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## ABSTRACT

This paper offers a synthesis of 27 community college issues derived from recent books, journals, and ERIC documents. It presents single-page statements that each include a research finding, comments, and references. The findings are divided into nine topics: administration and governance, faculty, student achievement and persistence, curriculum and instruction, enrollment management, school/business relationships and partnerships, student service and intervention programs, vocational education, and community college life. The findings can be used by community college administrators, faculty, and staff to inform policy, pedagogy, and practice, and may also be useful to graduate students as an introduction to the literature on community colleges. Some of the highlights of the findings include: (1) faculty mentoring programs benefit both the individual and the college; (2) peer mentoring will become particularly important as large numbers of community college faculty move toward retirement in the next 10 years; (3) early alert programs have a positive effect on students' course completion and re-enrollment rates; (4) faculty members, counselors, or advisors should contact students at mid-point in the semester in order to address problems or barriers to academic success; (5) Limited English Proficient (LEP) students are more successful when instructional programs incorporate academic and cultural components. (Author/NB)

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# What Works in the Community Colleges: A Synthesis of the Literature on Best Practices

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## Introduction

In 1986 the U.S. Department of Education published What Works: Research About Teaching and Learning. The report was immensely popular, and was followed in 1987 by an expanded second edition. The concept of synthesizing educational literature on best practices and presenting this material in a format accessible to educators and administrators warranted a similar effort that would be directed toward community college personnel.

In April 1988, Professors Arthur M. Cohen and Leslie Koltai of the UCLA Graduate School of Education led a group of graduate students in the Community College Studies Program at UCLA in preparing “What Works” statements focusing on community college issues. Those findings were presented to practitioners in a public forum on May 18, 1988, and four practitioners, including a community college district chancellor, a president, the head of a statewide association, and the leader of a college faculty senate, were asked to react to the statements from their diverse perspectives. The practitioners questioned the research when they disagreed with the statements, but acknowledged that the literature revealed examples of best practice. The exercise, as reported by Arthur M. Cohen, “demonstrated the viability of the procedure as applied to the community college literature and served as an apposite demonstration of the importance of relating research and practice: the former without the latter is irrelevant; the latter without the former is vulnerable” (Cohen, 1988, p. iii).

In order to build on the success of the 1988 What Works in the Community Colleges and to continue the attempt to bridge the gap between research and practice in

two-year colleges, Dr. Cohen and seven graduate students in the Higher Education and Organizational Change division of the UCLA Graduate School of Education have produced a contemporary synthesis of community college literature in order to inform best practices in the new millennium.

The format of the most recent report reflects prior editions of What Works: single page statements that include a research finding, comments, and references. The 27 findings were derived from recent books, journals, and ERIC documents, and are divided into nine topics; administration and governance, faculty, student achievement and persistence, curriculum and instruction, enrollment management, school/business relationships and partnerships, student service and intervention programs, vocational education, and community college life. The What Works findings can be used by community college administrators, faculty, and staff to inform policy, pedagogy, and practice, and may also be useful to graduate students as an introduction to the literature on community colleges.

Contributing authors include Carrie Bourdon, Rozana Carducci, June Chang, Nathan Durdella, Michelle Plecha, Bill Purdy, and Pam Schuetz.

**Reference:**

Cohen, A.M. (1988, May). *A preliminary effort at producing statements on what works in community colleges*. Paper presented at What Works in the Community College: An Invitational Seminar, Los Angeles. (ED295707)

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## ADMINISTRATION AND GOVERNANCE

**Research Finding:** **Productive working relationships between boards of trustees and presidents are fostered through the establishment of trust, mutual respect, clear expectations, and good communication.**

**Comments:** The establishment of a productive relationship between community college boards and presidents is inextricably linked to the principles of mutual respect and trust. In order for both parties to effectively fulfill their distinct, yet interdependent, roles and responsibilities, trustees and presidents must actively engage in specific initiatives designed to foster open communication and a common vision for the institution. These practices include:

- Establishing a shared vision and mission (e.g., drafting a mission statement)
- Clearly defining the roles and responsibilities of both trustees and presidents
- Providing formal written expectations for the president along with objective benchmarks for measuring success
- Implementing presidential and trustee evaluation instruments that are consistent, objective, grounded in a shared vision, and offer tools for performance improvement
- Creating formal transitions plans that outline the selection and training of new leaders
- Incorporating team building activities into trustee/presidential interactions (e.g., retreats, shared meals, seminars, social activities)
- Establishing an institutional calendar that outlines planning and assessment initiatives

The practices highlighted above are critical for fostering flexibility, mutual respect, open communication, and trust among the community college presidents and boards of trustees. These qualities are essential in achieving a high degree of efficiency and innovation when facing an impending institutional crisis.

#### **References:**

- Anderson, J. A. (1997). Leadership training initiatives for community college administrators: A focused synthesis of the literature. *Community College Review*, 24(4), 27-54.
- Iwanaga, J. (1998). *Presidents and trustees in partnership*. ERIC digest. Los Angeles: ERIC Clearinghouse for Community Colleges. (ED416935)
- Nielsen, N., & Newton, W. (1997, Summer). Board-President relations: A foundation of trust. In I. M. Weisman, & G. B. Vaughan (Eds.), *Presidents and trustees in partnership: New roles and leadership challenges*. *New directions for community colleges*, 98 (pp. 33-42). San Francisco: Jossey-Bass. (ED409937)
- Vaughan, G. B., & Weisman, I. M. (1997). The nation's community colleges are in good hands. *Trustee Quarterly*, 3, 10-13. (ED415937)



**Research Finding:** When trustees are prepared for their positions through a formal orientation process, the result is a more unified board with better knowledge of the college's goals and objectives.

**Comments:** Many board members assume their positions with little or no knowledge of community college governance or the specific goals and objectives of the individual college. Orientation programs provided by trustee associations and/or the college president and the local board itself allow for better prepared trustees who are more able to effectively fulfill their roles and responsibilities. These orientation programs can assume a variety of formats (i.e., length, content, mandatory/voluntary) and should be tailored to meet the unique context and needs of the specific board members.

Critical issues and questions frequently addressed in board orientations include:

- College history and mission
- Board policy making procedures
- Responsibilities and role of the trustee
- Institutional budget and strategic planning
- State laws and regulations
- Current issues and trends

Several authors have discussed the diverse sources of motivation for pursuing trustee development. Common motivational factors include: expectations placed upon trustees by government and college officials, views of the news media, implementation of mandatory programs, and the trustee's own self-concept as a member of a learning organization that values life-long learning. Benefits accrued through an orientation programs for trustees include better-informed trustees, clearer expectations, and increased accountability.

### References:

Anderson, R., & LaVista, D. J. (1994, Fall). Survival skills and the trustee orientation. *Trustee Quarterly*, 2-4. (ED374882)

Chait, R. P. (1996). *Improving the performance of governing boards*. Phoenix, AZ: Oryx Press. (ED102811)

Davis, G. (1997). Orientation and professional development of trustees. In I. M. Weisman, & G. B. Vaughan (Eds.), *Presidents and trustees in partnership: New roles and leadership challenges. New directions for community colleges*, 102 (pp. 21-31). San Francisco: Jossey-Bass. (ED409937)

Davis, G. (2000). *Issues in community college governance: New expeditions charting the second century of community colleges (Issues Paper No. 7)*. Battle Creek, MI: Kellogg Foundation. (ED439742)

**Research Finding:** The implementation of structured community college leadership training and mentorship programs are essential in the recruitment and development of effective and diverse community college administrators.

**Comments:** The creation and implementation of structured leadership training and mentorship programs at the community college level has played a significant role in the cultivation of college administrators capable of addressing the complex issues and challenges currently facing American community colleges. These programs have also served as an effective means of increasing racial and gender diversity within community college leadership.

