Mainstreamed Academic Assistance and Enrichment for All Students: The Historical Origins of Learning Assistance Centers

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Learning Assistance Centers (LACs) have become one of the most widely adopted approaches for providing academic support and enrichment for all students enrolled at a postsecondary institution. LACs were a natural product of historical forces influencing the college environment such as changes in federal policies, increases in federal economic resources, rapidly increasing enrollment, increased diversity of the student body, and mutually supportive alliances with other campus entities. Understanding the external and internal forces that helped to create LACs can also provide insight into new venues for transformation of them to meet future needs.

Introduction

Learning Assistance Centers (LACs) have become one of the most widely adopted programs for increasing academic success of college students in American postsecondary institutions. According to Frank Christ, a national leader in this field, LACs operate on more than 1,000 postsecondary institutions (personal communication, June 15, 2004). This widespread presence is remarkable considering that LACs only came into existence during the early 1970s. While LAC is the term used in the professional literature, it operated under more than 100 program names on individual campuses. The following are some examples: Academic Advancement Center, Academic Success Center, Bureau of Study Counsel, and Student Learning Center (LSCHE, 2004). However, they share the same characteristics and approaches.

Before exploring the history of LACs, it would be helpful to place the program into a broader historical context of academic access of which they are an element. "It can be asserted accurately that bridging the academic preparation gap has been a constant in the history of American higher education and that the controversy surrounding it is an American educational tradition" (Brier, 1984, p. 2). A wide variety of approaches in academic access have been taken since the founding of American postsecondary education to meet this academic preparation gap. Six historical phases have been identified which display an evolution of these approaches (Arendale, 2001; 2002a; 2002b). These phases illustrate the

natural interconnection with the social history that surrounds and interact with each of them.

Social change is more likely to occur as a practical response to specific events rather than as implementation of a well-developed ideology (Chafe, 1991, p. 172). Major events such as world wars, major migrations of people, economic trends, and federal legislation play important roles with helping to foster changes in post secondary education. These currents of history also naturally sweep academic access in an evolutionary development as it adapts to meet immediate needs and survives the political forces that will war against its existence.

Figure 1: Different Phases of Academic Access Programs for College Students in the United States

Time Period	Name(s) Commonly Used with Activities	Students Served
1600s to 1820s	Tutoring	Privileged White males
1830s to 1860s	Precollegiate preparatory academy and tutoring	Privileged White males
1870s to 1930s	Remedial education classes within college preparatory programs and tutoring	Mostly White males
1940s to 1970s	Remedial education classes integrated within the institution, tutoring, and compensatory education	Mostly White males
1980s to 1990s	Developmental education, learning assistance, learning assistance center, and tutoring	Previous groups, nontraditional students, and some general students
Present Era	Developmental education, learning centers, and learning enrichment	Previous groups and an increase of general students

The expansion of the service to more students was not due to an intelligent plan or preexisting educational theory, but as a natural response to growing needs by an increasingly diverse heterogeneous college student body. Within this context LACs would be created in the last quarter of the twentieth century. Previously in the history of academic access, programs

were provided for student subpopulations that had identified academic deficiencies. However a major shift occurred since the LAC functioned as a service to all students, from first-year students through graduate school, and many programs provided services to faculty members. With this vision, the LAC served the entire campus community and was the forerunner of today's teaching/learning center that include academic support and enrichment for all students while also providing faculty development services (LSCHE, 2003).

Overview of Learning Assistance Centers

"Academic access" describes the entire array of activities and services that a postsecondary institution provides to increase the academic success of its students. American colleges have been providing such services since the founding of postsecondary education. While the first manifestation was tutor programs, the most recent approaches have been developmental education and learning assistance centers.

In the early 1970s the Learning Assistance Center emerged as a new model of academic access (Carman, 1970; Christ, 1971; Ellison, 1973; Gunselman, 1971). Most recognize Professor Frank Christ at California State University-Long Beach as the first to use the term in the professional literature. Both he and Martha Maxwell served informally as the first national leaders for this new approach. White and Schnuth (1990, p. 157) noted that a distinguishing characteristic of LAC's is their comprehensive nature and mission within the institution. Rather than focusing on a subpopulation of underprepared students which was typical of earlier historical phases of academic access, LAC's extended their services for all students and faculty members. The center was seen as a natural extension of the classroom with enrichment activities for all students, not just those with a history of academic underperformance.

