an external assessment can be made of its activities and initial outcomes.

Focus of the Evaluation

In the winter of 2002-03, Instructional Systems, Inc. commissioned an independent evaluation of the ATTAIN Initiative on behalf of SUNY. MAGI Educational Services, Inc., a New York State-based research and evaluation firm was awarded a contract to conduct this study. In consultation with ISI and EOC staff, it was agreed that the major goal of the evaluation was to provide a progress report on the current status of ATTAIN, concentrating on three questions of keen interest:

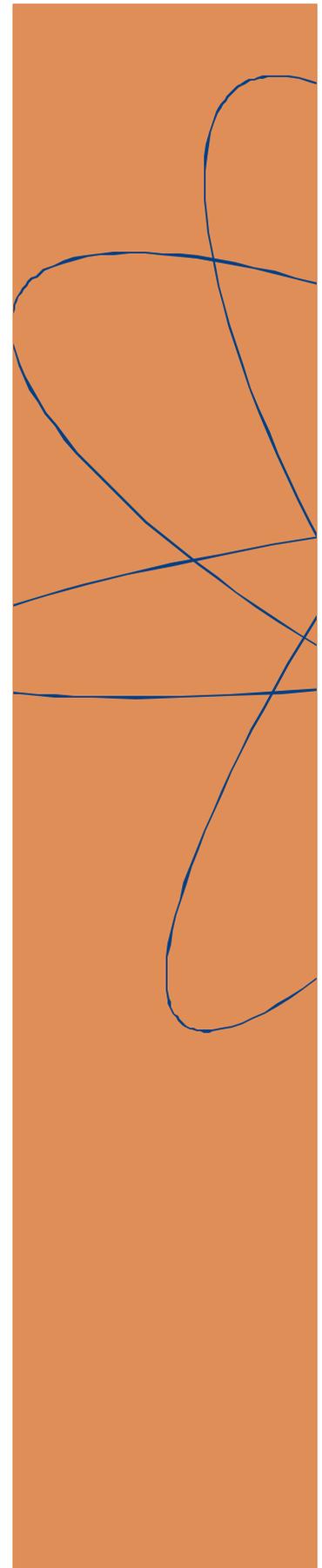
-  **Are all of the organizational pieces of the project in place?**
-  **Who is using the services?**
-  **Are users satisfied?**

We are at the threshold of a new world, a new day--the 21st Century. And we find that having access to books is not enough; knowing where the library is, is not enough; being able to read the newspaper is not enough. New technology is here and we've got to learn to deal with that, brother, or we're going to be left behind."

— Ossie Davis

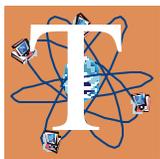
In order to answer these questions, MAGI staff examined the installation of the labs, the implementation of the programs and services within the labs, and the degree of satisfaction derived by the different users of these facilities: adult students, faculty and staff.

Information for the evaluation was gathered through multiple procedures including a review of previously published studies of community technology initiatives; administration of surveys to students, faculty and lab coordinators; site visits to 5 ATTAIN Labs; interviews of students, faculty, and coordinators; and a review of data retrieved from the *ISI Management System*, the internal database system that provides information on the total numbers of students using ISI courseware, curriculum units studied, and the amount of time engaged with the system.



M E T H O D O L O G Y

Evaluation Criteria

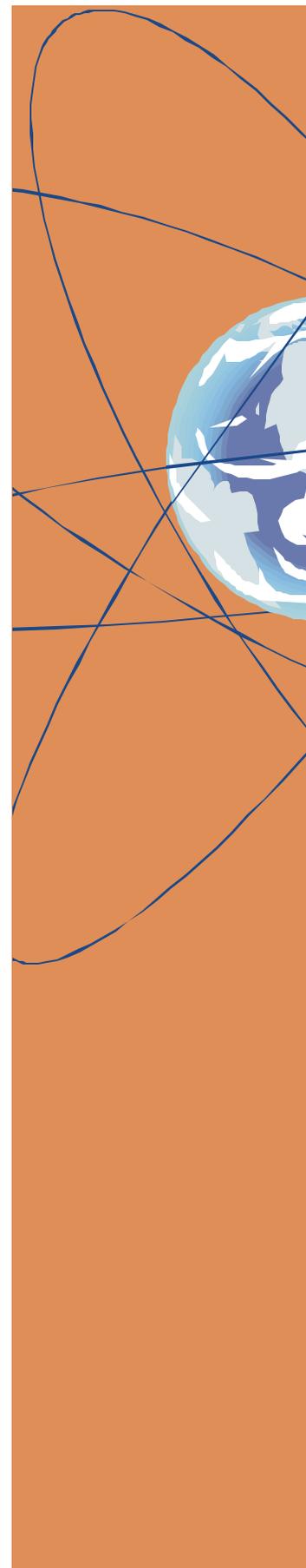


To provide a comprehensive, yet preliminary assessment that would answer the aforementioned questions, a number of critical areas of ATTAIN Lab operations, facts about lab users, and the degree of satisfaction with the labs were examined at 12 sites that had been operating ATTAIN Labs for at least three months. At the organizational level, the focus was on the key elements needed to successfully implement the labs. Relevant criteria included

-  the leadership/management structure at each site;
-  qualifications of staff;
-  training provided to staff to implement the project;
-  staff and administrator commitment to the project;
-  planning activities undertaken at each site to install and operate the labs;
-  space and facilities that are convenient, accessible, and safe; and
-  outreach methods used to make community members and institutions/providers aware of the project.

Applicable variables that concerned the users of the labs included

-  the number of adult students using the labs and why;
-  the ways students learn about the labs;
-  demographic characteristics of lab users;
-  the number and type(s) of students not using the labs;
-  the resources/courseware participants used and how often; and
-  the use of lab resources by adult students' families.



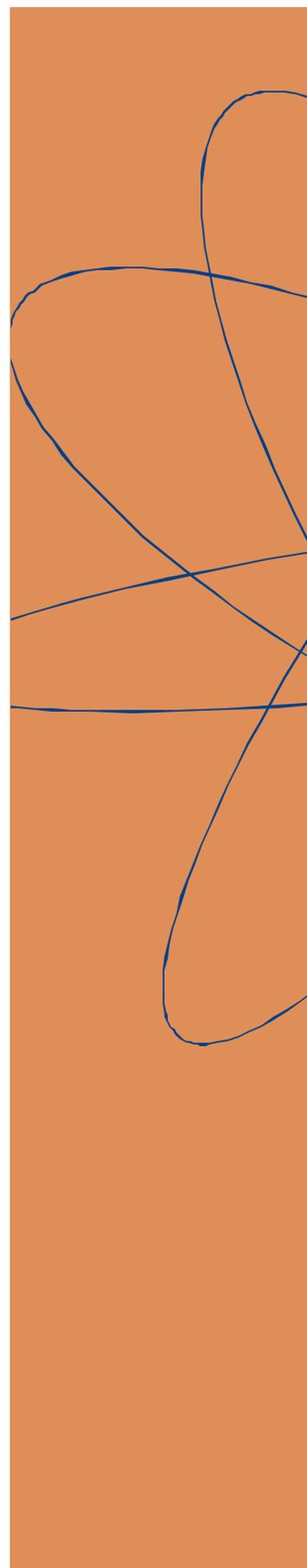
And, finally, the pertinent user satisfaction criteria that were investigated included

- 🔧 lab users' reactions to the ATTAIN Initiative;
- 🔧 ease of use of technology resources;
- 🔧 relevancy of ISI courseware to adult students' needs;
- 🔧 users' satisfaction with their interactions with lab staff, courses available, and quality of courses/services;
- 🔧 user's satisfaction with the outcomes of the ATTAIN Initiative (e.g. did the project make a difference in their lives?);
- 🔧 barriers to project participation;
- 🔧 staff and administrators' perceptions of the project (e.g., did they feel the project produced important benefits for participants? Did they think that some participant groups benefited more than others?); and
- 🔧 features of the ATTAIN labs that worked well; worked poorly.

Data Collection Methods

Several different data collection strategies were used to obtain information relevant to the key evaluation questions and related criteria. The methods included surveys, site visits, interviews, and a review of the ISI Management System.

A. Surveys. Three surveys were developed: a coordinator survey, faculty/staff survey, and a client/student survey. These surveys probed a number of issues related to the organizational infrastructure to support the ATTAIN Labs, including the design and implementation of the labs; the types of users served; the hardware and software used by adult students; the professional development and technical assistance provided; the outreach activities utilized; and



the extent of user satisfaction. Across the 12 ATTAIN sites, completed Coordinator Surveys were returned by 7 sites, over 320 Student/Client Surveys were returned, and 23 Faculty/Staff Surveys were submitted.

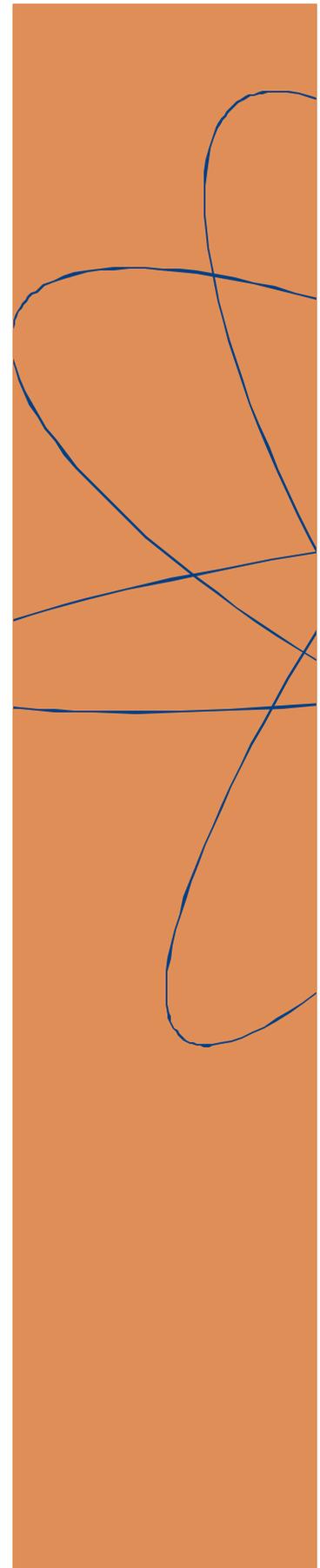
B. Site Visits. To augment data gathered through surveys, MAGI staff conducted a series of site visits to 5 ATTAIN Labs across New York State: one in New York City and two each in Buffalo and Rochester. During each visit, interviews were conducted with administrators responsible for the ATTAIN Lab; faculty and staff who use the Lab, either for their students or for their professional use; and adult students. The interviews explored topics such as the specific stages of installation of the ATTAIN Lab, professional development, integration of the Lab into the EOC/community-based organizations' programs and services, preliminary program outcomes, adult student satisfaction and project challenges.

C. Review of ISI Management System Summary reports from all ATTAIN Labs were downloaded from ISI's Management System. These reports furnished information on the number of adult students accessing the ISI courseware since September of 2002. Data was reported for the total enrollment, number of curriculum sessions, and the average time spent per session.