Common elements of successful professional development programs include:

- The establishment of formal and informal mentorship relationships
- Writing and reflection assignments
- A targeted duration of one year
- Enrollment in university-based graduate or continuing education programs
- Administrative internships
- Seminars and workshops sponsored by national community college associations (e.g., American Association of Community Colleges, American Council on Education)

Particular attention has been given by several scholars to the value of mentoring relationships:

- The 2001 American Association of Community Colleges (AACC) Leadership Survey found that 57% of respondents indicated that a mentor was either valuable or very valuable in helping them obtain their current presidency.
- 62% of those surveyed by the AACC indicated that a mentor was either valuable or very valuable in preparing them for the everyday challenges and tasks of the presidency.
- Mentoring relationships have led to increased resolve to seek administrative positions and stronger people skills among proteges.

#### **References:**

- Anderson, J. A. (1997). Leadership training initiatives for community college administrators: A focused synthesis of the literature. *Community College Review*, 24, 27-54.
- McPhail, C. J. (2002). Leadership prep: The cohort leadership learning model. *Community College Journal*, 73(1), 46-48.
- Shults, C. (2001). *The critical impact of impending retirements on community college leadership*. Washington DC: American Association of Community Colleges. (ED451833)

Valeau, E.J. (1999). Editor's choice mentoring: The Association of California Community Colleges project. *Community College Review*, 27, 33.

FACULTY

**Research Finding: Faculty development enhances instructional quality.**

**Comments:** Faculty development activities are provided by institutions to enhance and develop teaching in order to improve student learning outcomes. Colleges are motivated to invest in these activities as a means of coping with increasingly diverse student populations, meeting greater demands for accountability, and dealing with funding pressures, new and part-time faculty, and changes in technology.

Faculty development activities typically include workshops, one-on-one consultations, instructional grant programs, colleague collaboration, and/or distribution of print materials such as newsletters, tip sheets for teachers, and annotated bibliographies related to teaching. Levinson-Rose and Menges observed in 1981 that research on faculty development programs typically “fails to go beyond data collected on the spot from participants.” This statement appears to be true today as there is insufficient systemic research to make definitive statements tying improvement in student learning outcomes to specific faculty development activities. However, incidental data including student evaluations, participant satisfaction and expert observer feedback provide some basis for estimating probable effectiveness of the different activities. Specifically:

- Instructional consultation appears to be very effective
- Workshops are somewhat effective
- Grants for instructional improvement, colleagues helping colleagues programs, and distribution of resource material may be effective and integral to improving student learning outcomes

More research is needed to evaluate faculty development activities and to implement evaluation results. Part-time faculty are not generally included in professional development activities, but studies have indicated that part-time faculty who participate in professional development were more likely to incorporate into their teaching small group discussions, demonstrations, and other activities promoting critical thinking.

**References:**

- Alfano, K. (1994). *Recent strategies for faculty development. ERIC digest*. Los Angeles: ERIC Clearinghouse for Community Colleges. (ED371807)
- Foote, E. (1996). Faculty development in community colleges. *Community College Journal of Research and Practice*, 20, 89-93.
- Keim, M. C., & Biletzky, P. E. (1999). Teaching methods used by part-time community college faculty. *Community College Journal of Research and Practice*, 23, 727-737.

Levinson-Rose, J. & Menges, R. J. (1981). Improving college teaching: A critical review of research. *Review of higher educational research*, 51, 403-434.

National Education Association (1996). Instructional development: What works? *Update*, 2(4). Retrieved December 12, 2002, from <http://www.nea.org/he/heupdate/upv2no4.pdf>.

Oromaner, M. (1998). *Faculty and staff development. ERIC digest*. Los Angeles: ERIC Clearinghouse for Community Colleges. (ED416941)

Smith, C., & Beno, B. (1993). *Guide to staff development evaluation*. Sacramento, CA: Community College League of California. (ED363381).

**Research Finding:** Faculty mentoring programs benefit both the individual and the college.

**Comments:** A large number of community college faculty are expected to move toward retirement over the next ten years, and many new faculty members will be hired. One effective way for new faculty members to learn about the operations of the college is through peer mentoring. Mentors are veteran faculty members who teach less experienced faculty about the college culture, best teaching practices, professional development opportunities, etc. Faculty mentoring produces both individual and college wide benefits.

Individual benefits:

- Improvement in teaching techniques
- Better negotiation of the informal politics and workings of the college
- Increased learning about opportunities for professional development
- More active involvement in the campus community

College benefits:

- Closer relationships and more positive interactions between new and established faculty
- Mentored faculty are more integrated with the college and thus there is a lower rate of faculty turnover and higher faculty moral
- Mentored faculty are rated by students as more effective teachers

#### **References:**

- Howard, J., & Grosset, J. (1992). Student responses to a community college faculty mentoring program. *Community College Review*, 20(1), 48-53.
- Lyons, R. E. (1996). *A Study of the effects of a mentoring initiative on the performance of new adjunct community college faculty*. Unpublished doctoral dissertation, University of Central Florida. (ED437129)
- Madison, J., & Huston, C. (1996). Faculty-faculty mentoring relationships: An American and Australian perspective. *NASPA Journal*, 33, 316-330.
- St. Clair, K. L. (1994). Faculty-to-Faculty mentoring in the community college: An instructional component of faculty development. *Community College Review*, 22(3), 23-35.
- Van Ast, J. (1997). Sage on the stage or guide on the side: An outcome-based approach to the preparation of community college vocational-technical faculty for the 1990s and beyond. *Community College Journal of Research and Practice*, 21, 459-480.

**Research Finding:** **Student success is inextricably linked to great teaching in community colleges. Engaging in critical reflection on teaching and increasing the frequency of meaningful interaction with students are two strategies found to be effective means for improving teaching.**

**Comments:** Community college faculty are charged with providing instruction to an increasingly diverse student body characterized by students with various levels of academic achievement, a wide range of professional aspirations, and multiple learning styles. Thus, it is imperative that community college faculty and administrators emphasize the exploration and implementation of instructional innovations in order to effectively educate a diverse student body. The following strategies have been found to improve teaching in the community college:

- Instructors should practice critical reflection in teaching. Faculty must constantly examine and reflect upon their students and their teaching. Such reflection will inform decision-making both in and out of the classroom, and “informed decision making can be considered the heart of good teaching” (Brookfield, 2002, p.31). Possible ways that instructors can employ critical reflection include:
  - Soliciting feedback from students through “one-minute papers.”
  - Forming teacher reflection groups with colleagues. Meeting with other teachers provides peer support for individual instructors, and allows colleagues to share suggestions and strategies for coping with common frustrations and challenges. Research has shown that good teachers are likely to be strongly connected with their peers.
  - Reviewing and creating education theory. While faculty members should be educated on cognitive and developmental psychology theory, instructors should also create theory around their own experiences. This type of personal theorizing reminds teachers that they are also learners and are constantly developing.
- Frequent and meaningful interaction with students has been shown to have positive impact on student outcomes such as satisfaction, achievement, and degree aspirations. Such interaction may have added importance for minority and first-generation students, as these students often arrive at college in greater need of support, guidance, encouragement and direction. The increased interaction with students that occurs when faculty engage in advising and mentoring roles provide students with academic and social support that improves their chances of success.



## References:

- Angelo, T. A. (Ed.). (1998, Fall). *Classroom assessment and research: An update on uses, approaches, and research findings. New directions for teaching and learning*, 75. San Francisco: Jossey-Bass.
- Arredondo, M. (1997, November). *First-generation college students and faculty-student interaction*. Paper presented at the Association for the Study of Higher Education conference, Albuquerque, NM.
- Brookfield, S. D. (2002). Using the lenses of critically reflective teaching in the community college classroom. In C. L. Outcalt (Ed.), *Community college faculty: Characteristics, practices, and challenges. New Directions for community colleges*, 118 (pp. 31-38). San Francisco: Jossey-Bass.
- Schuetz, P. (2002). Instructional practices of part-time and full-time faculty. In C. L. Outcalt (Ed.), *Community college faculty: Characteristics, practices, and challenges. New Directions for community colleges*, 118 (pp. 39-46). San Francisco: Jossey-Bass.

STUDENT ACHIEVEMENT AND PERSISTENCE

**Research Finding:** Early alert programs have a positive effect on students' course completion and re-enrollment rates.