Christ (1971) stated that these centers had six purposes: (a) higher course grades for participating students; (b) central location for students to receive tutorial assistance; ©) referral source to other helping agencies; (d) comprehensive library of basic study aids, (e) training agency for paraprofessionals, peer counselors and tutors; and (f) a center for faculty development. This last feature of serving as a venue for faculty development is unique in comparison with previous remedial and developmental education programs:

A Learning Assistance Center will be any place where learners, learner data, and learning facilitators are interwoven into a sequential, cybernetic, individualized, people-oriented system to service all students (learners) and faculty (learning facilitators) of any institution for whom LEARNING by its students is important. (Christ, 1971, p. 39)

LAC's were much more comprehensive in terms of theoretical underpinnings and the services that they provided in comparison with earlier reading labs and other forms of academic assistance.

> [LAC's] differed significantly from previous academic support services by introducing concepts and strategies from human development, the psychology of learning, educational technology, and corporate management into an operational rationale specific to higher education; by functioning as a campus-wide support system in a centralized operational facility; by vigorously opposing any stigma that it was 'remedial' and only for inadequately prepared, provisionally admitted, or probationary students; and by emphasizing 'management by objectives' and a cybernetic subsystem of ongoing evaluation to elicit and use feedback from users for constant program modification. (Christ, 1997, pp. 1-2)

The LAC provided a new venue for students to pursue personal and academic development. This physical location provided a place to bring together a variety of services, learning equipment, and curriculum for use by students. Emerging learning technologies were often first implemented within LACs due to the high cost with acquisition of equipment and software and providing staff to assist students with their use. LACs become a natural home for personalized and independent learning.

> [The LAC is] a place concerned with learning environment within and without, functioning primarily to enable students to learn more in less time with greater ease and confidence; offering tutorial help, study aids in the content areas and referrals to other helping agencies, and programs. (Christ, 1971, p. 35)

Historical Development of LACs

A confluence of factors fostered the introduction of LACs during the 1970s encouraged their widespread adoption in the following decades. Four major factors supported their growth: changes in federal policies and economic resources, dramatic growth of student enrollment, increase in diversity of the student population, and dissatisfaction with previous approaches to addressing high rates of student departure.

Changes in Policies and Resources

There had been a long period of little involvement by the federal government with postsecondary education since the original passage of the *1862 Morrill Act* which provided economic support for land grant institutions following the Civil War. Following World War Two the federal government began to provide large appropriations for college financial aid that was awarded either as a benefit for those who served in the military or was for those who could qualify for financial need. Federal

legislation provided funds for new programs designed to increase the academic success of students. Finally, a number of colleges, especially public community colleges, embraced admission policies that nearly guaranteed a chance for postsecondary education regardless of their background.

GI Bill. The Servicemen's Readjustment Act of 1944 (GI Bill of Rights) inspired and financially supported nearly one million World War II veterans to enroll in college by the fall of 1946 (Wyatt, 1992). The Act provided for up to 48 months of financial support for postsecondary education. Nearly five million veterans applied for the educational benefits with more than 2.5 million veterans attending college in the subsequent decade. These veterans represented a wide and diverse socio-economic group of individuals who through the sheer force and magnitude of enrollment within the education system made a profound impact upon the college environment (Prieto, 1997). The second major wave of those entering college would be both the returning veterans of the Vietnam War and those who sought to avoid involvement in the conflict through an education deferment for those enrolled in college.

Civil Rights Legislation. The Civil Rights movement in the early 1960s served as a catalyst for societal changes in the infrastructure of America. The Civil Rights Act of 1964 and other programs of President Lyndon Johnson's Great Society focused on both people of color, whom had been historically excluded from many of society's benefits, as well as poor people who were of diverse ethnic backgrounds. Chief Justice Warren continued in the opinion by stating on behalf of the Supreme Court, "We conclude that in the field of public education the doctrine of 'separate but equal' has no place. Separate educational facilities are inherently unequal" (Brown v. Board of Education, 347 U.S. 483, 495). This court case, and the other related ones, would serve as important foundation for later civil rights legislation of the 1960s. It would require the power and authority of the Civil Rights Act of 1964 to eliminate the dual education in postsecondary education. There was a presumption that postsecondary institutions would create new programs, policies, and services to increase the success of the new entrants to college.

Higher Education Act. The Higher Education Act (HEA) of 1965 (and the previous Economic Opportunity Act of 1964) were designed to widen access and support for students who had been traditionally excluded from postsecondary education for a variety of reasons: institutional racism against students of color, low economic background, first-generation to pursue postsecondary education, limited ability to speak English, and students with a disability. The previous program that

provided support was the Economic Opportunity Act with its Poverty Program. These initial access programs were then transferred to Department of Health, Education, and Welfare (HEW).