Study Strengths and Limitations

The evaluation study was characterized by a number of features that served to strengthen the interpretation of findings. These included

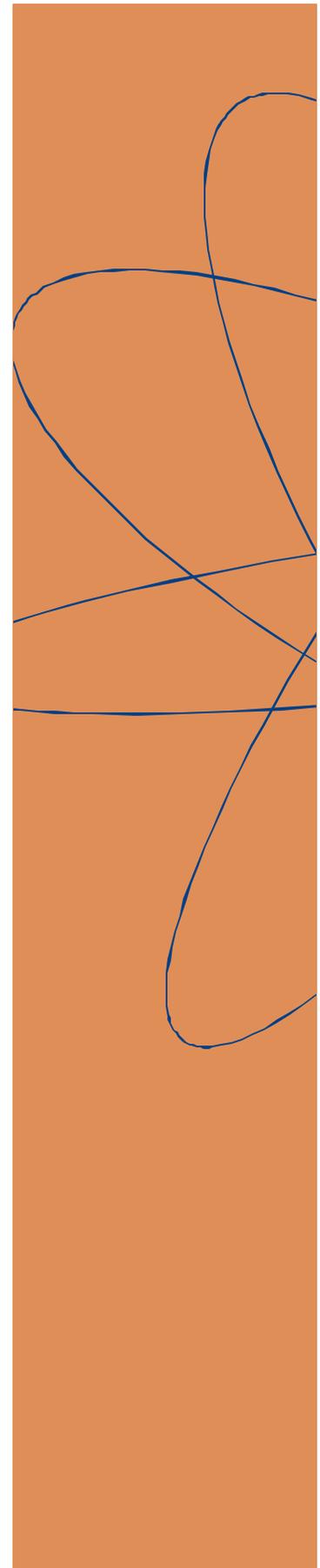
- a systematic data collection plan that incorporated a number of converging procedures,
- the use of both quantitative and qualitative evaluation methods, and
- the assessment of ATTAIN Labs statewide.



Like all evaluation studies, the ATTAIN Lab evaluation had a number of limitations. These included

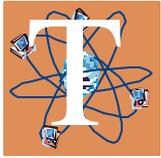
- ❏ Much of the information pertaining to the ATTAIN Labs operation and implementation was obtained through survey, and as such is considered “self-report” data. While survey procedures are recognized as viable approaches that allow for the collection of substantial amounts of information, they are also subject to systematic biases and random distortions on the part of respondents.
- ❏ Although the survey response rate was high for adult students, not all coordinators returned completed surveys. A response bias, therefore, could have occurred.

To reduce the impact of these constraints, MAGI used multiple measurements so that the consistency of data could be checked across respondents, as well as ATTAIN sites.



FINDINGS

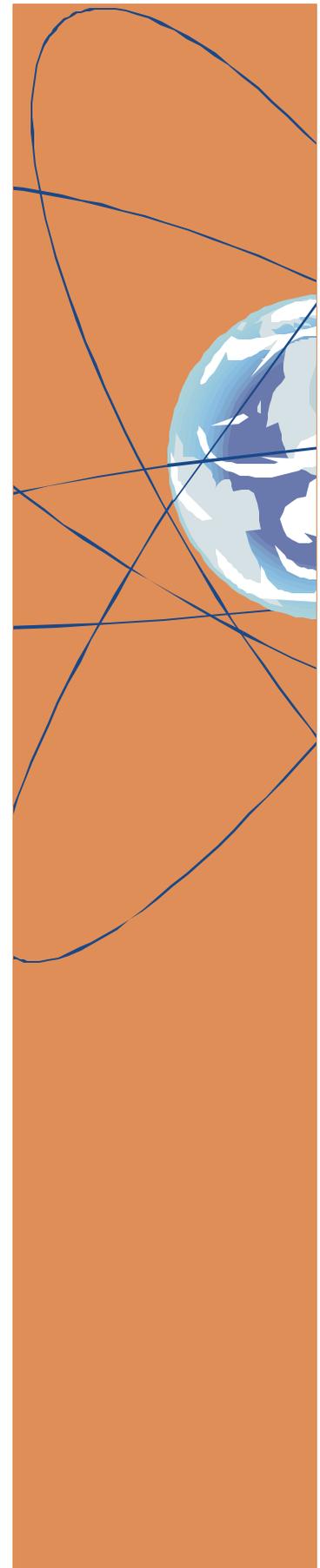
Are all of the organizational pieces of the project in place?



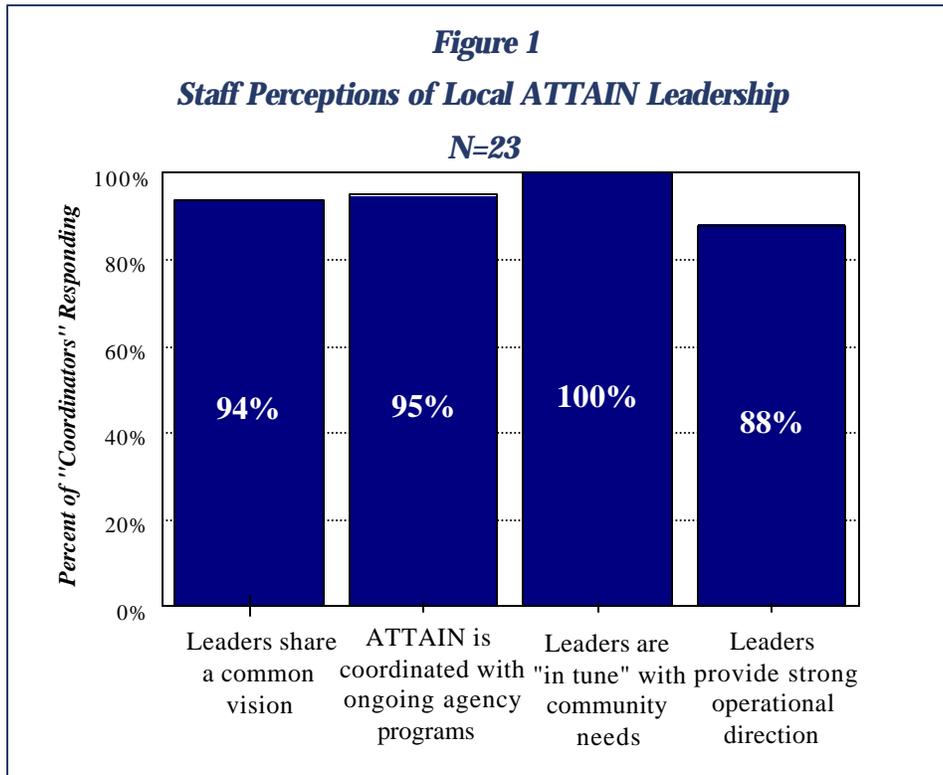
The effectiveness of an ambitious project such as ATTAIN is determined by a number of factors. One group of factors that can strongly influence a project's ability to bring about change is *organizational* in nature. Organizational features such as management, staffing, and resource support set the stage for meaningful change. As such, they can have a powerful influence on project outcomes. According to the research, successful service delivery programs are characterized by the following organizational elements:

-  effective leadership
-  consistent program planning
-  highly qualified staff
-  ample opportunities for professional development
-  sufficient resources including maintenance, hardware, software/courseware, and “peopleware”
-  maintenance/hardware and software support
-  strong backing from internal and external stakeholders
-  interactive communication and outreach strategies

Findings from this evaluation suggest that most of these organizational pieces were in place at ATTAIN sites, serving to support the project and move it to the next level.



PROGRAM LEADERS WERE SUCCESSFUL IN SHAPING THE DIRECTION OF ATTAIN AND SETTING IT ON ITS PROPER COURSE. (FIGURE 1)



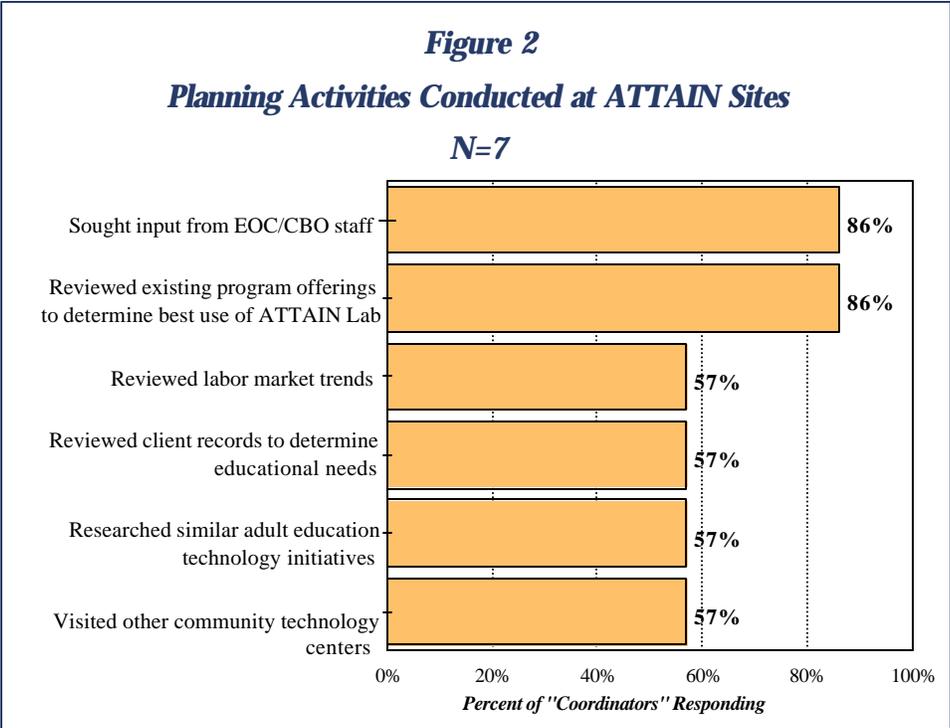
- 94% of the staff believed that program leaders shared a common vision for ATTAIN.
- Most of the staff also felt that leaders were able to connect that vision with ongoing program offerings:
 - 95% reported that ATTAIN Lab activities were well-coordinated with existing services for students, e.g., job training, GED preparation, etc.; and 87% said that Lab offerings fit in with what they did on a *daily basis*.
- Staff also reported that the leadership clearly communicated the importance and priority of the ATTAIN project.
 - Half of them said that relative to other programs, the Lab was top priority—*the main menu*—at their site; of the remaining 50%, nearly all said that ATTAIN was as important as other site offerings.

Site Visit Notes

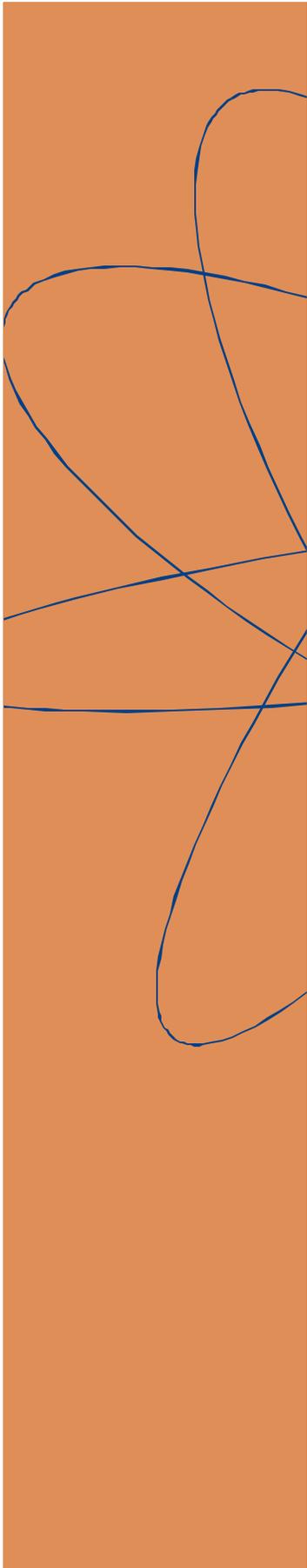
Visits to ATTAIN sites suggest that faculty and staff share a common vision for the project—to enhance existing instructional programming by offering job-specific training, workplace skills tutorials, basic skills courseware and general access to technology. Selected sites also reported that their vision for ATTAIN extends beyond current programming—namely, to provide access to state-of-the-art technology for the benefit and empowerment of all underserved individuals and their families in the community.