**Comments:** A number of community colleges have developed early alert programs which notify students mid-point in the semester of their academic standing and identify students who are experiencing academic difficulty. Faculty members, counselors or advisors will contact students by mail or phone to address problems or barriers to academic success. Students are also notified of services such as tutoring, peer mentoring, study groups, and student success skills seminars that could help them to improve academically. Although in some cases early alert programs are only offered to low income students, minority students, and first generation students, the majority of early alert programs are available to all students who are experiencing academic difficulty. Compared to students who were not involved in such a program, students involved in an early alert program:

- Are more likely to successfully complete the course in which they were having academic difficulty
- Maintain higher rates of continuous enrollment by the end of the academic year
- Have higher persistence rates for two or more consecutive semesters
- Exhibit higher persistence rates four years later (including transfer students)

**References:**

- Belcher, M. J. (1991). *Costs vs. benefits: An evaluation of the academic alert system* (Report No. 91-02R). Miami, FL: Miami-Dade Community College Office of Institutional Research. (ED340423)
- Cartnal, R. H., & Peter, F. (1999). *Evaluation of the early alert program, spring 1999* (Report CC-RR-98/99-06). San Luis Obispo, CA: Cuesta College. (ED441541)
- Crawford, L. (1999, March). *Extended opportunity programs and services for community college retention*. Paper presented at the Annual California Community Colleges Chancellor's Office Statewide Conference, Monterey, CA. (ED429642)
- Lewallen, W. C. (1993). *Early alert: A report on two pilot projects at Antelope Valley College*. Lancaster College, CA: Antelope Valley College. (ED369452)

**Research Finding:** **Students who receive peer mentoring get higher grades and re-enroll and graduate at higher rates than students who do not receive peer mentoring.**

**Comments:** Since the late 1980's countless community colleges have implemented peer mentoring programs in order to increase students' academic success and institutional retention. A peer mentoring program typically matches students who have been at the school for a longer period of time with students who are new to the campus. Mentors usually guide new students personally and academically and either meet one on one or in small groups. While many peer-mentoring programs are targeted towards academically under-prepared students, students on academic probation, first generation students, and minority students, all types of students seem to benefit from mentoring. The most often studied outcome of mentoring research is improvement in academic skills and retention. Compared to students without mentors, students who receive peer mentoring are more likely to:

- Have higher semester grade point averages
- Report more improvement in writing skills
- Report improvement in time management skills
- Demonstrate increased knowledge of campus services
- Return the following semester at a higher rates
- Continue enrollment from one year to the next
- Graduate at higher rates

#### **References:**

- Baron, W. (1997). *The problem of student retention: The Bronx Community College solution--The Freshman Year Initiative Program*. New York: Bronx Community College. (ED409971)
- James, D. P., Alford, V., Alpha-Kpetewama, T., Clagett, C. A., & Engleberg, I. N. (1996). *Campus retention committee final report* (Report no. OIRA-R-PB96-4). Largo, MD: Prince George's Community College. (ED414986)
- Miller, K., & Sonner, B. (1996). *PASS: Promoting Academic Student Success*. Corning, NY: Corning Community College. (ED413945)
- Mueller, M. K. (1993). *ALANA intervention program*. Port Huron, MI: Saint Clair Community College. (ED361043)
- Plecha, M. (1998). *Influence of study group attendance and students' perceived helpfulness on expected grade*. Unpublished Manuscript. (ED427804)

Reitz, N., & McCuen, S. (1993). *American River College Beacon Project Student Catalyst Program: Peer assisted learning. Annual report, 1992-93*. Sacramento, CA: American River College. (ED365383)

Takahata, G. M. (1993). *Title III mentoring program*. San Diego, CA: San Diego Community College District. (ED413002)

Twomey, J. L. (1991). *Academic performance and retention in a peer mentor program at a two-year campus of a four-year institution*. Alamogordo, NM: New Mexico State University. (ED331552)

**Research Finding:** **Students who complete a student success course tend to show greater improvement in academic skills and are more likely to persist than students who do not participate in such courses.**

**Comments:** In the past 15 years, student success courses have been implemented on the majority of two-year college campuses. Student success courses, also called study skills courses, freshmen success courses, or college survival skills courses, are designed to help students with the transition to college. These courses are usually offered to students during their freshmen year of college and in some cases are offered in the summer prior to their first college year. Student success courses often target first generation students and students with low high school grade point averages. Many of these courses focus on teaching students college survival skills such as critical thinking, reading and writing strategies, effective study habits, effective note taking, communication techniques, and time management. A common outcome of student success course completion is improvement in academic skills and persistence. Compared to students who do not enroll in these classes, students who take college success courses are more likely to:

- Score higher on reading and comprehension measures
- Develop higher order thinking strategies
- Score higher on motivation measures
- Show more improvement in course grades
- Earn higher course grades in reading, writing, and math courses
- Complete more college credits
- Exhibit higher course completion rates
- Persist from year one to year two

#### **References:**

- Bender, D. S. (1997, February). *Effects of study skills programs on the academic behaviors of college students*. Paper presented at the Annual Meeting of the Eastern Educational Research Association, Hilton Head, SC. (ED406897)
- Bruno, E. M. (1990). *Follow-up study on Guidance 7, College Success students at Columbia College, 1989-90*. Sonoma, CA: Columbia College. (ED332734)
- Cuseo, J. B. (1997). *Freshman-orientation seminar at the community college: A research-based rationale for its value, content, and delivery*. Unpublished manuscript. (ED411005)
- Raymond, L., & Napoli, A. R. (1998). An examination of the impact of a freshman seminar course on student academic outcomes. *Journal of Applied Research in the Community College*, 6(1) 27-34.
- Rice, R., & Coll, K. (1991). *The freshman seminar at the community college: A tool for integrating student, faculty and institutional development*. Unpublished manuscript. (ED341409)

- Sagher, Y., & Siadat, M. V. (1997). *Building study and work skills in a college mathematics classroom*. Chicago: Chicago City Colleges. (ED449834)
- Stone, N. R. (1990). Developing critical thinkers: Content and process. Ideas in practice. *Journal of Developmental Education*, 13(3), 20-22.
- Stupka, E. (1993). *An evaluation of the short term and long term impact a student success course has on academic performance and persistence*. Sacramento, CA: Sacramento City Collège. (ED364300)
- Yockey, F. A., & George, A. A. (1998). The effects of a freshman seminar paired with supplemental instruction. *Journal of the First-Year Experience & Students in Transition*, 10(2), 57-76.

CURRICULUM AND INSTRUCTION



**Research Finding:** **English as a Second Language (ESL) programs best serve students when instructional activities take account of the diversity *within* the ESL student population.**

**Comments:** In the postwar period, English as a Second Language (ESL) programs grew in size and significance as more immigrants settled in the U.S. On the forefront of the efforts to facilitate English language fluency, community colleges constructed ESL programs to serve the needs of these new residents and citizens. In designing, implementing, and managing ESL programs—generally in noncredit instructional programs at the basic level and credit programs at advanced levels—community colleges focused on serving an ESL population as a singular group. Today, community colleges have retooled their ESL programs to take account of the diversity *within* the ESL population. As a result, ESL programs now reflect the diverse characteristics and needs of students.

The diversity within ESL programs has been given increased attention in the literature and in practice. As well, numerous studies have documented the positive academic outcomes and personal development attributed to ESL participation. Below are a few examples of effective ESL program initiatives that take into account the diversity of students:

- For students with differing English language abilities, ESL *instructional levels* have been developed. These levels serve students who have just entered programs (transitional), who have progressed through the program (intermediate), and who have advanced even further (advanced and college credit).
- ESL students have more options now that ESL programs have *coordinated instruction* with other instructional programs (e.g., adult high school diploma, adult basic skills, older adult, and inmate educational programs).
- For students with advanced language skills but who lack the competency or confidence to enter credit instruction, *college credit sections* for ESL students have been introduced to offer more course selections and more challenging curriculum offerings.
- In response to labor trends and the needs of local communities, community colleges have designed *Vocational ESL (VESL)* programs to assist students in language fluency adapted to specific industries and economic sectors.
- In order to serve the needs of more students, ESL programs have begun to offer services to families in *family literacy programs*.
- ESL students with special needs now have access to more advanced *student services*, including learning specialists, counselors, tutors, and mentors.