The HEA expanded access to higher education that was expressed in three major programs: establishing TRIO Programs for first-generation and economically-disadvantaged students, funding for "developing institutions" to establish learning assistance programs (USDOE Title III Strengthening Institutions Grant Program), and introduction of need-based financial aid for economically-disadvantaged students (Pell and Perkins Grant Programs). These three programs provided tangible support for the largest infusion of underprepared and economically-disadvantaged students since the early 1900s. The Act ". . . represents the charter that Congress defined for the nation, expressing the national purpose that higher education should be accessible to all qualified persons regardless not only of the traditional 'race, creed or national origin,' but also of economic status." The federal appropriations since the inception of the Act have grown exponentially (Prieto, 1997, p. 3). As an example of the impact of the increased federal financial support, at one point in the 1980s the Title III grant program helped to fund learning assistance centers at 80% of the community colleges in Kansas. While the new access programs allowed these students to attend college, it also placed expectations upon the colleges to develop academic support programs to support the academic success and graduation of these new students.

Open Door Admission Policies. When community colleges began to expand in the early portion of the twentieth century, the entry level test scores for their students were only moderately lower than senior institutions (Koos, 1924). This dramatically changed in the 1960s as open door admissions policies of community colleges and some public four-year institutions (especially those located in urban areas) brought many new students to postsecondary education that formerly entered the work force immediately after high school. While nearly 100% of two year colleges would be classified as open door, nearly 40 percent of public four year institutions also could be placed in that category (Roueche & Snow, 1977). Increased pressure was placed on open-door admission colleges in the 1970s and 1980s as restrictive admission four-year institutions began to recruit more heavily potential college students to replace the higher numbers formerly provided from the post war baby boom. Senior institutions recruited the more academically able students and left community colleges with more academically-unprepared students. This, therefore, dramatically increased the need for services to serve these

students at these institutions.

Increasing Student Enrollment

College enrollment increased significantly during the 1950s since the high school to college enrollment rate rose from 15 to 24 percent of 18- to 24-year -olds. During the 1960s the rate increased to approximately 35 percent and finally reached 45 percent in the next decade. Much of this growth was due to a significant increase in enrollment by adult and part-time students (NCES, 1993, p. 66). Higher education was viewed as essential for many young people and returning veterans from World War II, Korea, and Vietnam to join the growing middle class in America. Rather than the traditional focus on a liberal arts education, many of the new students perceived the purpose of postsecondary education as preparation for direct entry into the world-of-work.

Increasing Diversity of Student Population

A variety of factors led to the enrollment of a more diversified student body. This would help to accelerate changes that were already occurring within higher education:

> . . . the GI Bill was clearly effective in bringing the children of working-class families into the middle class educational mainstream. This was the thin end of a democratizing wedge prying open higher education in the United States. Never before had so many people in any society earned so many higher degrees. (Appleby, Hunt, & Jacob, 1994, p. 147)

Cross (1971, p. xii) described another wave of students entering postsecondary education during the 1960s. Cross called them the "New Students" for lack of another more descriptive name. During this time these students shared many following characteristics: bottom third of their high school class regarding their graduation percentile rank; first-generation college students; passive learning styles; overestimation of their academic abilities to handle college-level material; diverse age, socioeconomic status, and ethnicity. Between 1972 and 1982, students over the age of twenty-five increased their college enrollment by more than 70 percent (King, 1985). Because of the increasing nature of lifelong learning and a decline in the traditional aged college students, the "new" adult students of the 1960s have changed in comparison to their peers in the early post WWII era. They are more heterogeneous regarding most demographic measures, more likely to have a strong career and goal focus, and perform at academic levels that meet or exceed those by the 18 to 22-year-old students (Richardson & King, 1998). These students tend to access learning assistance services in high rates as they do with other campus services such as career counseling and academic advising.

Students with disabilities received federal mandates to

accommodate their needs by education providers. While the federal legislation was initially applied to elementary and secondary education, it has been extended to postsecondary education as well. The Rehabilitation Act of 1973 and the comprehensive 1990 Americans with Disabilities Act charged postsecondary institutions with providing "reasonable accommodations." Common services provided by some included one or more of the following based upon the unique needs of each student with a disability: additional time to complete examinations, tutors, note takers, counselors, equipment to audio record lectures, and other adaptive equipment. Such interventions were reported to help these students meet or exceed the graduation rates of students without a disability. For example, at Adelphi University, the students with a disability who participated in a comprehensive program of academic support graduated at a rate of 84 percent as compared with a rate of 60 percent for students without a disability (Yanok & Broderick, 1988).