- All of the staff (100%) believed that program leaders were “in tune” with community needs and were able to translate those needs into solid technology offerings.
- 88% reported that the leaders provided strong direction for day-to-day Lab operations.

ATTAIN SITES ENGAGED IN A VARIETY OF PLANNING ACTIVITIES TO PREPARE FOR AND MAINTAIN THE EFFECTIVE IMPLEMENTATION OF THE PROJECT. (FIGURE 2)



- About 60% or more of the participating organizations carried out the following:
 - sought input from their staff (86%)
 - reviewed existing offerings to determine the best use of the ATTAIN Lab (86%)
 - reviewed labor market trends (57%)
 - reviewed client records to determine educational needs (57%)
 - researched similar adult education technology initiatives (57%)
 - visited other community technology centers (57%)



- ▮ Fewer organizations sought input from community members or assessed community resources (43%); however, most intend to do so in the future.

ATTAIN “STAFF” AT THE PARTICIPATING ORGANIZATIONS WERE WELL QUALIFIED AND EXPERIENCED IN ADULT EDUCATION AND TECHNOLOGY APPLICATIONS.

- ▮ Staff members worked an average of 11 years in adult education/workforce preparation, and nearly 10 years in their current position.
- ▮ Two-thirds or more had earned a bachelor’s degree or beyond, with more than half having a master’s degree.
- ▮ 70% of the staff worked full time.
- ▮ 80% of the staff considered themselves *fluent* with most technology applications; only 3% said they did not have the basic skills to use technology. **(Figure 3)**

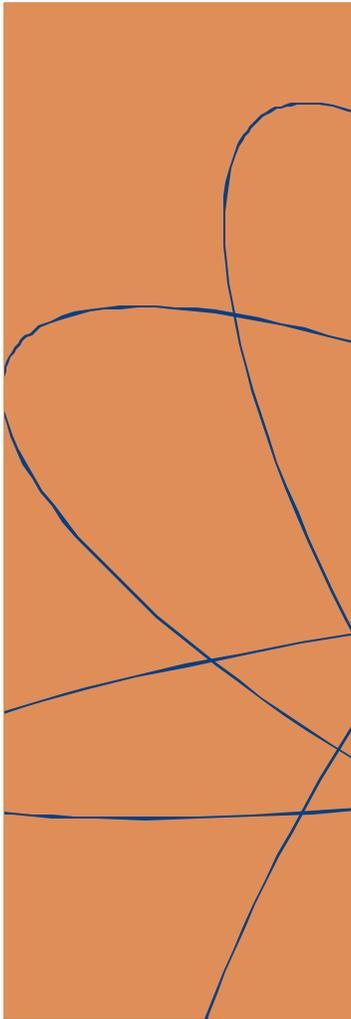
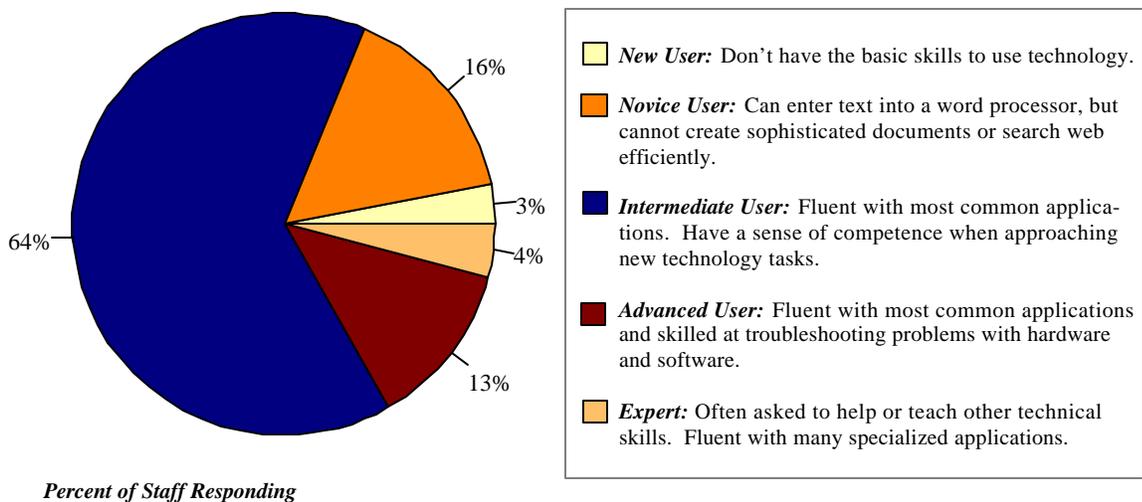
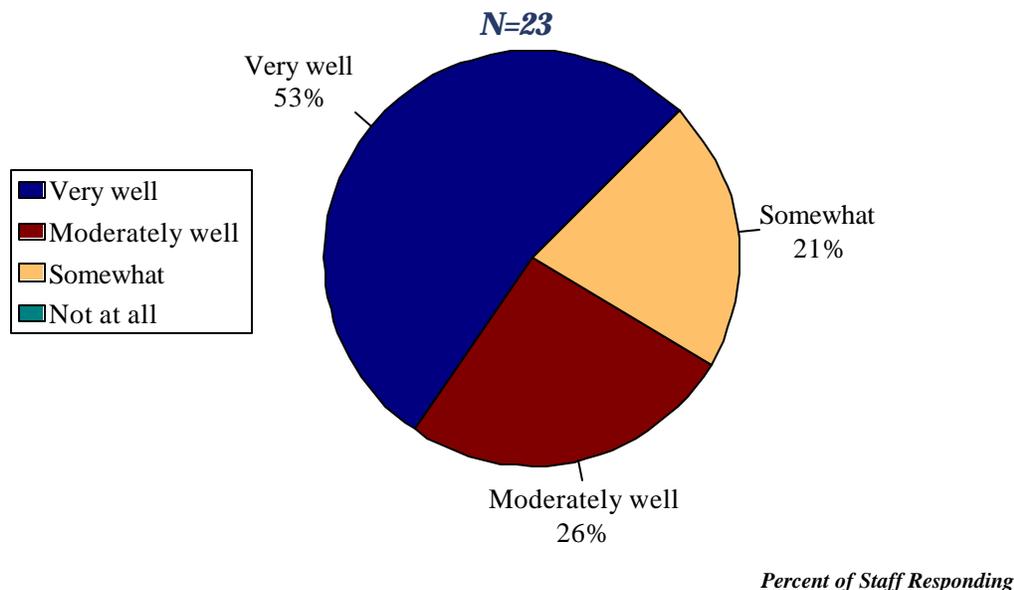


Figure 3
Technology Fluency among Staff
Using ATTAIN Lab
N=26



ALTHOUGH A MODEST AMOUNT OF PROFESSIONAL DEVELOPMENT WAS PROVIDED TO STAFF, IT GENERALLY PREPARED THEM WELL FOR THEIR ATTAIN RESPONSIBILITIES. (FIGURE 4)

Figure 4
Staff Perceptions of How Well Training Prepared Them for Using the ATTAIN Lab with Their Students

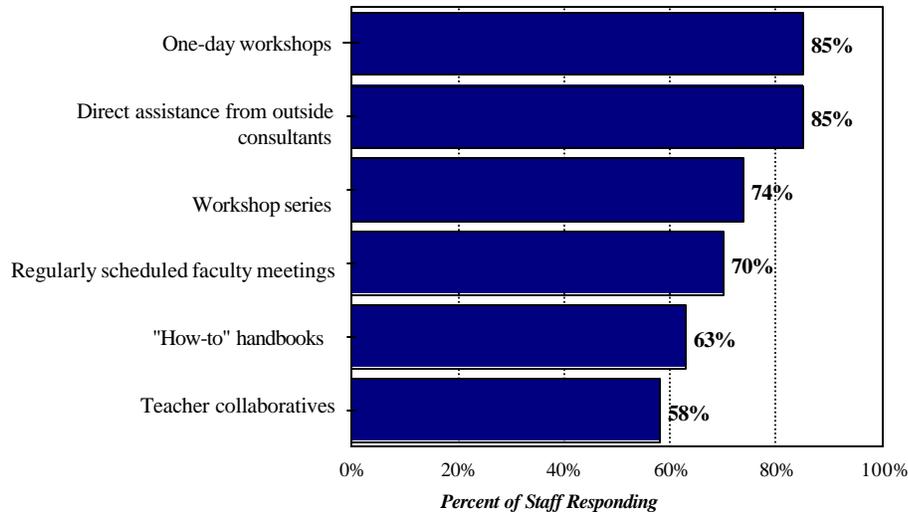


- On average, staff received just over 9 hours of training in the use of the ATTAIN Labs' programs and features.
- Training was provided through various methods, with the large majority of staff receiving instruction through... **(Figure 5)**
 - one-day workshops (85%)
 - direct assistance from outside consultants (85%)
 - a workshop series (74%)
 - regularly scheduled faculty meetings (70%)
 - "how to" handbooks (63%)
 - teacher collaboratives (58%)

The technical assistance provided by ISI to each of the EOC ATTAIN labs was instrumental to the successful implementation of the labs.

*—William Chalmers
Director of EOC Operations
University Center for
Academic and Workforce
Development*

Figure 5
Technology-related Professional Development
Offered in Support of ATTAIN
N=23



- 70% or more of the staff were trained in ATTAIN-specific applications including...
 - ISI courseware (78%)
 - the enrollment process for using ISI courseware (74%)
 - use of the ISI Management System (70%)

- Fewer received training in more general applications such as...
 - word processing (22%)
 - e-mail (22%)
 - presentation software (13%)
 - web browsers or search engines (13%)
 - spreadsheets (4%)

- Most staff—74%—felt that training prepared them “very well” or “moderately well” for using the ATTAIN Lab with their students.

- 80% reported feeling comfortable using the hardware/software in the ATTAIN Lab.

Site Visit Notes

Methods of professional development varied across sites. In some cases, all faculty and staff participated in full-day sessions, while other sites relied on a turn-key training approach. Staff were reportedly comfortable with the extent and quality of training received, and appreciated the ability to provide feedback to ISI regarding additional training needs. Staff described ISI trainers as “knowledgeable, helpful and patient”.