**References:**

- Brickman, B., & Nuzzo, R. (1999). *International versus immigrant ESL students: Designing curriculum and programs to meet the needs of both*. North Las Vegas, NV: Community College of Southern Nevada, Department of International Languages. (ED426610)
- Gerardi, S. (1996). *The effects of English as a Second Language on college academic outcomes*. New York: New York City Technical College. (ED398946)
- Ignash, J. M. (1992). *ESL population and program patterns in community colleges*. *ERIC digest*. Los Angeles: ERIC Clearinghouse for Community Colleges. (ED353022)

**Research Finding:** **Limited English Proficient (LEP) students are more successful when instructional programs incorporate academic *and* cultural components.**

**Comments:** Increasing demands for more inclusive and comprehensive instructional programs for Limited English Proficient (LEP) students have focused attention on the need to take into account the numerous learning styles and backgrounds of these students. For LEP students, positive learning outcomes are associated with the inclusion of multiple learning strategies and cultural content in classroom instruction.

*Multiple learning strategies.* Incorporation of multiple learning strategies in an instructional program for LEP students is integral to student success. By utilizing multiple learning strategies, instructional programs involve more students in classroom activities. When students are involved they feel empowered, and their performance on numerous indicators of academic success improves.

*Cultural content in instruction.* Incorporating cultural content into instructional programs for LEP students translates to increased student investment and success. Students who can express themselves in familiar cultural terms more readily participate in instruction. As well, by infusing instruction with cultural content, LEP students are able to learn from each other, which further enhances their abilities to succeed in the classroom.

#### **References:**

- Camacho, J. S. (1995). *Compton Community College General Education Associate of Arts/Certification, Bilingual Immersion Program for the California State University System*. Compton, CA: Compton Community College. (ED385321)
- Gooden-Jones, E. M., & Carrasquillo, A. L. (1998). *Developing English writing proficiency in Limited English Proficient students through cooperative learning strategies*. New York: Fordham University. (ED423668)
- Noncredit and adult education: Challenges, opportunities, changes. Final report.* (1998). Sacramento, CA: California State Board of Education and Board of Governors of the California Community Colleges. (ED443975)

**Research Finding:** **Increasing the applicability of science curriculum to “real life” increases community college student retention.**

**Comments:** Higher education studies have shown decreasing participation and persistence rates in the science fields among students in general, and among women and minorities in particular. As community colleges offer numerous certificate programs in applied science and technology fields and provide opportunities to transfer for students interested in science baccalaureate degrees, issues of recruitment and retention in the sciences are very important at two-year campuses.

In a recent report, the National Science Board recommended restructuring science curriculum to include more investigative learning, technology, laboratory experience and collaborative work. Science instructors at community colleges have embraced some of these methods in an attempt to increase meaning and “real life” applicability of the subject material to students. Increasing the personal relevancy of science curriculum has been shown to increase retention of underrepresented students.

The following recommendations include techniques that have proven beneficial in increasing student interest and engagement in the sciences:

- Employ a project method of teaching science that encourages students to select and complete a project revolving around scientific concepts. Students must be heavily involved in the decision-making process, and professors should act more as helpers and facilitators instead of lecturers. Projects completed by students can later be used as teaching aids or models for future instruction.
- Structure curriculum in non-major courses around focused current issues related to science. Instructors should provide background information and concepts and allow students to form groups and gather information on a given topic. Potential topics of interest include: hazardous waste disposal, nuclear terrorism, nutrition, epidemics, etc.
- Encourage collaborative, non-competitive, and laboratory-focused work when possible. Giving students hands-on interaction with science through labs helps increase comprehension of concepts and problem-solving skills. Furthermore, such activities have been shown to be particularly effective in increasing interest among female and minority students. Females have indicated a disinterest in science due to the lack of applicability of subject material to life, and minorities have reported a competitive environment in science fields that discourages participation. Helping students develop peer networks through collaborative work that is applicable to “real life” can help to increase retention among underrepresented student groups.
- Incorporate student input and assessment in the review and revision of curriculum. Instructors should make objectives for learning clear to students, utilize multiple methods of assessment to examine student learning in the sciences, and allow students to provide feedback in structuring the curriculum.

## References:

- Astin, A. W., Parrott, S. A., Korn, W. S., & Sax, L. J. (1997). *The American freshman: Thirty-year trends*. Los Angeles: Higher Education Research Institute, UCLA.
- Center for Institutional Data Exchange and Analysis. (2000). *1999-2000 SMET retention report*. Norman, OK: University of Oklahoma.
- Ediger, M. (1999). *Teaching science in the community college*. Unpublished Manuscript. (ED429635)
- Edwards, L. D. (1999, February). *Using multimedia to counter stereotypes in science classrooms: New perceptions of who becomes a scientist*. Paper presented at the National Convention of the Association for Educational Communications and Technology, Houston, TX. (ED436150)
- Farrell, E. F. (2002, February 22). Engineering a warmer welcome for female students. *The Chronicle of Higher Education*, 48(24), A31.
- National Science Board (2002). *Science and engineering indicators – 2002* (Report No. NSB-02-1). Arlington, VA: Author.
- Shotwell, R. A. (1996, May). *Scientific literacy: A non-traditional approach to science for students outside of technical fields*. Paper presented at the National Institute for Staff and Organizational Development Conference on Teaching and Leadership Excellence, Austin, TX. (ED397887)

**Research Finding:** **Instruction in basic skills is most effective when faculty are well trained and where multiple pedagogical strategies are used.**

**Comments:** As the number of under-prepared students entering community colleges increases, two-year institutions are charged with the responsibility of educating students who lack basic skills in mathematics, English, reading, critical thinking, and writing. In fact, the institutional missions and objectives of community colleges have changed in order to reflect the increasing importance of basic skills and developmental education instructional programs. Two strategies have been shown to be effective in facilitating student learning in basic skills: faculty training and multiple pedagogical strategies for differing learning styles.

1. *Faculty training.* As good faculty are essential to student success, retraining faculty members to adapt to students' changing needs is critical to basic skills program development and student success. Community colleges have employed professional faculty development requirements, faculty workshops and colloquia, and faculty mentorship programs.
2. *Pedagogical strategies.* In order to adjust to differing student learning styles, basic skills programs must utilize pedagogical approaches that incorporate multiple learning models. Such approaches include:
  - *Uncovering the curriculum.* Instructors can demystify course components to make student feel more comfortable and invite students to actively participate.
  - *Questioning.* Students need to be provided with techniques to question course material and become critical thinkers.
  - *Collaborative learning.* One of the most effective strategies involves collaborative learning, where instructors and students from different courses cooperate in order to promote common instructional objectives. Two popular models are paired classes and "College Success Courses."
  - *Instructional assistants.* Increasing the human resources in the classroom greatly benefits under-prepared students.
  - *Course simulation model.* In instructing students in basic skills, instructors can replicate the curriculum of credit-bearing, lower-division courses that will be taken later in a student's college career. This strategy better prepares students for success in upper-division classes.
  - *Utility strategies.* An instructional strategy promotes immediate transfer of curriculum to other courses.
  - *Planning.* Simply helping students with skills not typically offered in remedial courses, like planning and study skills, will increase student success.

- *Reconceptualize vocabulary development.* Instead of teaching “vocabulary” in the strict sense, utilize vocabulary that relates to students’ cultural capital in order to assist them in maneuvering through the system.
- *Apprenticeship.* Pairing students who have already gone through remedial programs with students just entering such programs will increase student success.
- *“Writing across the curriculum.”* This traditional technique still holds value in basic skills classrooms.

### **References:**

- Brothen, T. (1998). Transforming instruction with technology for developmental students. *Journal of Developmental Education*, 21(3), 2-4, 6, 8.
- Gudan, S. (1994). *Underprepared students: Challenges facing college faculty*. Detroit, MI: Schoolcraft College, Learning Assistance Center. (ED398941)
- Stahl, N. A., & Others (1991). *How college learning specialists can help college students*. *ERIC digest*. Bloomington, IN: Indiana University ERIC Clearinghouse on Reading and Communication Skills. (ED334571)

## ENROLLMENT MANAGEMENT



**Research Finding:** **Articulation between high schools and community colleges better prepares students to attend college, increases retention rates in both high schools and community colleges, eases the transition from high school to college, and improves students' self confidence and conceptions of their ability to succeed in college.**

**Comments:** Successful articulation programs, which allow high school students to take community college courses for credit, benefit students, teachers and faculty, and individual high schools and community colleges.