High Student Drop Out Rates

While many new students entered postsecondary education, it also witnessed a mass exodus of students who were unable to persist at the institution due to their limited academic preparation and the nature of services then. There was a growing expectation by many in American society that everyone should have an opportunity to attend postsecondary education. A major issue was how "to make good on the implied promise of the open door" (Gleazer, 1970, p. 48). In 1973, the Carnegie Commission observed how postsecondary education in the 1960s moved from providing "mass higher education" to offering "universal access." This was an important change in the purpose of high education:

> The current transition to universal access to college involves the guarantee of a place for every high school student who wishes to enter higher education, the introduction of more remedial work, the adaptation to the interests of new groups of students regardless of age. . . . It is a transformation of fundamental, historic proportions. (Carnegie Foundation for the Advancement of Teaching, 1973, p. 5)

The difficulty was that while the open access policies that resulted from the Civil Rights legislation from the 1960s provided an open door for students that were more diverse and often less academically prepared, the situation turned into a "revolving door" (Roueche, 1968). While institutions might report the heterogeneous nature of their entering college class, most did not want to admit that most college graduates did not reflect the same diversity but instead were predominantly White. Roueche argued that admitting severely academically underprepared students without a corresponding college remedial program was an

injustice to the individual student and also to society as a whole which expected their publicly supported institutions to effectively educate all students, not just those who were academically talented before entry to postsecondary education. Roueche stated that colleges had to operate differently than the secondary schools that produced them:

> As a result of this open-door policy, many students entered college with academic deficiencies. After a lifetime of gathering credits rather than learning basic skills, they were unprepared for the more stringent demands of college courses. (Roueche & Baker, 1987, p. 34)

The "right to fail" was a predominant theme of many colleges that permitted students to pursue academic degrees for which they had little academic preparation. Open access and self advisement without the corresponding level of academic support services served to foster an environment of neglect that encouraged a decision by many students to drop out of college. "Community colleges have long been caught between a rock and a hard place -- trying to provide access and opportunity to all who can profit, while maintaining academic standards in the face of increased student underpreparedness" (Roueche & Roueche, 1993, p. 1).

This frustration with the inability to always accurately predict student success created great frustration for all stake holders involved in the academic enterprise:

> The open door often turned into a revolving door, with students dropping out and 'stopping out' regularly. This led to a highly charged debate about the lowering of standards, often followed by the call to raise admission standards and close the doors of opportunity to the thousands of prospective new students. (Casazza & Silverman, 1996, p. 28)

<u>*Responses to High Student Drop out Rates*</u>

A natural result was increased promotion of opportunity and success in education at all levels. The new access to higher education demanded meaningful academic support programs to increase the academic success of these newly admitted students (Howe in Thompson, 1988). Access without the ongoing support mechanisms was an empty promise of hope to students from academically and economically disadvantaged backgrounds. Most of these students faced postsecondary education as first-generation college students with few role models or even students of similar ethnicity among either the student body or the teaching faculty. This affective dimension of student academic success would not be recognized by most educators until the 1990s.

It was necessary to create education intervention programs to deal with deep-rooted social problems that influenced many students of color and those from low socio-economic backgrounds in America. In addition,

the energy generated by student activism during the 1960s against the Vietnam War was rechanneled into a variety of campus targets, including the demand for programs to help students succeed.

Remedial classes. While remedial programs were pervasive in postsecondary education, especially among community colleges, Roueche (1968) found little evidence of their effectiveness. "[I]ntuition rather than research appears to be the basis for most remedial programs" (p. 42). Roueche continued:

> There is a paucity of research on the efficacy of remedial programs in the junior college. Indeed, with few exceptions, community colleges neither describe nor evaluate their endeavors in this critical area. Available research will not support the contention that junior colleges offer programs that in fact remedy student deficiencies. Programs are certainly offered, but the entire issue of remedying deficiencies has not been sufficiently researched to date. (p. 47).

Roueche makes the obvious observation when he said, "Can a community college remedial course rightfully expect to accomplish in one or two semesters what public schools have failed to accomplish in 12 years?" (pp. 47-48). While Roueche has been a long-term supporter of using effective developmental education programs to increase student success, he strongly advocates a comprehensive institution-wide approach to improving academic success of students.

Reading clinics. Many college preparatory programs of the early 1900s were expanded to deal with the significant increase in college students after World War II. A national survey by Barbe (1951) suggested that the years after WWII witnessed the growth of a significant number of reading clinics to meet the high number of academically underprepared students who were entering college. While there was general agreement for the need of such clinics, the administrative placement and implementation of services lacked any common plan across the U.S.

Counseling programs. It was common practice in the 1950s to emphasize counseling services as a major component of remedial programs (Kulik & Kulik, 1991, p. 36). Klingelhofer (1954) described the services provided at the State University of Iowa for academically high-risk students. The Iowa experience typified experiences and policies of other institutions of higher education. Students who had been placed on academic probation were required to attend mandatory counseling sessions. Students completed self-assessment instruments concerning academic adjustment, time schedule, and occupational preference. The counselor and student would then discuss the responses and develop an action plan. The limited research models of this time suggested that

participating students earned a higher semester grade point average than students who did not participate. However, research methodologies were limited and failed to have the sophistication to deal with variables that are more typically of research studies today.