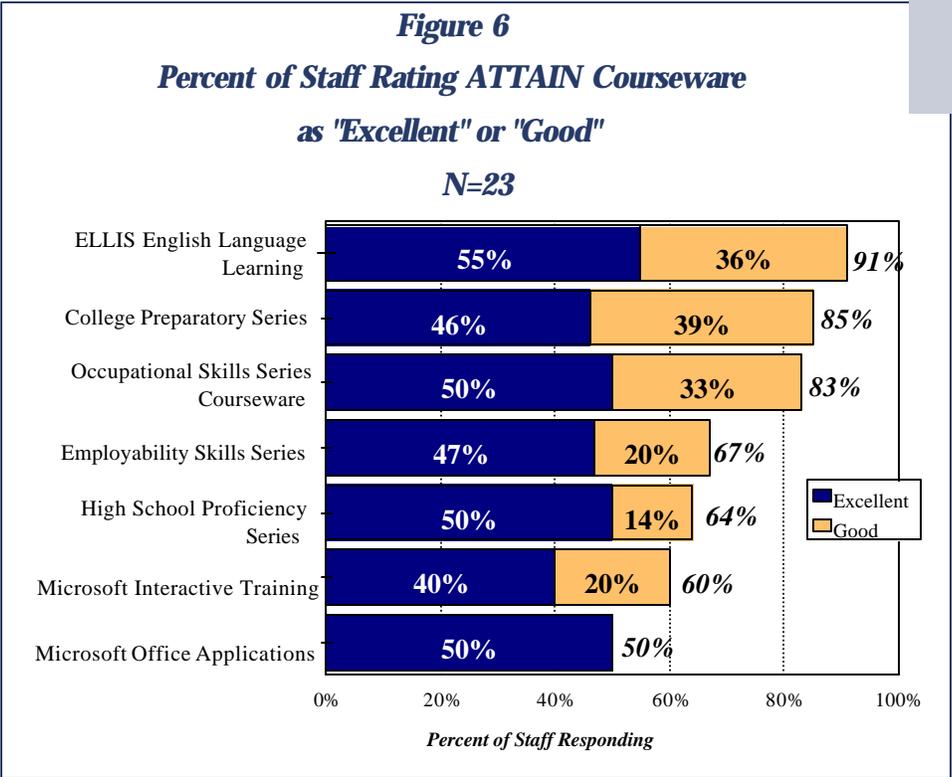
- However, one-third of the staff cited “insufficiently trained staff” as an obstacle to the effective usage of the ATTAIN Lab, and nearly 30% said they were unclear about their roles and responsibilities on the project.

ATTAIN SITES RECEIVED THE NECESSARY HARDWARE AND SOFTWARE SUPPORT TO GUARANTEE THE EFFECTIVE IMPLEMENTATION OF THE PROJECT.

- All sites installed fully operational computer labs with 24 Internet-connected workstations.
- Each workstation is capable of running powerful software applications including Microsoft Office Suite and the ISI courseware package.
- Staff gave high marks to the quality of the available applications in meeting clients’ needs, with about two-thirds or more rating the following as “good” or “excellent”. **(Figure 6)**

ISI staff were extremely responsive to the requests for hardware and software technical assistance made by individual EOC staff.

— William Chalmers
Directors of EOC Operations



- ELLIS English Language Learning software (91%)
 - College Preparatory Series (85%)
 - Occupational Skills Series (83%)
 - Employability Skills Series (67%)
 - High School Proficiency Series (64%)
 - Internet access (64%)
- ☰ Only half the staff, however, felt as positively about Microsoft Office Suite; in fact, 50% rated this application as “poor” in terms of meeting clients’ needs.
- ☰ Overall, 95% of the staff said they had sufficient resources to make effective use of the ATTAIN Lab with their students.

ATTAIN SITES PROVIDED THE “PEOPLEWARE” TO SUPPORT THE SUCCESSFUL IMPLEMENTATION OF THE PROJECT.

- ☰ More than 70% of the organizations assigned a full-time (43%) or part-time (29%) employee to oversee the ATTAIN Lab.
- ☰ Most organizations also provided technical or instructional support to assist their staff in using the ATTAIN Lab.¹
- ☰ The majority of staff, however, rarely received this support:
- 60% said they “occasionally” or “never” received technical support for hardware or software troubleshooting
 - 55% said the same about instructional support, e.g., using ISI courseware for lessons or assisting students in using ISI courseware
 - 75% rarely received help in supervising students’ personal technology use, e.g., for e-mail, word processing, or Internet surfing

Site Visit Notes

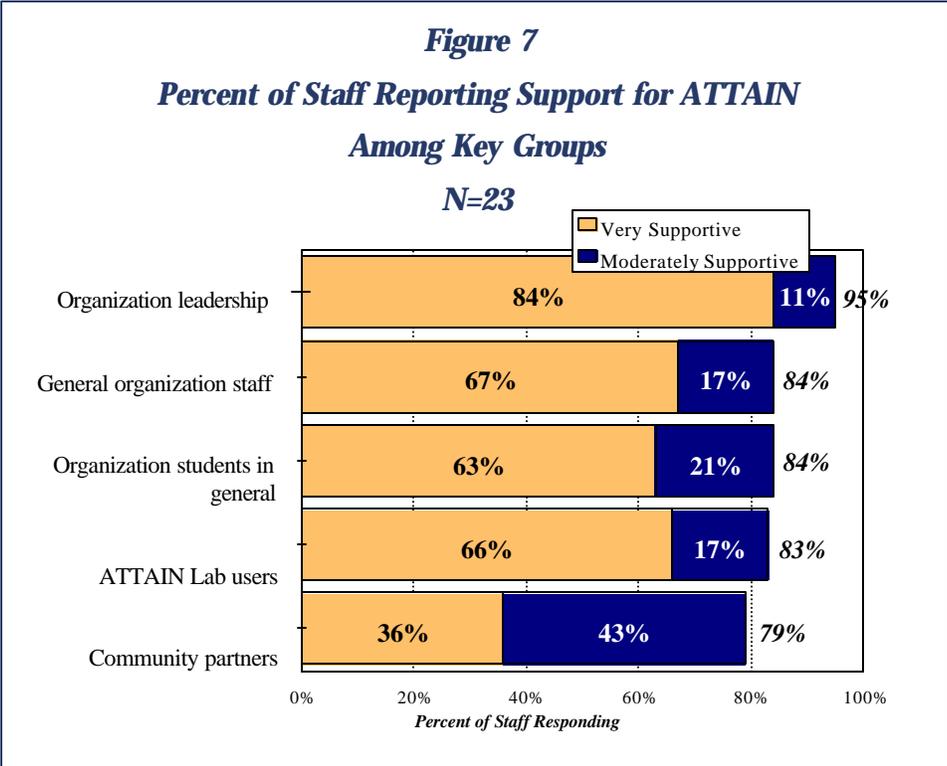
The majority of sites report that technical support from ISI is timely and effective. In most cases, the task of communicating with ISI is assigned to one person within the organization. Therefore, most staff don’t experience the technical support firsthand. In the words of one faculty member, “When we have technical problems, we don’t touch anything. Our coordinator contacts ISI and they respond immediately. Everything is monitored, and we have never had a computer down.”

¹ The evaluation did not distinguish between technical assistance and support provided internally by the local organization and externally, by ISI.

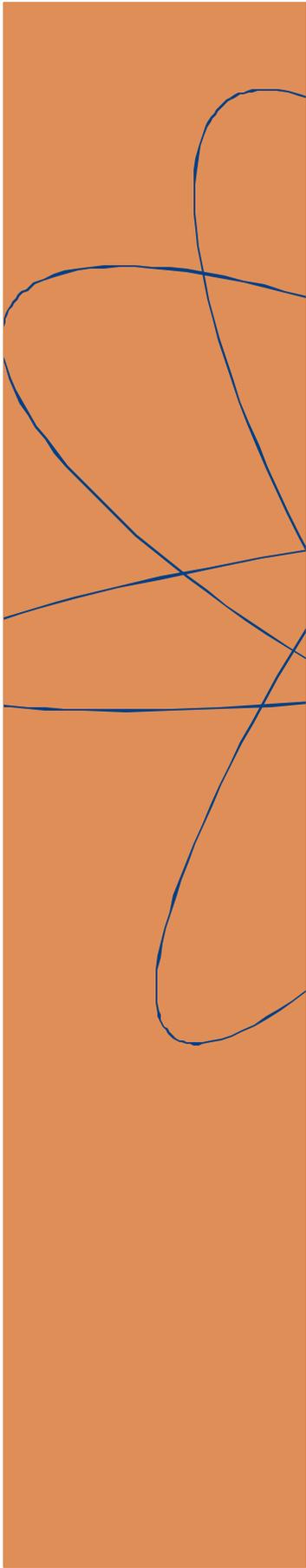
- Still, 90% of those who did receive assistance, felt it was very useful.
- A substantial number of staff—from 40% to 50%—named software issues and hardware concerns as obstacles to effective use of the ATTAIN Lab at some point.

ATTAIN SITES ARE SEEKING OTHER SOURCES OF FUNDING TO SUPPORT THE PROJECT INCLUDING FOUNDATION, FEDERAL, AND COMMUNITY PARTNER FUNDS.

ATTAIN HAS THE STRONG BACKING OF ORGANIZATION STAFF. (FIGURE 7)



- 9 out of 10 staff reported that they understood and supported their organization’s goals and objectives for the ATTAIN Lab.
- An equally high percentage believed that other key groups—community partners, organization leadership, general organization staff, and adult students—supported the ATTAIN Lab.

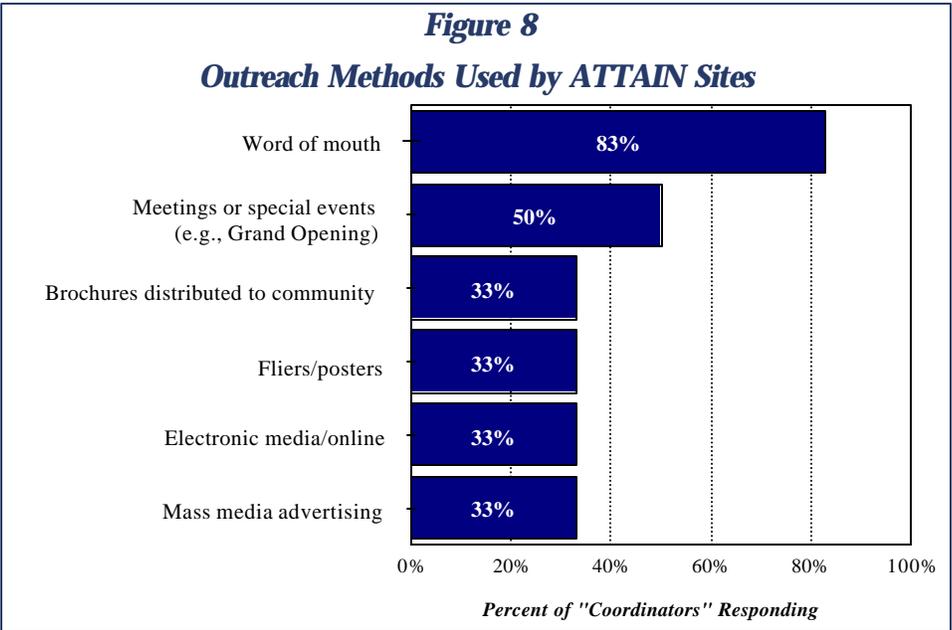


ATTAIN SITES USED VARIOUS STRATEGIES FOR KEEPING STAFF, ADULT STUDENTS, AND THE GENERAL COMMUNITY INFORMED ABOUT THE PROJECT, AND FOR RECEIVING INPUT ON KEY ACTIVITIES.

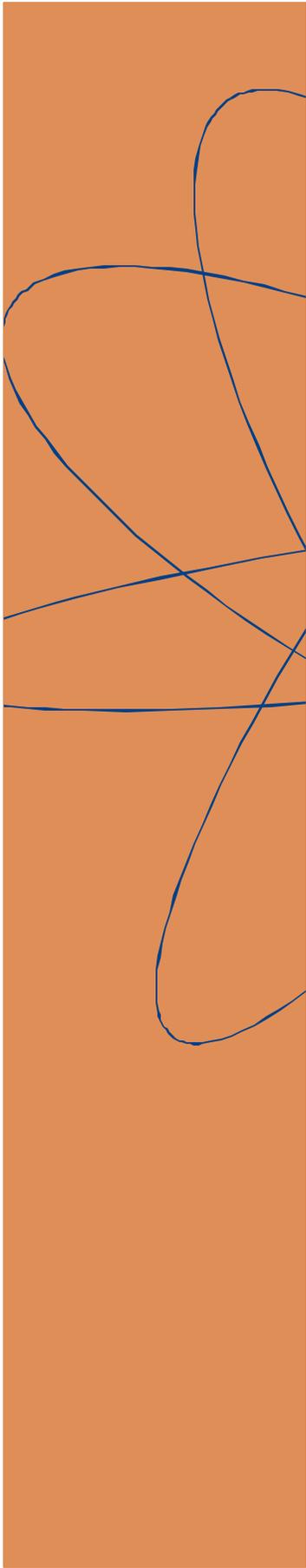
- Close to 90% of the staff reported that communication among key project stakeholders—ISI staff, organization leadership, and organization staff—was good.
- Two-thirds reported that systems were in place to receive feedback from key groups for program improvement purposes.