1. **Benefits to Students:** High school to community college articulation provides students with more stimulating and challenging course work at a faster pace; increases motivation to continue high school and enter college; increases access to job/college counseling; creates greater excitement about learning; increases students' self confidence and the belief that they can be successful in college; allows students to see what college is really like; increases job readiness skills; and increases freedom in selecting courses and subjects.
2. **Benefits to Teachers and Faculty:** Articulation reduces duplication in coursework and instruction; allows for expanded program content; facilitates communication between teachers/faculty and administrators; and promotes curricular alignment and relevance.
3. **Benefits to High Schools:** Articulation facilitates communication with community colleges; increases enrollment in articulated courses in high school; expands course content; increases high school student retention; increases student interest in learning; enhances public relations; and promotes a more unified educational system.
4. **Benefits to Community Colleges:** Articulation facilitates communication with high schools; increases enrollment in articulated courses in community colleges; increases community college student retention; increases student interest in learning; increases enrollment revenues; reduces duplication in instruction; enhances public relations; and promotes a more unified educational system.

#### **References:**

Assar, K. (1991, April). *Dimensions of diversity: The Fenway Middle College comes to Bunker Hill Community College*. Paper presented at the Annual Convention of the American Association of Community and Junior Colleges, Kansas City, MO. (ED332747)

- Brown, J. L. (1993, May). *The high school partnership program at Kansas City Kansas Community College*. Paper presented at the Annual International Conference of the National Institute for Staff and Organizational Development on Teaching Excellence and Conference of Administrators, Austin, TX. (ED362244)
- Hudson, R. (1991). *High school at college: A study of the Bell High at Harbor College program* (Los Angeles college research report no. 01-91). Los Angeles: Los Angeles Harbor College. (ED329321)
- Michigan State Department of Education. (1998). *Michigan articulation handbook*. Lansing, MI: Author. (ED425310)
- Rancho Santiago Community College. (1991). *Third party evaluation of 2+2+2 articulated career education programs: 1988-1991 Final report*. Santa Ana, CA: Author. (ED341421)
- Seppanen, L. (1991). *The Running Start Program: Impact and benefits from the first year in Washington community colleges*. Olympia, WA: Washington State Board for Community and Technical Colleges. (ED338288)
- Tafel J., & Eberthart, N. (1999). *Statewide school-college (K-16) partnerships to improve student performance*. Denver, CO: State Higher Education Executive Officers. (ED434611)
- Washington State Board for Community and Technical Colleges. (1999). *Running Start, 1999-2000 annual progress report*. Olympia, WA: Author. (ED457888)

**Research Finding:** **Orientation sessions positively influence student retention and academic performance by providing information and support for incoming students.**

**Comments:** Freshmen orientation services have repeatedly been shown to improve academic persistence and performance for participating college students. Research has also found that these services lead to increased student satisfaction with the college and greater use of student support services. The positive outcomes that accompany orientation services are particularly relevant for increasing the retention of at-risk students. As the freshmen to sophomore student attrition rate at public community colleges is higher than at all other types of post-secondary institutions, the move toward offering orientation services has been intensifying in recent years. In a single institution study at Terra Community College, Kelly (1996) found that over 75 percent of students reported a need for or interest in receiving some type of orientation, and that faculty members also supported such services.

The two main orientation models at two-year institutions are (1) an orientation session that takes place sometime before the academic year begins and (2) a freshman orientation course that occurs during the beginning of students' first year.

Before-school orientation sessions offered by two-year institutions vary in duration and format. Studies have pointed out certain characteristics that make these sessions most beneficial to students in attendance.

- Consistent leadership for the planning and administration of orientation sessions is needed. Designating specific personnel in academic advising or student services for this event is important as most advisors and counselors are already overextended with their numerous other responsibilities.
- Topics such as financial aid, time and stress management, goal-setting, studying, and test-taking strategies are of interest to entering students. Colleges can offer break-out sessions organized around these topics and give students the flexibility to attend those sessions of greatest interest.
- Key administrators and faculty members should be actively involved in the session. This sends the message that the faculty and staff value students and that students have resources available to them. Having faculty members lead break-out sessions on specific topics for small groups of students is one way of achieving involvement.
- Orientation sessions should be scheduled to occur the week before school starts, if not the day before, in order to increase attendance. Further, colleges should provide sessions for both day and night-time students.

Freshmen orientation seminars have grown in popularity over the last fifteen years; close to 70% of all two and four-year colleges offer such seminars. Many recommendations have been offered on how best to structure these courses.

- Research has advocated offering these seminars for the complete fall quarter/semester in order to increase the exposure students have with each other and the faculty

members leading these seminars. Making these seminars a course requirement also guarantees that students who need orientation the most will receive information and services.

- Offering freshman seminars for credit and for a letter grade increases course legitimacy and student engagement. Currently 66 percent of two-year colleges offer these seminars for a grade, and 12 percent offer them for three or more units.
- Class size should be capped at 25 students or fewer. In order to provide a supportive environment where all students have an opportunity to participate and ask questions, maintaining a small class size is important. Over 60 percent of community colleges offering freshman seminars cap enrollment at 25 students.
- Customizing orientation courses for specific sub-populations of students may increase the relevancy of courses and support provided to student groups. For example, some campuses have provided specific seminars for transfer, adult, single parent, and ESL students.

#### References:

- Barefoot, B. O. (Ed.). (1993). *Exploring the evidence: Reporting outcomes of freshman seminars* (Monograph series no.11). Columbia, SC: University of South Carolina, National resource center for the freshman year experience. (ED367214)
- Barefoot, O. O. & Fidler, D. S. (1996). *The 1994 survey of freshman seminar programs: Continuing innovations in the collegiate curriculum*. (Monograph Series No. 20). Columbia, SC: University of Southern Carolina, National resource center for the freshman year experience and students in transition. (ED393386)
- Cuseo, J. B. (1997). *Freshman orientation seminar at community colleges: A research-based rationale for its value, content, and delivery*. Unpublished manuscript. (ED411005)
- Kelly, C. B. (1996). *An orientation curriculum for Terra Community College*. Unpublished master's practicum paper, Heidelberg College, Ohio. (ED401949)
- Levine, J. H., (Ed.). (1999). *Learning communities: New structures, new partnerships for learning. The first-year experience*. (Monograph series, no. 26). Columbia, SC: National Resource Center for the First-Year Experience and Students in Transition. (ED433743)
- MacMillan, T. F. (1998). *Short-term impact of matriculation services: 1997-98 academic year* (Research report 98-14). Ukiah, CA: Mendocino College. (ED423936)
- Shanley, M. G., & Witten, C. H. (1990). University 101 freshman seminar course: A longitudinal study of persistence, retention, and graduation rates. *NASPA Journal*, 27, 344-352.

**Research Finding:** Academic advising increases academic success, retention, graduation, and transfer rates, especially for “at risk” students from first-generation, low-income families and students with disabilities.

**Comments:** Academic advising, using both developmental and prescriptive approaches, gives students important information in order to make informed choices while also teaching those students who need assistance how to make informed choices. Advising helps students to develop critical thinking skills and self-direction in setting long term academic and career-oriented goals.

Academic advising gives students an opportunity to ask questions and receive advice regarding academic policies and graduation requirements. As well, academic advising outlines the procedures, academic requirements, and strategies for transferring to a university in order to assist students in planning ahead and making a smooth transition.

Academic advising thus increases grades and academic success, and greatly improves retention, graduation, and transfer rates. While academic advising requires additional financial and human resources, it is still cost effective when retention rates are figured into the program.