Many colleges had already established reading or learning skill centers in the 1950s and 1960s for subpopulations of students who had been prescribed remediation due to low college entrance test scores or poor performance while in college. Often these were administered by the director of the campus counseling center. This was a logical administrative location for such programs at the time since it reflected the "medical model" of meeting academic student behaviors since the goal was to identify/triage students who displayed predictive symptoms of academic weakness/sickness and then to prescribe mandatory treatments of required enrollment in remedial courses or assigned sessions with a psychological counselor. For example, at Pratt Community College (Pratt, Kansas) during the 1960s the college counselor administered the Rorschach (ink blot) test to all incoming college students. This was done to assess their perceived academic risk and then to require weekly sessions of identified students with a clinical psychologist. While such practices were eventually discontinued and discredited, it reflected the mind set that additional services should only be provided for a small minority of students perceived to be at risk for failure.

LACs. It was during the 1970s that LACs were first conceived and then quickly adopted by hundreds of colleges across America. Most programs were established between 1970 and 1972. A national survey by Sullivan (1980), three quarters of all postsecondary institutions were operating some form of a LAC. Lissner (1990, pp. 132-133) states that LAC's were the natural evolution of the various student support programs that were created after the Civil Rights legislation of the 1960s. Integration of various components was required to bring together instructional media centers, writing centers, reading laboratories, study skill centers, and technology-delivered individual study programs (initially audio tape programmed instruction and later by microcomputers). Coherence was brought to the various activities through a common philosophy and location for easy access by students. It was common for LAC's to be a consolidated and centralized operation that was housed in a single location on campus, often within the main campus library. White, Kyzar, and Lane (1990, p. 185-189) reviewed the common space requirements for LAC's. Because of the variety of services provided by the centers, extensive space was necessary to house tutorial areas, classrooms, computer labs, staff offices, curriculum materials, and other spaces. LACs formed a number of

important alliances that supported their growth and the success of the institution.

An association with campus libraries became an important strategic alliance for many LACs. It was common for the LAC to be one of the first locations for access to educational technology. While early equipment consisted of audio tutorial listening stations, later the LAC became a cost-effective location for newly acquired microcomputers and computer software. Some of the early software packages (e.g., PLATO ®) were extremely expensive. Since many of the LACs were initially financed through U.S. Department of Education federal grants such as Title III, they had access for the purchase of expensive technology which many colleges could not afford. LACs, unlike most libraries, also had available staff that could assist students in the use of technology-delivered instruction.

Another alliance was a similar approach to emerging theories of learning. The availability of instructional technology developed concurrently with the 1960s and 1970s emphasis on modular learning on an independent basis. After a hundred years of the enrollment of students in full academic term remedial classes, the LAC was able to provide short-term, non-credit learning opportunities for students. Whether it be appointments with tutors, self-paced learning with audiotape or computer software, or other print resources, students had control over their supplemental learning with the additional cost for tuition or commitment for an entire term of study that may be irrelevant to their individual needs (Enright, 1975). Student activism, ignited during the 1960s, was a powerful voice for access to free and unfettered academic services.

A third strategic alliance of the LAC was that it was viewed as a catalyst for improved learning across the campus and improved graduation rates. Rather than continuing the previous practice of preparatory programs and remedial courses that were often outside the heart of the college, these centers were central to the institutional mission (Hultgren, 1970; Kerstiens, 1972). Faculty members often recognized these centers as extensions of the classroom and for deeper mastery of the college-level content material. "The resource center does not define the goals of the learning it supports; it accepts the goals of the faculty and the students" (Henderson, Melloni, and Sherman, 1971, p. 5). One of the best documented case studies in the professional literature concerning a LAC was the one established at California State University-Long Beach by Frank Christ called the Learning Assistance Support System (Christ 1971; 1997).

Professional Associations and Organizations

A review of education history displays a pattern for academic

disciplines to create a system to educate, validate, and support those involved with the enterprise. These systems often include professional associations, publications, and graduate degree programs. These are especially important to provide identity and validation for its members. Several national professional associations and organizations related to learning assistance were founded about the same time as creation of LACs. They provided critical support for the LAC movement as it began to spread throughout American postsecondary education during the following decades.