ATTAIN SITES FOLLOWED THE “BUILD IT AND THEY WILL COME” APPROACH TO MARKETING THE PROJECT.

- Although about one-third of the participating organizations “reached out” to adult learners and the community via brochures, mass media advertising, posters, and informational meetings, the predominant outreach method was *word of mouth*. **(Figure 8)**



- Indeed, most adult students learned about ATTAIN from organization staff; under 10% heard about the program from a flyer, poster, or media announcement.



Voices of Faculty and Staff



We were well-prepared for the opening of the Lab; the orientation and training were very helpful.

The technical assistance we get from ISI has been great. Austine (ISI's Senior Network Engineer) is amazing.

The ISI course on Customer Service is excellent.

As more faculty/staff learn more about what the lab really can do, they will start to use it more and more with their students.

Our goal is to use the ATTAIN lab as a community lab. That includes exposing as many students to the technology as possible.

The ATTAIN lab is comfortable and inviting, which instills a sense of pride. The students have ownership of it, and they treat the lab respectfully. To get Blacks and Hispanics exposed to this technology is priceless.

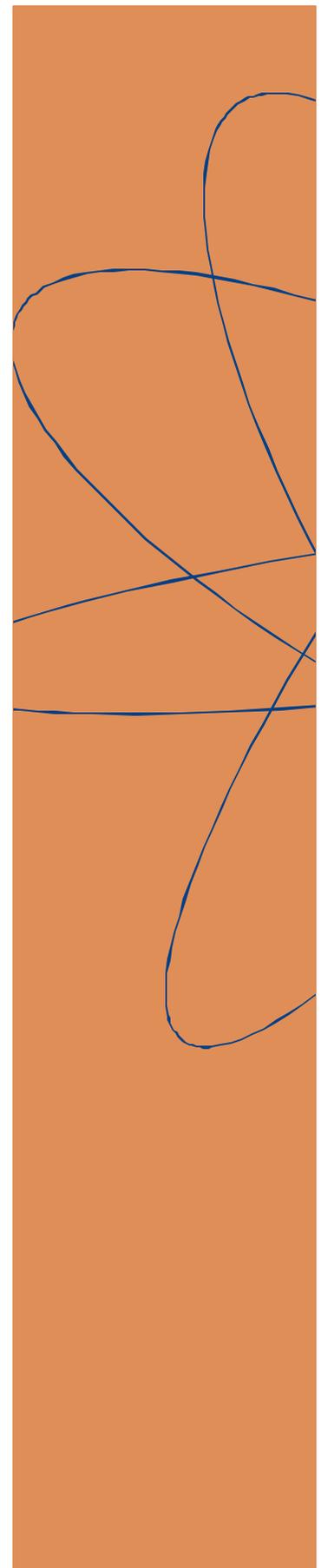
The lab is running very well since we got started. We've worked out all the kinks. It's a matter of just increasing the number of students using the lab.

Students are always excited about technology. We have a state-of-the-art lab here, and they seem quite comfortable using it.

Though we think everyone these days has access to the Internet, for many of our students this is their only access.

In the process of using the lab faculty are learning how to use it best. That kind of thing takes time—finding out what software is appropriate for what people.

More than any other aspect of the technology, I appreciated the look in their eyes when they first see the lab. That's something I can't put a price on. They deserve this as much as any other kid.



Who is using the Attain Labs?

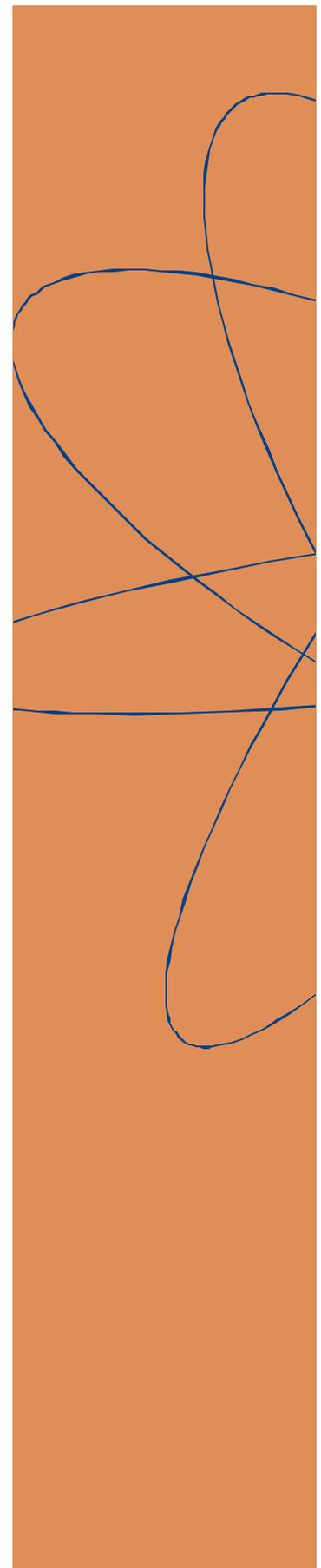
Access to the latest computer technology and software applications, while certainly important, does not guarantee usage. For adult learners to take advantage of the technology that exists, certain preconditions are necessary. Foremost, adults must feel comfortable and confident using the technology. Second, the available technology must meet their needs—i.e., be “in sync” with their reasons for program enrollment. Equally important, adult learners must be able to access the technology at times convenient to their schedules. Our findings indicate that these needed ingredients were evident at participating organizations. As a result, the ATTAIN Labs enjoyed widespread usage, particularly by the adult students for whom they were designed.

SINCE THE OPENING OF THE FIRST ATTAIN LAB IN 2001, OVER 5,000 ADULT STUDENTS STATEWIDE HAVE USED THE ADVANCED TECHNOLOGY OFFERED.

- ▮ On a typical day, an average of 50 students per site used each Lab.

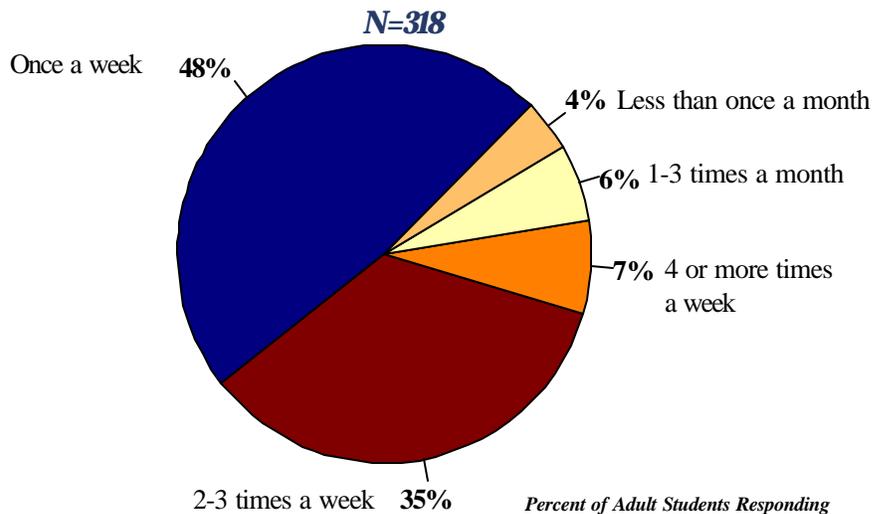
ATTAIN LAB USERS WERE REPRESENTATIVE OF THEIR COMMUNITIES.

- ▮ The typical Lab user was a 30 year old, single, female of color. She was unemployed, had two children, and had yet to receive/earn a high school diploma.



ATTAIN LAB USERS WERE FREQUENT USERS. (FIGURE 9)

Figure 9
Frequency of Adult Students'
Use of the ATTAIN Lab



- 90% used the Lab at least once a week, with 42% using it two to four times a week.

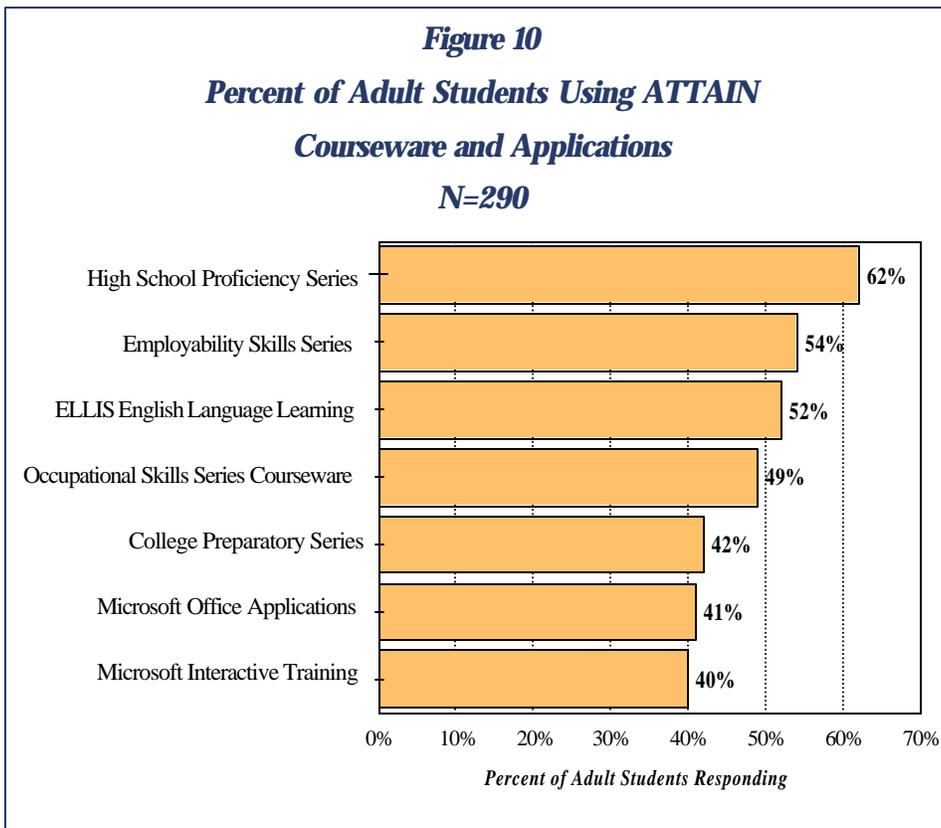
ATTAIN LAB USERS FELT COMFORTABLE USING THE LAB TECHNOLOGY.

- The vast majority reported that they experienced “no problem”...
 - learning how to use the equipment (92%)
 - actually using the equipment (90%)

THE COURSES OFFERED IN THE ATTAIN LAB MATCHED STUDENTS' NEEDS.

- Adult students enrolled in their organization’s program for three main reasons: 1) to get a high school diploma or GED; 2) to be trained for a better job; and 3) to improve their English skills.