#### **References:**

- Bernhardt, J. J. (1997). Integrated, intrusive, comprehensive academic advising as a method to increase student retention, graduation and transfer in postsecondary TRIO programs. *Journal of Educational Opportunity*, 16(2), 17-27.
- Clark, K. (1995, May). *SELECT: Achieving & rewarding excellence in faculty advising*. Paper presented at the National Academic Advising Association Region VII Conference, Austin, TX. (ED382264)
- McLendon, S. F. (1992). *The development of a retention plan for use at Sue Bennett College*. Unpublished doctoral practicum paper, Nova University, Kentucky. (ED346930)
- Santa Rita, E. (1995). *Focus on retention: Proposed mission of general counseling into the 21<sup>st</sup> century*. New York: Bronx Community College, Department of Student Development. (ED390476)
- Stage, F. K., & Dannells, M. (Eds.). (2000). *Linking theory to practice: Case studies for working with college students. Second edition*. Florence, KY: Taylor & Francis Group.

**SCHOOL / BUSINESS RELATIONSHIPS AND PARTNERSHIPS**

**Research Finding:** **School-to-Work programs in community colleges increase students' academic achievement, better prepare students for further post-secondary study, broaden students' career options, and increase retention and participation in both community colleges and in the workforce.**

**Comments:** The School-to-Work Opportunities Act of 1994 called for the creation of a system of linked opportunities beginning in middle school, taking root in high school, and continuing through post-secondary training. The Act recognized the community college as an essential component in helping sub-baccalaureate students make the transition from school to work, as the localized orientation of community colleges makes them well-suited to respond to labor market demands and student goals. The School-to-Work Opportunities Act attempted to make connections between school-based learning and work-based learning through the use of career majors and applied or experiential learning. School-to-Work (STW) programs greatly benefit students, employers and businesses, and teachers/professors. STW is widely embraced throughout the United States, and is a valuable service, worthy of further government and community investment.

1. **Benefits to students:** Students who participate in STW programs have an increased awareness of their career options and demonstrate better decision-making skills in regards to these options. They also display an improved attitude and motivation towards learning, and tend to have higher self-confidence. They demonstrate better life and work skills such as time management, and have a better understanding of the relationship between academics and careers. They understand which skills increase employability, and as a result are more prepared for the world of work. As well, STW students tend to take more difficult courses, earn better grades in those courses, and are more likely to attain postsecondary education.
2. **Benefits to businesses:** Businesses which participate in STW programs have greater opportunities to communicate to educational institutions which skills are required in the workforce, and as a result are able to hire better skilled employees. STW programs also enhance employee recruitment and community relations. In addition, STW programs provide businesses with highly skilled and motivated student interns who are able to increase productivity and reduce recruitment and training costs.
3. **Benefits to teachers:** Teachers who participate in STW programs report that their teaching has improved and that they have become more proficient in offering their students work-based and hands-on learning opportunities. They also report that STW programs keep them motivated to teach, and that their classes are more enjoyable because STW students are more motivated to learn.

## References:

- Hughes, K. L., Bailey, T. R., & Mechur, M. J. (2001). *Making a difference in education. A research report to America*. Washington DC: National School-to-Work Opportunities Office. (ED449364)
- Mobley, C. (2001). The impact of community colleges on the school-to-work transition: A multilevel analysis. *Community College Review*, 28(4), 1-30.
- National School-to-Work Opportunities Office. (2000). *Perspectives on progress: The School-To-Work national customer dialogues. Final report*. Washington DC: Author. (ED445214)
- Owen, S. K. (1981). *Evaluation of Project School To Work: A monograph*. Washington DC: Employment and Training Administration, and Olympia, WA: Washington State Department of Employment Security. (ED237594)



**Finding:** community colleges benefit the community by providing a better-trained workforce, and benefit colleges through increased publicity and larger corporate donations.

**Comments:** Through workforce training collaborations, corporations can send employees to community colleges to take courses in subjects related to the employees' jobs (e.g., technology training). Many businesses prefer to send employees to community colleges because of the lower tuition costs, close geographic proximity, and high levels of recognition within the community. Community colleges can attract corporate students by marketing workforce-training programs to local businesses. In return, workforce training collaborations often provide excellent publicity for community colleges.

Strong workforce training programs can often be a selling point in seeking corporate donations from local businesses. Research has shown that corporations prefer to donate money in ways that will enhance consumer loyalty and goodwill within the community. Donating to community colleges in return for workforce training is one way in which businesses can achieve this goal.

**References:**

- Maag, K., & Hoffman, P. (1992). Business roundtables boost funds and awareness. *Foundation Development Abstracts*, 2(2). (ED407044)
- Bryce, H. J. (1993). A community college president's guide to corporate contributions. *Leadership Abstracts*, 6(8). (ED367431)
- Sorrentino, S. A., & Hines, E. R. (1994). Community colleges and universities as providers of education and training. *Community College Journal of Research and Practice*, 18, 475-483.
- Stamps, D. (1995). Community colleges go corporate. *Training*, 32(12), 36-38, 40-43.
- Brumbach, M. A., & McGee, E. A. (1995). Leveraged investments: Corporations and community colleges. *Community College Journal*, 65(7), 22-27.

**Research Finding:** When community colleges establish partnerships with local schools, businesses, and community groups, community college service programs are more effective.

**Comments:** In addition to providing transfer curriculum and vocational education, community colleges are called on to serve the community. To fulfill this institutional mission, colleges have established community service programs and cooperative agreements with local schools, businesses, activist groups, and other community organizations. This collaboration with local groups, as opposed to traditional community service classes and seminars, helps to make college community service programs more effective, and allows the colleges to experience a greater connection to their communities and to develop a better rapport with local service groups.

Community services collaborations come in many different form; cooperative efforts can provide housing for the homeless, help to preserve the environment, develop mentoring programs, and help to alleviate hunger in the community. The success of the service programs hinge on the support of college administrators, college presidents, and community leaders. As well, when these partnerships involve students, the results are even more promising.

Successful cooperative initiatives include peer-assisted learning, intercultural awareness, ethics and civic participation, hazardous material technology and public safety programs, international education, community leadership, multimedia technology, literacy, at-risk intervention, community diversity, and child development training.

#### **References:**

- Barnett, L. (1995). *A climate created: Community building in the Beacon College Project*. Washington, DC: American Association of Community Colleges. (ED393494)
- Heffernan, K. (2001). Campus Compact: Developing partnerships for community services. *Community and Junior College Libraries*, 10(2), 55-59.
- Pickeral, T., & Peters, K. (1996). *Campus community collaborations: Examples and resources for community colleges*. Mesa, AZ: Campus Compact National Center for Community Colleges. (ED405045)

**STUDENT SERVICES AND INTERVENTION PROGRAMS**

**Research Finding:** Community college students involved in learning communities earn higher grades, persist at higher rates, and are more satisfied with the collegiate experience than students enrolled in traditional courses.

**Comments:** Learning communities (LCs) in community colleges usually consist of linked (two courses) or clustered (three or more courses) classes, with a common cohort of students who are team-taught. LCs may combine skills courses with content courses or link two or more courses from different departments with a common theme.

This curricular restructuring tends to enhance peer and faculty interaction, and promotes a greater sense of academic community between students and faculty. LC students “demonstrate greater progress in terms of intellectual development, indicate higher levels of involvement with peers and the campus, and express greater overall satisfaction with the college experience” (Shapiro and Levine, 1999, p. 192). These characteristics have long been acknowledged as having a significant positive effect on learning outcomes.

According to Shapiro and Levine (1999), “LCs have emerged as a practical, pedagogically sound concept for addressing the criticism and challenges leveled at higher education today. Regardless of how we choose to define success in college – whether it is a statistical measure of persistence and retention, or gains in cognitive development and writing abilities that show up as positive outcomes on student learning assessments – we now have compelling evidence to suggest that learning communities on campuses lead to greater student success in college” (pp. 14-15).