The first of these venues for LAC leaders was the College Reading and Learning Association (CRLA). CRLA (www.crla.net) was founded in 1966. It was initially named the Western College Reading Association. The initial informal meeting included a small group of about 20 professionals and the association was incorporated in New Mexico in 1972. In 1978 the association changed its name to the Western College Reading and Learning Association to encourage membership by fellow educators in writing, learning assistance, tutorial programs, mathematics, and other related areas. The Association changed its name again in 1989 to the College Reading and Learning Association to recognize the growing national membership in the organization. In addition to the national conference, numerous state chapters host their own meetings throughout the year. CRLA publishes a quarterly newsletter, annual conference proceedings, and the biannual Journal of Reading and Learning (Kersteins, 1998). Many of the early citations in this article were first published through the CRLA Conference Proceedings. CRLA became the de-facto annual meeting location for LAC professionals.

The National College Learning Center Association (NCLCA) is dedicated to promoting excellence among learning center personnel. NCLCA (www.nclcs.org) was founded in 1985 as the Midwest College Learning Center Association and later changed its name to reflect the growing national and Canadian membership base in 1999. As its name states, the focus of the association is with college learning centers. The Association hosts a national conference and a summer institute for advanced training in learning center management and best practices. It publishes a newsletter, occasional monographs, and publishes biannually The Learning Assistance Review.

One of the most critical resources for the training of learning center personnel since the inception of the movement has been the Winter Institute (WI). The WI is an annual, week long, intensive training workshop to advance skills of educators who provide leadership with campus learning assistance centers. The WI was initiated in 1977 and

hosted at the University of California-Berkeley. The WI was initially named the Annual Institute for College Learning Center Directors and in the early years attracted more than 450 LAC staff and directors from 100 colleges. Currently the WI attracts 60 professionals annually. The WI was created by Ernest Gourdine from the University of California-Davis, Martha Maxwell from the University of California-Berkeley, and Barbara Tomlinson from the University of California-Riverside (Maxwell, 1981). One of the early facilitators at the workshop was Professor Frank Christ who would eventually assume leadership for WI as either director or co-director through the present. In succeeding years the WI has been hosted by California State University-Long Beach, United States Air Force Academy, University of Arizona with Paradise Valley Community College, and University of Texas at Austin. The influence of WI has inspired other similar institutes sponsored by the Military Learning Assistance Board, National College Learning Center Association, and New York Long Island Community College (LSCHE, 2002).

The WI featured the leadership and contributions of two of the major founders of the LAC movement, Martha Maxwell and Frank Christ. Maxwell founded LACs at the University of Maryland (1955) and the University of California-Berkeley (1968). She authored the landmark book for the field, *Improving student learning skills* (Jossey-Bass, 1979) which was recently revised (H & H Publishing, 1997). She has authored five other books and numerous articles. Christ founded the LAC at California State University-Long Beach in 1972 and directed it until 1990. He is the author of the SRSE II, a computer-based diagnostic and prescriptive study skills survey, six study skills textbooks, and many articles on learning assistance, study skills, and technology as it impacts on teaching and student learning. He is also the author and designer of LINDEX, an electronic database and information system for learning assistance and developmental education professionals. Both shared many commonalities in their professional lives. Both Maxwell and Christ initially directed study skill/reading centers that served a small group of academically underprepared students before creating their own LACs at new institutions that expanded service to the entire student body. Each served as president of the College Reading and Learning Association, on editorial boards for the major journals in the field, and leadership positions with other associations. Their publishing careers were prodigious and extended considerably after retiring from their LAC directorships. In recognition of their lifetime achievements, both were recently inducted as a Founding Fellow of the American Council of Developmental Education Associations as well as receiving nearly every major award recognition from their

professional associations.

A major resource for LAC staff and directors is Learning Support Centers in Higher Education (LSCHE). The LSCHE web site (www.pvc.maricopa.edu/~lsche/) was authored and designed by Frank Christ as an extension of LINDEX, an electronic database and information system for learning assistance and developmental education professionals previously created by him. The LSCHE web portal provides extensive information for LAC professionals including: proceedings of previous Winter Institute presentations, calendars of events, bibliographies, previously-published articles, and web-links to other resources related to LACs. It is the only web site solely devoted to learning support centers and has been a significant professional development service to the profession.

Learning Assistance Centers and the Future

Some educational leaders proclaim a new emphasis has taken root in higher education (Lazerson, Wagener, & Shumanis, 2000). They expose the time-honored myth that teaching and learning are two sides of the same coin. This new change in emphasis of the education model is reflected in several areas. The first area concerns the central focus of education. Rather than the traditional teacher-centered model, the focus according to these proponents is a shift to being learning-centered. The history of LACs display a sensitivity to developing mutually supportive alliances that advance the interests of the LAC as well as that of the institution. Several examples of potential future trends follow.

Numerous LACs have been transformed into full service learning and teaching centers. Some of these expanded centers also provide faculty development services as well. Common practices of these expanded centers include using academic support programs to provide requested feedback to course professors, publishing teaching effectiveness newsletters, conducting learning effectiveness workshops, providing teaching mentors, and consulting on instructional delivery innovation.