- Correspondingly, the most frequently used software programs aligned with those needs: **(Figure 10)**



- ISI High School Proficiency Series (used by 62% of the students)
- Employability Skills Series (54%)
- ELLIS English Language Program (52%)
- ISI Occupational Skills Series (49%)

- 95% of the students reported that the ATTAIN courseware met their needs; although, about 30% said they would like to have other technology programs in the Lab.

THE ISI COURSEWORK WAS, BY FAR, THE SINGLE LARGEST SOFTWARE PACKAGE USED.

- Between September 2002 and March 2003, over 1,700 students logged into an ATTAIN Lab workstation statewide and used one of the ISI-designed courses.

Site Visit Notes

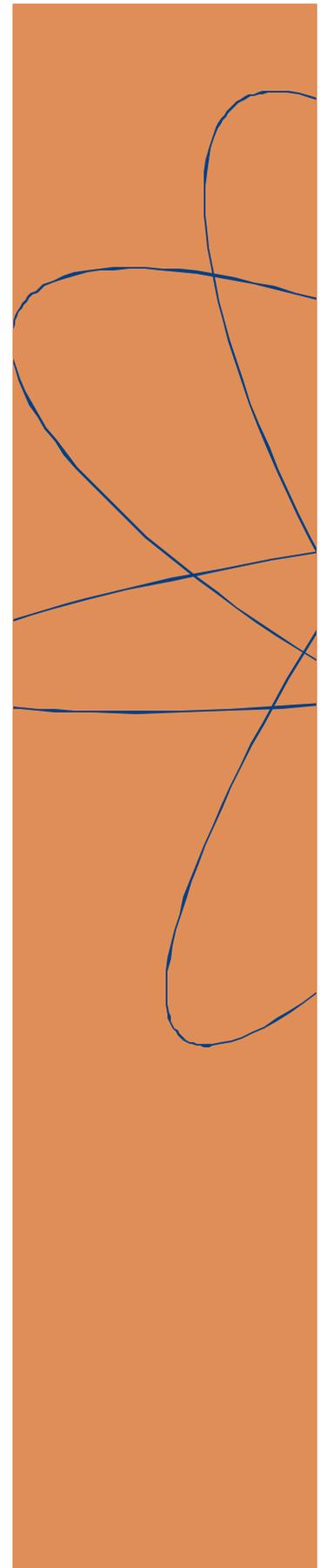
Faculty and staff use the ATTAIN lab with their students for multiple purposes and in a variety of ways. At one site, youth participating in a Jobs for Youth program use a combination of Internet resources (CareerZone, Monster.com), Microsoft Office applications, and academic and vocational courseware to complete a comprehensive career project comprised of researching a career of interest, composing a letter of inquiry to a college or university, composing a resume and cover letter, and calculating a household budget based on the anticipated salary for their chosen career.

- During this same period, over 54,000 ISI course sessions were undertaken, with an average session lasting 12 minutes.

ATTAIN LABS WERE OPEN TO ADULT STUDENTS AND STAFF AT TIMES CONDUCIVE TO THEIR SCHEDULES.

- Across all sites, ATTAIN Labs were open for use from 8:00 AM until 8:00 PM, Monday through Friday, and from 8:00 AM until 3:00 PM on Saturdays.
- The vast majority of students (96%) used the Lab during weekdays rather than weekends:
 - 47% used it during the morning hours
 - 29% used it in the early afternoon
 - 11% used it from 3:00 to 5:00 pm
 - 16% used it after 5:00 pm
- 95% of the students felt that the hours of operation “were good for them.”

AT THIS TIME, FAMILY MEMBERS OF ADULT LEARNERS AND INDIVIDUALS FROM THE COMMUNITY ARE NOT ACCESSING THE TECHNOLOGY RESOURCES IN THE ATTAIN LABS.



Voices of Students



I got a lot out of the Workforce Preparation course; I learned about job interview skills.

I had no problems getting started [on the ISI courseware]; it's easy to use and follow.

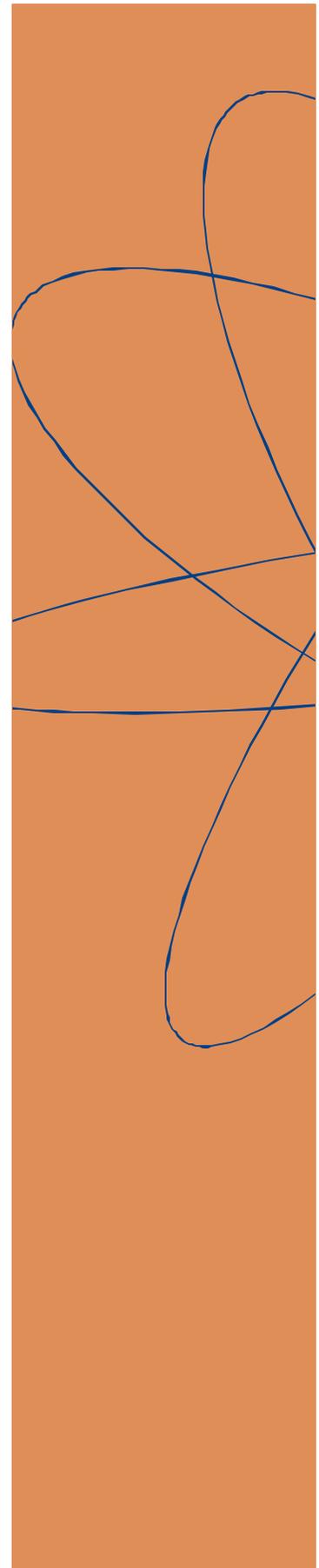
I learn much better when I can control the pace of what they're teaching; and that's what the ATTAIN Lab courses do.

I like the Lab. It's quiet. I can search the Internet for material for class assignments; I can use the computer to do a report and print it out; and I can get my email.

I use the Customer Service programs a lot. I had jobs in the past and wanted to sharpen my professional skills.

School (and the diploma) is necessary. The center has helped me to mature and to realize that technology is growing. One of my goals is the computer.

Without a diploma, and computer skills, I will earn minimum wage for the rest of my life. With it, I can develop a better life for me and my family.

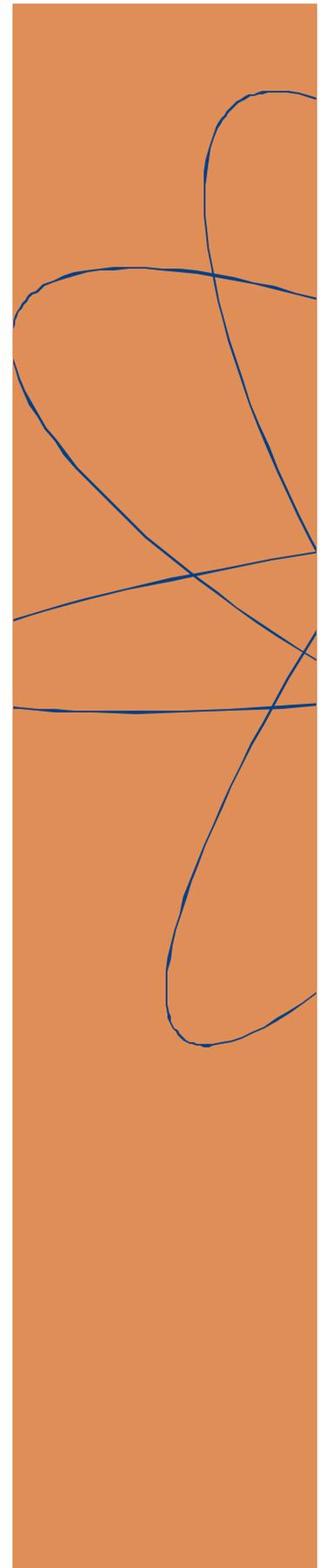


Are Users Satisfied?

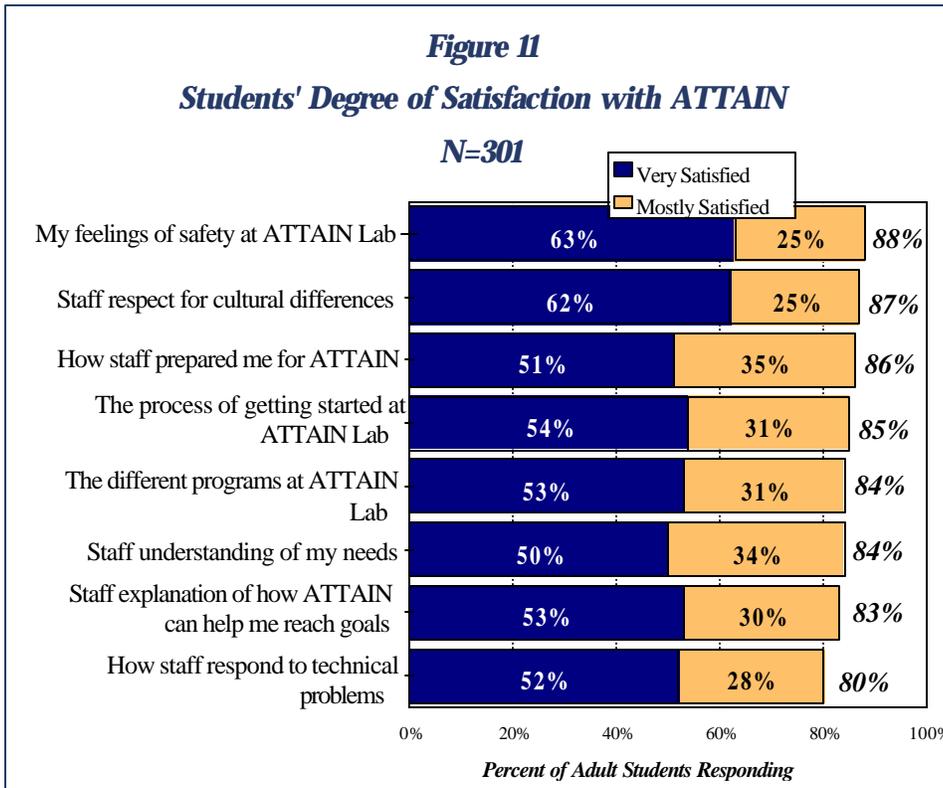
The effectiveness of a relatively new program such as ATTAIN can be gauged, largely, by the reactions of key groups. The extent to which adult learners and staff are satisfied with program services and believe that the program has produced important benefits are critical factors in ultimate success. Using these measures of success, the ATTAIN project can be judged as *highly effective*.

ADULT STUDENTS GIVE HIGH MARKS TO THE ISI COURSEWARE AND OTHER TECHNOLOGY APPLICATIONS.