### References:

- Astin, A. W. (1993). *What matters in college? Four critical years revisited*. San Francisco: Jossey-Bass.
- Minkler, J. (in press). Learning communities in community colleges. ERIC review. *Community College Review*.
- Shapiro, N. S. and Levine, J. H. (1999). *Creating learning communities: A practical guide to winning support, organizing for change, and implementing programs*. San Francisco: Jossey-Bass.
- Smith, B. L., & Hunter, M. R. (1988). Learning communities: A paradigm for educational revitalization. *Community College Review*, 15(4), 45-51.
- Weber, J. (2001). Learning communities in higher education: A field observation case study (Doctoral dissertation, Widner University, 2000). *Dissertation Abstracts International*, 61, 4702. (ED459882)

**Research Finding:** **Minority student transfer rates improve when intervention programs are implemented at the college.**

**Comments:** The transfer function is a primary component of the community college mission. Cohen and Brawer (2002) cite national transfer rates of around 25 percent, with state transfer rates ranging from 11 to 40 percent. While transfer rates are difficult to compare across studies because different definitions of transfer rate are often used, patterns over the past two decades indicate that differential rates of transfer exist across racial, ethnic, and socioeconomic groups. In particular, non-Asian minorities and low-income students transfer to four-year colleges and universities at lower rates than their white counterparts from higher income families.

External forces that affect transfer rates include state and local policies, entering student characteristics, and the socioeconomic environment where the college is located. Internal forces include college academic and student support services that provide counseling and articulation with four-year institutions and help to retain students.

Minority student transfer rates tend to improve when:

- Two- and four-year institutions collaborate to identify and remove institutional barriers to transfer. Clear articulation agreements, cooperative admissions agreements, and common course numbering help to remove impediments to transfer.
- Two-year colleges install transfer centers on campus. Transfer centers can provide transfer counseling, host transfer informational sessions, coordinate four-year campus tours, foster innovative approaches to academic skills acquisition, and foster a transfer-oriented campus climate and culture.
- Two-year colleges promote student mentoring by peers, faculty, counselors, and prominent community members to motivate students and reinforce academic values.
- Community college faculty periodically review and update transfer curricula.
- Orientation programs are provided to help students transition from the environment and culture of the two-year college to that of the four-year college or university.
- Two-year student data is communicated to four-year colleges so that they can identify and recruit students eligible for transfer.
- Institutional research focusing on student assessment, placement and outcomes is an integral part of the college's transfer program.

Pascarella, et al. (1998) state: "Community college students who successfully negotiate the challenges of transferring to a four-year institution and who complete their bachelor's degree appear to achieve overall parity with similar four-year college students in such areas as job prestige, stability of employment, job satisfaction, and earnings." Thus, improvement of minority transfer rates involves both individual and social benefits.

## References:

- Cohen, A. M., & Brawer, F. B. (2002). *The American Community College*. San Francisco: Jossey-Bass.
- American Council on Education. (1996). *Policies and programs that affect transfer*. Washington, DC: Author. (ED385336)
- Rendon, L. I., & Garza, H. (1996). Closing the gap between two- and four-year institutions. In L.I. Rendon & R.O. Hope (Eds.), *Educating a new majority: Transforming America's educational system for diversity*, pp. 289-308. San Francisco: Jossey-Bass.
- McCormick, A. (1997). *Transfer behavior among beginning postsecondary students: 1989-94* (NCES no. 97266). Washington, DC: Department of Education, National Center for Education Statistics. (ED399859)
- Pascarella, E. T., Edison, M., Nora, A., Terenzini, P. T., & Hagedorn, L. S. (1998). Does community college versus four-year college attendance influence students' educational plans? *Journal of College Student Development*, 39(2), 179-193.
- Townsend, B. K. (2002, Spring). Transfer rates: A problematic criterion for measuring the community college. In T. H. Bers & H. D. Calhoun (Eds.), *Next steps for community colleges. New directions for community colleges*, 117 (pp. 13-23). San Francisco: Jossey-Bass. (ED463810)
- Zamani, E. M. (2001, Summer). Institutional responses to barriers to the transfer process. In F. S. Laanan (Ed.), *Transfer students: Trends and issues. New directions for community colleges*, 114 (pp. 15-24). San Francisco: Jossey-Bass. (ED456889)

VOCATIONAL EDUCATION

**Research Finding:** **Comprehensive, enhanced vocational education programs in community colleges increase student retention, employability, and earnings.**

**Comments:** A narrow focus on job-specific skills characterizes many traditional vocational education programs. Enhanced vocational education programs add applied academic and other training components to the curriculum to improve student retention and learning. According to Imel (1993), these components include:

**Applied academics:** Skills in communicating, computing, problem solving, understanding the natural world, group living and economic self-sufficiency.

**Employability skills:** Work-related habits including job search skills (e.g. filling out applications, preparing for interviews), time management skills, teamwork, leadership skills and working within a diverse workforce.

**Life-coping skills training:** A critical element for success at school and on the job, life-coping skills include developing a well-defined personal identity, identifying and coping with personal fears, coping with feelings and emotions, making wise decisions, dealing positively with values conflicts and choosing ethical courses of action.

**Comprehensive educational support system:** Support structures that ensure the curriculum is available to students over an extended length of time. The educational support system program includes program location and organization, student recruitment and orientation, instructional strategies, counseling and guidance, student management and discipline, community collaboration, parental and family involvement, staff selection and development, flexible scheduling, summer school, small class size, transportation and district commitment and support.

Enhanced vocational programs have been effective in improving retention. Those who stay, tend to complete programs and then earn more money than their uncredentialed peers. According to a study of California community colleges, vocational certificate holders earn 15 percent more than high school graduates while associate degree holders earn 11 percent more. In addition, employers are willing to pay a premium for the type of well-rounded workers that emerge from enhanced vocational programs. According to Ramsay (1999), "Employers are willing to pay significantly higher wages to workers who can find, organize, and think with a variety of kinds of knowledge."

#### **References:**

Imel, S. (1993). *Vocational education's role in dropout prevention*. ERIC digest. Columbus, OH: ERIC Clearinghouse on Adult, Career, and Vocational Education. (ED355455)



- Brown, B. L. (1999). *Vocational certificates and college degrees. ERIC digest.* Columbus, OH: ERIC Clearinghouse on Adult, Career, and Vocational Education. (ED434248)
- Lankard, B. A. (1996). *Job training versus career development: What is voc ed's role? ERIC digest.* Columbus, OH: ERIC Clearinghouse on Adult, Career, and Vocational Education. (ED395217)
- Ramsey, J. G. (1999, August 1). Marks of distinction: Educational credentials and the American dream. *Vital Speeches of the Day* 65(20), 620-628.
- Sanchez, J. R., & Laanan, F. S. (1997, November). *What is it worth? The economic value of obtaining a certificate or associate degree from California community colleges.* Paper presented at the annual conference of the California Association for Institutional Research, San Francisco, CA. (ED413941)
- Shirley, L. J., & Pritz, S. G. (1992). *The lifelong options program: A handbook for implementing and managing a vocational education program for youth at risk.* Clemson, SC: National Dropout Prevention Center. (ED351490)

**Research Finding:** **Integrating academic subject matter into occupation or vocational community college courses increases student motivation and retention, broadens learning, and better prepares students for the workforce. Course integration also benefits faculty, community colleges, and industry.**

**Comments:** As community colleges prepare workers for entry or reentry into the workforce, they must offer educational programs which provide higher order thinking, problem solving, and cooperative work skills in addition to technical or occupational job training. Community colleges need to develop courses that encourage critical thinking and provide an environment that facilitates an understanding of the changing economy. Such classes equip students with a knowledge base required for the workforce, and help to create well-rounded, productive individuals with higher rates of success in the workforce and in higher education. Courses that integrate traditional academic subject matter and occupational or vocational training benefit students, faculty, community colleges, and businesses and industry.

- 1. Benefits to students:** Integrated courses help students to learn more academic skills, improve occupational learning, broaden overall learning, and increase student interest and motivation. Such courses also promote transfer of learning, improve grades, and reduce dropout. Integrated courses give students a greater sense of community, and encourage them to interact and support each other more frequently. Students in integrated courses can better see the relevance of their learning, practice problem solving, work cooperatively with others, and construct and evaluate alternatives, all which better equip them to perform in the workforce.
- 2. Benefits to faculty:** Integrated courses increase faculty motivation by providing greater opportunity for interaction and collaboration with other instructors. As well, integrated courses improve faculty teaching skills and awareness of other disciplines, which leads to faculty renewal.
- 3. Benefits to community colleges:** Academic-occupational integration can lead to valuable curricular modification, and will help in the development of relationships with industry and local businesses. Colleges employing these integration programs will also become known and respected as state leaders. In addition, integrated courses can help to cut costs, increase revenue, accelerate learning, reduce instructional time, and bring in external grants.
- 4. Benefits to business / industry:** Integrated courses in the community college benefit industry by providing a better educated workforce with greater problem-solving skills, writing and word-processing skills, and communications skills. Such courses provide businesses with well-rounded employees, not just technically capable workers.