A growing expectation by students who enroll in distance learning programs is the provision of student services. Students reason that if they are paying the same tuition as those who attend "brick and mortar" class sessions, they should expect that advising, counseling, library, financial aid, and learning support services should likewise be provided via distance technology. There are a few commercial companies that are providing on-line tutoring services as a contracted fee with the institution. It appears that the campus LAC may be called upon to provide support and enrichment services via technology as well.

LACs will continue to evolve as they continue to provide service

to the campus community. The key is for LAC directors to be proactive of impending campus needs and seek to be partners in helping to meet them. If past is prologue, LACs have an important role for the future of postsecondary education.

References

Appleby, J., Hunt, L., & Jacob, M. (1994). *Telling the truth about history*. New York: W. W. Norton & Company.

Arendale, D. R. (2001). Effect of administrative placement and fidelity of implementation of the model on effectiveness of supplemental instruction programs. (Doctoral dissertation, University of Missouri-Kansas City, 2000). *Dissertation Abstracts International, 62*, 93. (ERIC Document Reproduction Service No. ED480590). Retrieved June 24, 2004 from *http://arendale.org.*.

Arendale, D. (2002a). A memory sometimes ignored: The history of developmental education. *Learning Assistance Review, 7*(1), 5-13. Retrieved June 24, 2004 from http://arendale.org..

Arendale, *D. (2002b). Then and now: The early history of developmental* education: past events and future trends. *Research and Teaching in Developmental Education, 18*(2), 3-26. Retrieved June 24, 2004 from http://arendale.org..

Astín, A. W. (1998). *Higher education and civic responsibility*. Paper presented at the American Council on Education's Conference on Civic Roles and Responsibilities, Washington, D.C.

Barbe, W. (1951). Reading-improvement services in colleges and universities. *School and Society, 74* (1907), 6-7.

Carman, R. A. (1970). *Systems analysis of a learning resource center*. Unpublished manuscript, University of California, Los Angeles. (ERIC Document Reproduction Service, ED 035411).

Carnegie Foundation for the Advancement of Teaching. (1973). *Priorities for action: Final report of the Carnegie Commission on Higher Education*. New York: McGraw-Hill.

Casazza, M. E., & Silverman, S. L. (1996). *Learning assistance and developmental education: A guide for effective practice*. San Francisco: Jossey-Bass.

Chafe, W. H. (1991). *The paradox of change: American women in the 20th century*. New York: Oxford University Press.

Christ, F. L. (1971). Systems for learning assistance: Learners, learning facilitators, and learning centers. In *Fourth annual proceedings of the Western College Reading Association, Volume IV: Interdisciplinary aspects of reading instruction* (pp. 32-41). Los

Angeles, CA: Western College Reading Association.

Christ, F. L. (1997). The Learning Assistance Center as I lived it. In S. Mioduski, & G. Enright (Eds.), *Proceedings of the 15th and 16th annual institutes for learning assistance professionals: 1994 and 1995* (pp. 1-14). Tucson, AZ: University Learning Center, University of Arizona. Retrieved August 19, 2004 from http://www.pvc.maricopa.edu/winterinstitute/proceedings/945_proc/ 945_proc_christ.html.

Cross, K. P. (1971). *Beyond the open door: New students to higher education.* San Francisco: Jossey-Bass.

Cross, K. P. (1976). *Accent on learning.* San Francisco: Jossey-Bass.

Ellison, J. (1973). *The concept of college and university learning resource centers.* (ERIC Document Reproduction Service, No. ED 077229).

Enright, G. (1975). College learning skills: Frontierland origins of the learning assistance center. In *Proceedings of the Eighth Annual Conference of the Western College Reading Association: College Learning Skills Today and Tomorrow* (pp. 81-92). Las Cruces, NM: Western College Reading Association. (ERIC Document Reproduction Service, No. ED 105204).

Gleazer Jr., E. J. (1970, Winter). The community college issue of the 1970s. *Educational Record,* 47-52.

Gunselman, M. (Ed.). (1971). *What are we learning about learning centers?* Oklahoma City, OK: Eagle Media.

Henderson, D. D., Melloni, B. J., & Sherman, J. G. (1971). *What a learning resource center (LRC) could mean for Georgetown University.* Unpublished manuscript. (ERIC Document Reproduction Service, No. ED 055 417).

Hultgren, D. D. (1970). The role of the individual learning center in effecting educational change. In G. B. Schick, & M. M. May (Eds.), *Reading: Process and Pedagogy. 19th National Conference Yearbook,* Volume 2 (pp. 89-94). Milwaukee, WI: National Reading Conference.