- The majority—60% or higher—gave “good” or “excellent” ratings to the following ATTAIN Lab courseware and applications:
 - Internet (78%)
 - Employability Skills Series (77%)
 - ELLIS English Language Learning software (74%)
 - High School Proficiency Series (73%)
 - College Preparatory Series (73%)
 - Microsoft Office Interactive Training (72%)
 - Microsoft Office Suite Applications (70%)
 - Individual ATTAIN Lab websites (68%)
 - Occupational Skills Series (60%)
 - Email (60%)

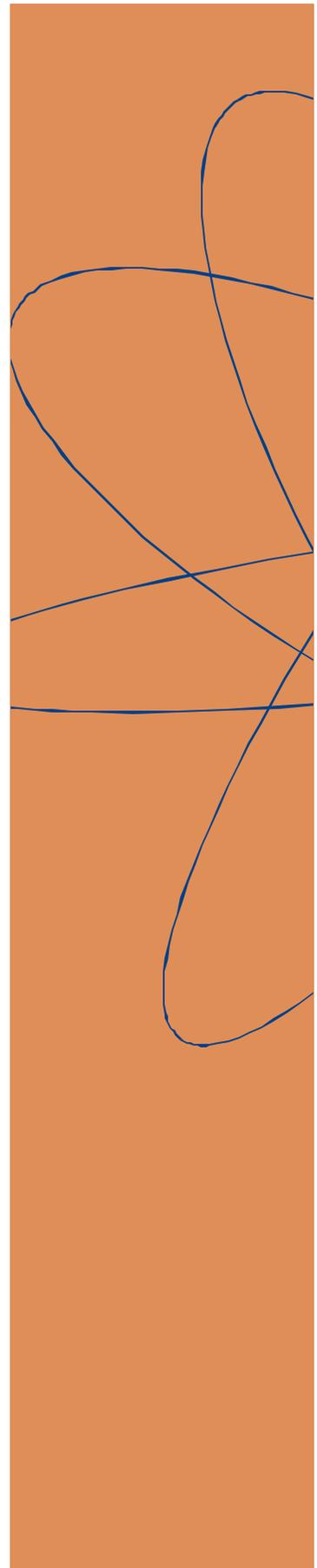


STUDENT SATISFACTION WITH OTHER ASPECTS OF ATTAIN ALSO RAN HIGH. (FIGURE 11)



- 85% or more of the students said they were “very” or “mostly” satisfied with...
 - their feelings of safety and security at the Lab (88%)
 - staff's respect for students' cultural and ethnic difference (87%)
 - the way staff prepared them to use the Lab technology (86%)
 - the process of getting started in the Lab (85%)

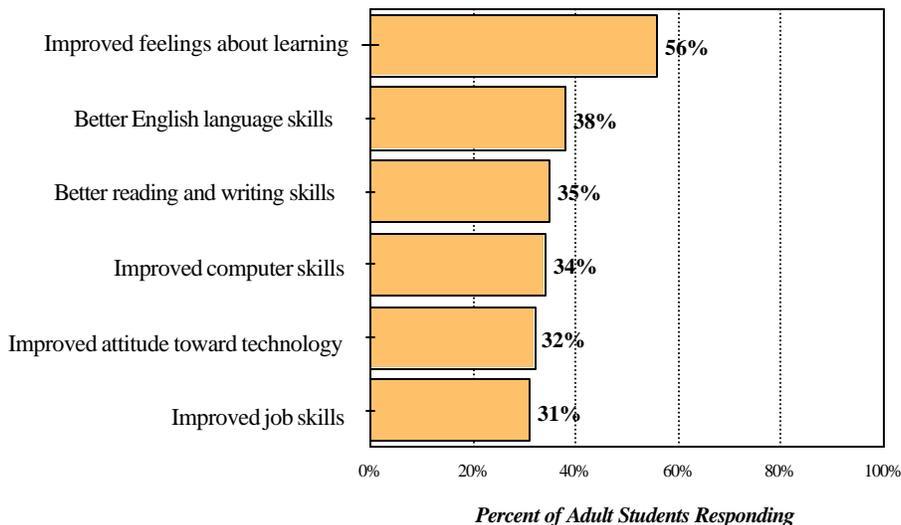
- And 80% or more felt the same about...
 - the kinds of programs and services offered by the Lab (84%)
 - how well staff understood their needs (84%)
 - staff explanation of how the Lab could help them reach their goals (83%)
 - how staff responded to technical problems with equipment (80%)



STUDENTS BENEFITED FROM THEIR USE OF THE ATTAIN LAB.
(FIGURE 12)

Figure 12
Students' Perception of the Top Benefits
Derived from ATTAIN

N=295



- More than half (56%) reported that because of the ATTAIN Lab they *felt better about learning*. And about 40% said that ATTAIN helped them to develop *better English language skills*.

- Other benefits reported by about one-third or more of the students included...
 - better reading and writing skills (35%)
 - new or improved computer skills (34%)
 - feeling better about technology (32%)
 - improved job skills (31%)

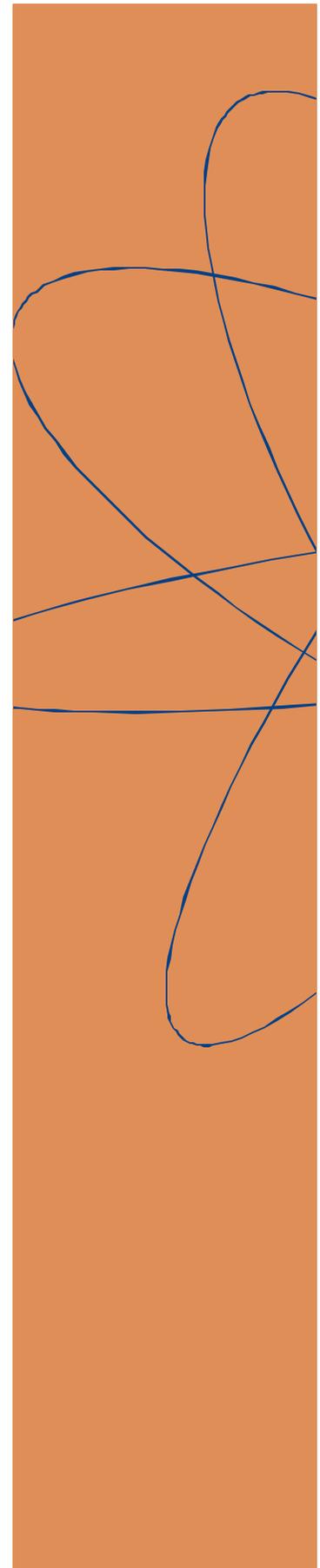
- A third of students also reported that their families have benefited from their use of the ATTAIN Lab.

Site Visit Notes

Staff reported that ATTAIN has enhanced classroom learning, increased efficiency among faculty and staff, and given students the opportunity to become familiar, and in some cases proficient, using state-of-the-art technology such as they will encounter in the workplace. Some students reported that access to the ATTAIN lab has provided both structure and meaning to their personal goals, and has afforded them a sense of pride and accomplishment.

THE ATTAIN LAB HELPED SOME STUDENTS BECOME MORE SELF-SUFFICIENT.

- ▮ Nearly 30% of the students reported the Lab helped them to *become more independent*. And 9%—or about 30 students—said that because of ATTAIN they had a *better chance of getting off welfare*.
- ▮ Organization staff echoed these sentiments, with 50% saying that their adult students developed increased independence because of ATTAIN.



Voices of Students



I want to be a medical secretary, and I learned a lot in Office Skills. There was a lot I didn't know but learned using ISI.

I feel more confident with technology now, because of the ATTAIN Lab.

I didn't know how to do a resume or cover letter, but now I do. A perfect one, too!

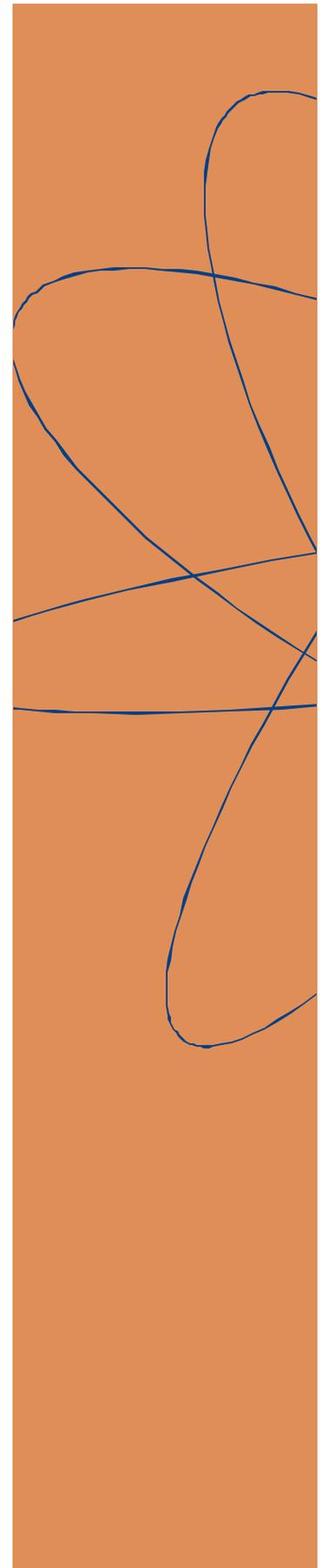
In CareerZone, you list all of your skills and it lists all of the jobs you could pursue. There were a lot of different jobs I didn't know about. And you also learn about the education you need for those jobs.

Even though we may have been comfortable with it [technology] before, we now get to use it 3 times a week. With everyday usage, we're getting much more comfortable with technology.

ISI is interactive—in some parts you watch, or listen. Some learn better by watching, some by listening. It works for different types of learners.

The pre-test for GED let me know what I need to do to pass. I have been able to practice everyday, and if I need help, I get it in class and review on the computer.

In the lab we help each other. The atmosphere teaches you. Seeing the way faculty and students speak helps me to know how to act professionally.



Voices of Faculty and Staff



I see improved personal independence in those students who use the Lab regularly.

The ATTAIN Office Worker program gives me a “heads-up” as to where these students are with these skills.

ATTAIN allows the learning pace to vary with the needs of participants.

I've enjoyed seeing the students excited about learning—the excitement has been awesome.

The scope of their experience has expanded—students have shown improvements in language, vocabulary, spelling and typing skills.

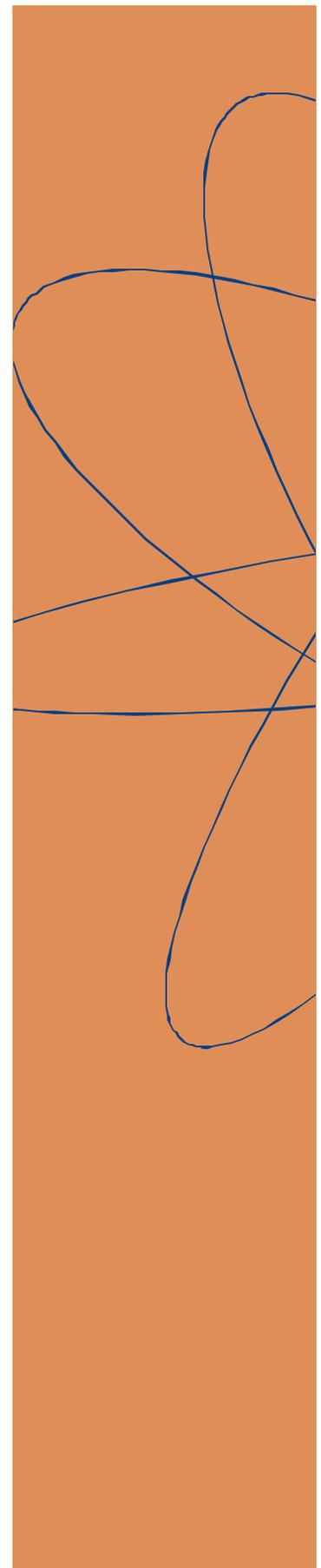
They get involved with ATTAIN. A positive attitude toward education is happening.

The assessments are great. It's not like taking a test at school; they get results right away and the students like that.

ATTAIN cuts down on curriculum time. ATTAIN has added to the efficiency of the programming in general.

The lab has a host of benefits to the student in addition to teaching him or her about technology and applications. It helps students feel better about themselves as competent, resourceful citizens, consumers, and students.

Adult student is able to understand his/her children's challenges as they relate to technology. Adult and child share a commonality—computer use!