**References:**

- Black, W. L. (2001). *Benefits of including a capstone simulation course in community college business curricula*. Unpublished manuscript. (ED455854)
- Brewer, J. A. (1999). *Integration of academic and occupational education in community technical colleges*. *ERIC digest*. Los Angeles: ERIC Clearinghouse for Community Colleges. (ED425786)
- Perin, D. (2001, April). Academic-occupational integration as a reform strategy for the community college: Classroom perspectives. *Teachers College Record*, 103, 303-335.
- Tichenor, S. (2001). *Technical training and general education: Can we really provide both?* Unpublished manuscript. (ED459892)
- Whiteman, J. M. (2001). *Business curriculum development in the community college*. Unpublished manuscript. (ED455418)

**Research Finding:** **Successful welfare-to-work programs provide participants with educational opportunities and resources designed to ensure both employment and economic self-sufficiency.**

**Comments:** The 1996 Personal Responsibility and Work Opportunity Reconciliation Act (PRWORA) significantly influenced community college welfare-to-work initiatives by limiting the amount of time welfare recipients can collect benefits and placing an emphasis on rapid employment. In response to this “work-first” legislative mandate, community colleges have adopted short-term training programs designed to facilitate entry into the local job market. The rapid employment of welfare recipients, however, does not necessarily translate into the achievement of economic self-sufficiency and career advancement opportunities, two outcomes essential for raising the participants’ long-term quality of life. Both scholars and practitioners have asserted that successful welfare-to-work programs are those that implement strategies designed to increase the job retention rates and educational achievements of participants. These success strategies include:

- Overcoming program completion barriers by offering flexible scheduling; implementing modularized, open-entry course formats that allow students to complete course work at their own pace; developing on-campus employment opportunities that meet PRWORA work expectations; providing on-campus child care; and alleviating transportation concerns through the use of subsidized bus passes or gas vouchers.
- Enhancing job retention rates through the cultivation of workplace skills during pre-employment training and on-the-job educational programming. Essential employment skills include communication, creativity, teamwork, critical thinking, and problem solving. Additional strategies for increasing job retention rates include the establishment of partnerships between local employers and the community colleges and the implementation of monitoring and mentoring programs that provide the participants with support once employed.
- Promoting educational advancement through the creation of fully articulated welfare-to-work programs that provide participants with college credits that can be applied towards an associate’s degree or vocational certificate. In addition, numerous community colleges report that immersing welfare-to-work participants in an academic culture is instrumental to the promotion of student motivation, academic achievement, and successful job placement. This college culture can be achieved by requiring participants to obtain a college identification card, providing them with experience completing admissions and financial aid forms, and enrolling students in introductory career, college success and developmental education courses.

**References:**

Katsinas, S. G., Banachowski, G., Bliss, T. J., & Short, J. M. (1999). Community college involvement in welfare-to-work programs. *Community College Journal of Research and Practice*, 23, 401-421.

Lisman, C. D. (Ed.). (2001, Winter). *The community college role in welfare to work. New Directions for Community Colleges*, 16. San Francisco: Jossey-Bass.

Peterson, K. (2002). *Welfare-to-work programs: Strategies for success. Eric digest*. Los Angeles: ERIC Clearinghouse for Community Colleges.

COMMUNITY COLLEGE LIFE

**Research Finding:** Traditional venues for student involvement should be customized to the community college setting in order to maximize benefit to students.

**Comments:** Much research has shown the importance of student involvement in the college setting, and that student development and learning are dependent upon how involved or invested a student is in the college environment. Through activities such as athletics, clubs, or research projects with faculty members, colleges can provide various opportunities that foster student involvement. The majority of the research on student involvement has been concerned with the experiences of students at four-year campuses, but student participation and involvement has also been found to correlate with progress in general education, higher GPA, and retention at two-year colleges as well.

However, community college students get involved in different ways that students in four-year colleges, often because two-year students are more likely to be older, attend school part-time, commute to campus, work off-campus, or have families to support. Effective and accessible venues for involvement should be customized to meet the needs and interests specific to community college students.

The following statements are recommendations for creating more student involvement in the community college:

- Structure activities around studying and classroom commitments:

Maxwell has found that “a principal factor bringing the majority of students together outside the classroom was their interest in studying together with one or a few other students” (2000, p.215). While extracurricular activities were not found to be popular with community college students, a larger percentage of students (48 percent) interact with other students around their courses through study groups or out-of-class discussions. Collaborative learning strategies and structures may be more appropriate means for engaging the community college student body. The “learning communities” approach, which promotes team-oriented group work and active learning, is one way to infuse student involvement into the curriculum.

- Provide programs that directly relate to students’ future career aspirations:

Community college students are drawn to activities that have an occupational focus. Activities that are centered around career interests are also very likely to be community service oriented. For example, at one college the Dental Hygienists Club offers free dental screenings in the community. These types of programs have personal relevance to students, and are also in line with two-year colleges’ dedication to serving the community.

- Keep in mind the diverse population of students who attend two-year institutes when program-planning:

It may be that community college students would like to participate in college activities but simply cannot make the scheduled time due to their many other commitments. Programs that involve the family or take place on the weekends have been more effective in engaging non-traditional aged and working students.

### References:

Colely, R. J. (2000). *The American community college turns 100: A look at its students, programs, and prospects*. Princeton, NJ: Educational Testing Services. (ED441 553)

Farr, G. (1998). Community college administrator offers views on role of campus activities. *Campus Activities Programming*, 31(8), 70-71.

Foote, E. (1997). *Collaborative learning in community colleges*. ERIC digest. Los Angeles: ERIC Clearinghouse for Community Colleges. (ED411023)

Glover, J. W. & Murrell, P. H. (1998). Campus environment and student involvement as predictors of outcomes of the community college experience. *Journal of Applied Research in the Community College*, 6(1), 5-13.

Hughes, R. (1994). The non-traditional student in higher education: A synthesis of the literature. In A. L. Rentz (Ed.), *Student affairs a profession's heritage*. Lanham, MD: University Press of America.

Maxwell, W. E. (2000). Student peer relations at a community college. *Community College Journal of Research and Practice*, 24, 207-217.

Mutter, P. (1992). Tinto's theory of departure and community college student persistence. *Journal of college student development*, 33(4), 310-318.



**Research Finding:** **Participation in service organizations and clubs enhances students' positive views of community service and community spirit, especially when students are leaders of the organizations or clubs.**

**Comments:** Students who are involved and invested in service organizations or clubs have a more positive view of community service than non-participating students. As well, involved students are more likely to look favorably upon community service after they leave the college.

The more intensely a student participates in an service organization, the more positively he or she will view community service. When students are leaders in service organizations, they are much more likely to view community service positively than are non-leaders in the organization.

Commuter students are uniquely affected by involvement in service organizations, as they often feel marginalized by their physical separation from students who live closer to campus. By participating in organizations or clubs, commuter students become more attached to their college, and are likely to view community service and their community college much more favorably than their non-participating commuter peers. By encouraging commuter students to participate in such groups, schools can succeed in decreasing the feelings of alienation and psychological distance from the college.

**References:**

- Wittel, K. (1990, December). Commuter students: Learning through serving their communities. *The Commuter*, 16(2), 4-6.
- Eklund-Leen, S., & Young, R. (1996). Attitudes of student organization members and nonmembers about campus and community involvement. *Community College Review*, 24(4), 71-81.
- Friedlander, J., & Pace, C. R. (1999). *Community College Student Experiences Questionnaire*, (2<sup>nd</sup> ed.). Memphis, TN: The University of Memphis, Center for the Study of Higher Education.



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