Kerstiens, G. (1972). The ombudsman function of the college learning center. In F. Greene (Ed.), *College reading: Problems and programs of junior and senior colleges. 21st National Reading Conference Yearbook, Volume 2* (pp. 221-227). Milwaukee, WI: National Reading Conference.

Kerstiens, G. (1998). *A brief history of WCRA, WCRLA, CRLA.* [On-line]. Retrieved August 18, 2004 from http://crla.net/memory_ lane.htm.

King, R. C. (1985). The changing student. *National Forum, 65*, 22-27.

Klingelhofer, E. L. (1954). The relationship of academic advising to the scholastic performance of failing college students. *Journal of Counseling Psychology, 1*, 125-131.

Koos, L. V. (1924). The junior college. Minneapolis, MN: University of Minnesota.

Kulik, J. A., & Kulik, C.-L. C. (1991). *Developmental instruction: An analysis of the research.* Boone, NC: National Center for Developmental Education, Appalachian State University.

Lazerson, M., Wagener, U., & Shumanis, N. (2000). Teaching and learning in higher education, 1980-2000. *Change, 32*(3), 12-19.

Learning Support Centers in Higher Education (LSCHE). (2002, October 19). *History of the Winter Institutes.* [On-line]. Retrieved August 18, 2004 from http://www.pvc. maricopa.edu/~lsche/wiarchives/history/.

Learning Support Centers in Higher Education (LSCHE). (2003, February 16). *Definitions: Some perceived differences between learning support centers and developmental education.* [On-line]. Retrieved August 19, 2004 from http://www.pvc.maricopa.edu/~lsche/about/diffs.htm.

Learning Support Centers in Higher Education (LSCHE). (2004, March 13). *Names of learning centers.* [On-line]. Retrieved August 19, 2004 from http://www.pvc.maricopa.edu/~lsche/about/names.htm.

Lissner, L. S. (1990). The learning center from 1829 to the year 2000 and beyond. In R. M. Hashway (Ed.), *Handbook of Developmental Education* (pp. 127-154). New York: Praeger.

Maxwell, M. (1981). An Annual Institute for Directors and Staff of College Learning Centers. In *New Directions for College Learning Assistance, 4* (pp. 39-45). San Francisco: Jossey-Bass. Retrieved August 18, 2004 from http://www.pvc.maricopa.edu/%7Elsche/wiarchives/history/mm_inst_art.htm.

National Association for Developmental Education. (1996). *Developmental education goals and definition.* [On-line]. Available: http://www.nade.net.

National Center for Education Statistics. (1993). *120 years of American education: A statistical portrait.* Washington, D.C.: U.S. Department of Education, Office of Educational Research and Improvement.

Prieto, C. R. (1997). *The Higher Education Act: Access into the 21st century.* Paper presented to the School of Law, Pontifical

Catholic University of Puerto Rico.

Richardson, J. T. E., & King, E. (1998). Adult students in higher education: Burden or boon? *Journal of Higher Education, 69*(1), 65-88

Roueche, J. E. (1968). *Salvage, redirection, or custody?* Washington, D.C.: American Association of Community Colleges.

Roueche, J. E., & Baker III, G. A. (1987). *Access & excellence: The open-door college.* Washington, D.C.: The Community College Press, American Association of Community and Junior Colleges.

Roueche, J. E., & Roueche, S. D. (1993). *Between a rock and a hard place: The at-risk student in the open-door college.* Washington, D.C.: Community College Press, American Association of Community Colleges.

Roueche, J. E., & Snow, J. G. (1977). *Overcoming learning problems.* San Francisco: Jossey-Bass.

Sullivan, L. L. (1980). Growth and influence of the learning center movement. In K. V. Lauridsen (Ed.), *Implementing Innovative Instruction* (pp. 7-16). New Directions for Community Colleges. San Francisco: Jossey-Bass.

Thompson, C. G. (1988). Equal opportunity -- past and present: An interview with Harold Howe II. *Journal of Developmental Education, 11*(3), 16-19.

White Jr., W. G., Kyzar, B., & Lane, K. E. (1990). College learning assistance centers: Spaces for learning. In R. M. Hashway (Ed.), *Handbook of Developmental Education* (pp. 179-195). New York: Praeger.

White Jr., W. G., & Schnuth, M. L. (1990). College learning assistance centers: Places for learning. In R. M. Hashway (Ed.), *Handbook of Developmental Education* (pp. 155-177). New York: Praeger.

Wyatt, M. (1992). The past, present, and future need for college reading courses in the U.S. *Journal of Reading, 36*(1), 10-20.

Yanok, J., & Broderick, B. (1988). Program models for serving learning disabled college students. *Review of Research in Developmental Education, 6*(2), 1-4.