STUDENT SUCCESS STORIES



Returning to school is a challenge that can require a good deal of personal courage from adult learners. Being out of touch with current educational demands, having “forgotten” the facts from “book knowledge”, being in classes with learners half their age, all contribute to a fair amount of trepidation. This is the story of a couple, RJ and CJ, who in their mid-60’s, took the plunge.

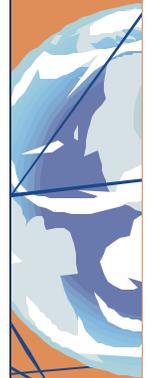
CJ had raised children and grandchildren for most of her adult life, and now was feeling the “empty nest” syndrome. An avid reader, she had become aware of the increasingly “invasive” role that computers have in daily life today. “I felt so stupid that my grandson could use a computer while I didn’t even know how to turn it on.” Her husband, RJ, having retired from UPS, also felt the need to retool his skills, since “retirement income just don’t pay too good.” Together, they decided to enroll in courses at the EOC.

Initial fears about their ability to meet the curriculum were quickly allayed. “I found out Day One, that the instructors here *met me where I was*,” said CJ with appreciation. After an individual assessment to determine their academic needs and vocational interests, instructors mapped out a schedule of classes, four days a week. Both CJ and RJ are enrolled in creative writing, science, and algebra and the Building Trades course. RJ is motivated by the ISI program, which helps him in home improvement projects.

Then came their introduction to the ATTAIN lab. “The instructors were wonderful. I didn’t feel like a fool... I am no longer embarrassed by mistakes, because the computer corrects me immediately and I can move on. Unlike a regular class, I don’t hold up the other students, and they don’t hold me up,” explained CJ. Her husband nodded in agreement. “This is very informative, especially the student feedback, where you immediately know how you did, and *why* you got a particular score.” They regularly use the Mavis Beacon and Building Trades software. Their only complaint is that “two hours a day is not enough.”

After eight months at the ATTAIN lab, both can attest to its positive role in defining their educational goals. CJ enjoys the writing software programs, and wants to further her education in English. RJ eventually wants a degree in Business Management, so he can operate his own business.

In her personal life, CJ is now able to use the computer at the community site where she volunteers. Best of all, she says, “I know I have the power to access information from the computer (Internet) when I need it. My grandson is in for a surprise.” 





enus is a 21 year-old, Hispanic female, born and raised in the Bronx by a single parent. She attended Jane Adams High School, dropped out, and with the help of her Aunt, ultimately registered in City as School High School. By her own admission, she wasted her first two semesters there. Then, she was placed in an internship at a North Bronx hospital, which proved to be a turning point for her. She found a supervisor, who encouraged her to present her internship experience formally to City as School staff as well as the hospital. She gained confidence from this experience and, eventually, graduated with a high school diploma from City as School, surprised that “she made it this far.”

Her long-range goal is to have a career in the field of mortuary science, but she recognizes that there are intermediate steps along the way that she may need to satisfy. After high school graduation, she canvassed a number of job agencies, hearing over and over again that she needed to have computer skills. Convinced that this training was necessary, she sought to find a “free” course as her income, which comes from the Department of Social Services, would not permit her to invest in an expensive course.

Lack of cost, combined with convenient location, made the North Bronx Career Counseling and Outreach Center (CCOC) a compatible match for her. She took the placement test in August, was notified in October that there were openings in the night class, and enrolled.

Ms. Ramos, who teaches Computer Literacy, began by teaching her to turn on the computer, and use the mouse so that there were “no surprises.” She provided handouts, which Venus reviewed later and found helpful. “Ms. Ramos was excellent,” she stated.

When Venus entered the class, she knew a little bit about the use of Word. Now, she has a working knowledge of Excel, Access, and word processing. “I can type, copy from one disk to another, format a disk, use PowerPoint to make presentations and write business letters and memos. I always wanted more and thought the class was so interesting! I also felt comfortable and, for the first time, found myself sitting in the front of the class and asking questions. I used all the time I was given during the day.”

She found the North Bronx CCOC faculty to be very supportive. In particular, she appreciated being exposed to women who spoke well and found that she was motivated to model

their language in order to “get to their level.” She felt that the staff provided “a lot of help” and were always willing to answer her questions. “They never turned me away and I always felt that they cared.” Other students were also helpful and encouraging. In short, she felt as if she was part of a family and, at the conclusion of the course, admitted that it was hard for her to leave the North Bronx CCOC.

As part of the WEP program (welfare clients work in exchange for their Social Services check), she was placed this past February in the Office of Security Services of the Human Resources Administration (HRA), a New York City agency. When she entered, she received a score of 79 on a computer literacy placement test, and she has done so well there that HRA would like to test her again and place her permanently in their offices, paying her \$17.00/hour. In Venus’s words: “At first, I was scared and couldn’t see working for no money. I got a check biweekly from Welfare for \$68.50. With my computer skills, I am now looking to go onto the payroll and make \$17.00/hour. This is exciting and I wouldn’t be able to do it without the computer class. It’s the best thing I could ever have done and I have been encouraging my Mother to enroll. She will once we can get a babysitter. I tell everybody that this is the best.”

Venus recommended that the North Bronx CCOC be expanded so that more students can take the Computer Literacy course. “It is such a wonderful opportunity for people, especially those my age. You’re treated like family and it’s free! The best!” 

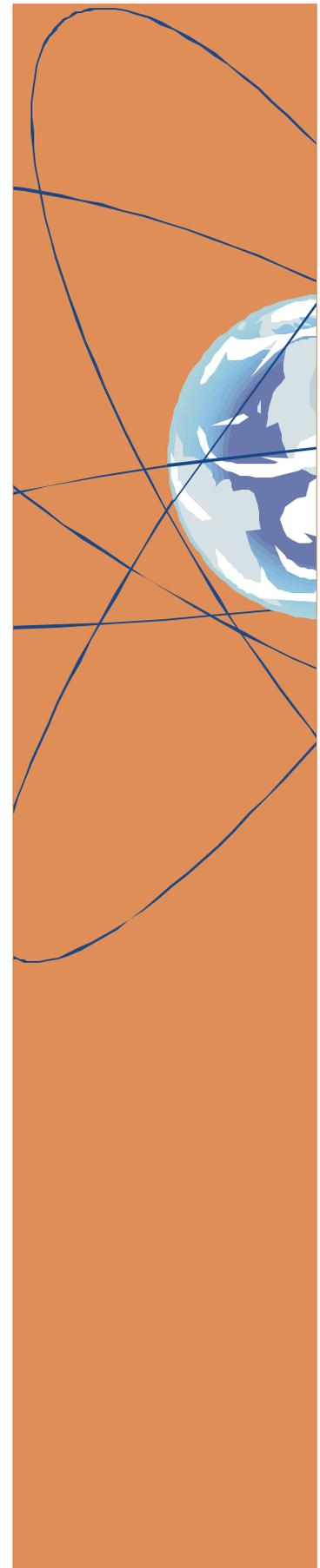
CONCLUSIONS AND RECOMMENDATIONS



Results from the preliminary evaluation of the ATTAIN Initiative suggest that the project made substantial progress toward achieving the twin goals of deploying fully-operational, advanced computer technology labs in economically disadvantaged communities throughout New York State and realizing high levels of satisfaction from those using the labs. These findings, however, should be tempered by the following factors:

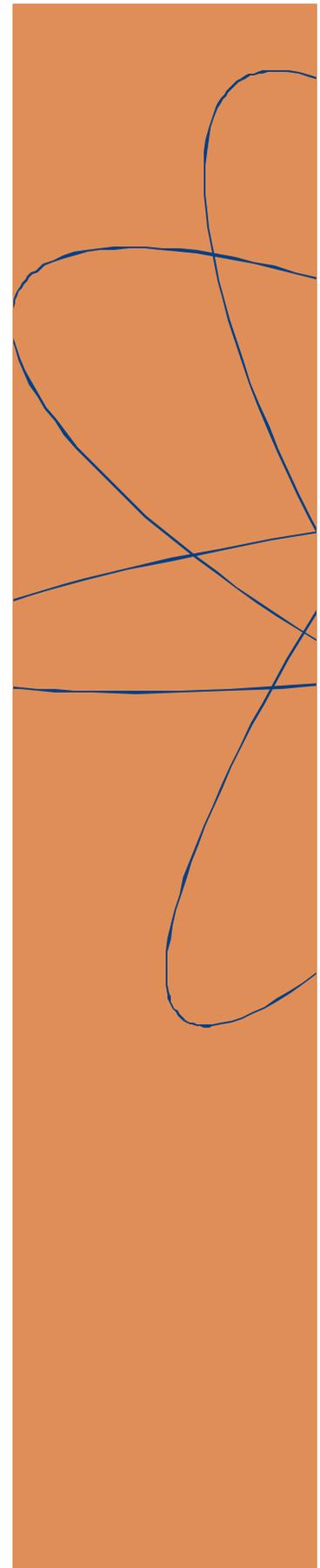
1. installation of the lab at some sites was, and can in the future, be slowed due to local circumstances, such as finding adequate and appropriate space to locate the lab, and configuring the facility's power and electrical systems to accommodate the lab needs;
2. professional development and technical assistance to EOC and community organization staff to effectively use all aspects of the ATTAIN Lab, and to integrate the lab features into existing programs and services, play an important role in the successful start-up and operation of the labs; and
3. outreach to the families of adult students, the community, and to other possible partners as to the availability of the labs and their potential for serving a broader community is a critical next step if the ATTAIN labs are to become the empowering force that project designers hope for.

Thus more study and evaluation is needed before a complete picture of the ATTAIN Initiative, particularly its impact on adult students and the community, can be fully drawn. Nevertheless, there are a number of important conclusions that can be surmised from the present evaluation of the ATTAIN Initiative. These are listed below followed by a modest set of recommendations for the next phase of this exciting project.



Conclusions

- ❏ As of April 1, 2003, the 12 ATTAIN Labs studied as part of this evaluation have been fully deployed. Nine in SUNY Educational Opportunity Centers, 1 in a SUNY Career Counseling and Outreach Center, and 2 in selected community-based organizations; each one located in an economically disadvantaged area of New York State.
- ❏ The planning for, and deployment of, ATTAIN Labs were informed by a variety of information gathering efforts and thoughtful administrative activities which paved the way for high levels of use by adult students and faculty/staff.
- ❏ Each participating EOC and community organization has put into place an array of ISI-developed workforce preparation and academic skills courseware, as well as computer applications that can significantly enhance their capacity to serve the needs of their students.
- ❏ ATTAIN labs have been well-received by adult students and the faculty/staff of participating EOCs and community-based organizations.
- ❏ Adult students who use the ATTAIN labs are learning; they reported improved computer skills, increased job competencies, and the ability to solve work-related problems using computers.
- ❏ Professional development of EOC and community-based organization faculty and staff was modestly sufficient to prepare them to integrate the ATTAIN lab features into their programs and services.
- ❏ ATTAIN labs have yet to be adequately engaged by adult students' families and the community.



Recommendations

- ❏ Educational Opportunity Centers and community organizations should provide ongoing professional development to staff on how to use the computer technology resources in the lab to support and enhance current programs and services.

- ❏ Educational Opportunity Centers and community organizations should become creative at marketing the benefits of the computer technology resources within the labs.

- ❏ SUNY EOC and community-based organizations must develop a strong vision for the identity of the ATTAIN labs and market this vision and identity to the community.

- ❏ A multi-year, comprehensive evaluation should be conducted to investigate the continued role and operations of ATTAIN labs in EOC and community-based organizations in New York, and their impact on adult learners, their families, and their communities.

