

LITERATURE REVIEW

PROMISING PRACTICES AT WORK

In

CALIFORNIA COMMUNITY COLLEGE

HEALTH OCCUPATIONS PROGRAMS

The Center for Student Success

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EXECUTIVE SUMMARY

This reports presents the findings of a literature review focused on strategies to promote student success in allied health programs. The literature review is one part of a three-pronged investigative study related to allied health programs conducted by the Center for Student Success. The objectives of the literature review were as follows:

1. To identify strategies used to promote successful completion of allied health programs; and
2. To review the appropriateness of employing these strategies in the California Community College system.

After conducting a search in the Educational Resources Information Center (ERIC) and various Web sites containing conference presentations and electronic journals, 39 references were retained for close review and analysis.

Several major themes were identified through the literature review:

- Recruitment and Retention
- Predictors of Student Success
- Teaching and Learning Strategies
- Collaboration and Partnerships

The literature on the topic suggests that the overall success of students in allied health programs, as in other programs, is the result of multiple approaches and strategies that encompass all stages of participation in higher education. The focus should not be only on what happens in the classroom. Rather the literature emphasizes that recruitment strategies and outside classroom activities such as mentoring, counseling, tutoring, peer interaction, partnerships and collaboration with entities on and off campus can play an important role in the overall success of students. As a result, a summary of the findings from the literature review is presented around the several major themes identified.

Recruitment and Retention

The literature underscores the shortage of allied health professionals and the need for aggressive recruitment and retention strategies, particularly targeting underrepresented and at risk groups. Various examples are described that combine marketing approaches (e.g., promotional flyers and newsletters), outreach (planned activities and direct communication with community based groups), orientations and follow-ups. In addition, developing strong student support systems that include mentoring, peer advising, counseling, tutoring, and financial aid appears to be an essential component in student success. Summer

programs that last between 4 to 8 weeks in which students are exposed to general education college courses as well as activities and courses specific to allied health programs further enhance targeted recruitment and retention once students join health occupation programs.

Predictors of Student Success

Many variables affect the degree of student success in completing any program. Several studies emphasize the importance of early identification of student characteristics that could be used in predicting success in the allied health programs. Identifying such characteristics can guide staff in allied health programs regarding the type of students to be targeted for recruitment or for special interventions once admitted into the program. Furthermore, based on these characteristics, college staff – admissions officers, counselors and faculty advisors - can guide students in career planning and job counseling. Predictors of student success include both traditional variables such as ACT, SAT scores, high school GPA as well as non-traditional variables such as personality characteristics. Academic preparation is the most important predictor of student success in allied health programs.

Learning and Teaching Strategies

The literature discusses the relevance of identifying and accommodating, where possible, the diverse learning styles of students. Although the evidence regarding the direct impact of individualized instruction that takes into account different learning styles is rather limited, some of the studies identified suggest that a number of learning style inventories have been used successfully in determining students preferences and increasing students' interest, motivation and achievement. Teaching and learning strategies such as portfolios, table clinics, collaborative and service learning are described in great detail. Again, the evaluation component regarding the direct impact of such methods on overall student success varies across studies. However, one can infer that these approaches have positive influences on student success.

Distance education in allied health is not a significant presence in the literature. The one study identified analyzes the academic performance of students enrolled in a distance education, interactive television, dental hygiene program at a technical college. The college shares its dental hygiene program with a number of cooperating college (distance) sites. The achievement of the learners at the host and cooperating college sites was compared based on the students' GPA and performance on the National Board of Dental Hygiene Examination (NBDHE). No statistically significant differences between the scores achieved by the two groups of learners on the NBDHE were identified. Neither were any significant differences between students' GPAs in 10 of the 11 core dental hygiene courses found. It was concluded that the distance educational technology of interactive television used in the college's dental technology program resulted in acceptable levels of learner performance.

Collaboration and Partnerships

The literature identifies collaboration and partnerships with various off campus entities as important avenues for recruitment and for enhancing the learning experiences and skill attainment of students. Indirectly, these approaches appear to also impact the student success in terms of increased program completion and career retention.

Overall, the literature related to allied health programs focuses on processes and methods. The evidence regarding the success of these processes and methods as measured by high program completion rates and low attrition rates is somewhat limited. In most studies the samples investigated and analyzed are rather small. The majority of the articles deal with case studies thus making generalizability of findings problematic. Nevertheless, in spite of these shortcomings, the articles identified reveal a host of strategies that deserve consideration by allied health faculty and practitioners.

INTRODUCTION

The overall purpose of the project is to investigate successful strategies used in Allied Health Programs with an emphasis on programs that have high completion and low attrition rates. One approach of this investigation is to conduct a literature review focused on the purpose of the project. The steps of the literature review are as follows:

- Identify strategies used to promote successful completion of Allied Health Programs;
- Review the appropriateness of employing these strategies in the California Community College system.

METHODOLOGY

Based on the purposes outlined above, a list of key words was developed to guide a literature search on the topic of strategies for successful completion of allied health programs. The list was refined after several iterations of search conducted in the ERIC database (ericir.syr.edu). Its final version included the following:

- Health occupations
- Allied health occupations
- Success
- Strategies

- Underrepresented students
- Higher education
- Two year colleges

Several search iterations and refinements yielded 39 ERIC citations relevant for the purpose of the project (their titles and abstracts are listed in Appendix 1).

In addition, relevant web sites were also searched (e.g., accreditation agencies and professional association for allied health programs such as the Commission on Accreditation of Allied Health Education Programs -- www.caahep.org; the Association of Schools of Allied Health Professions -- www.asahp.org; the National Network of Health Career Programs in Two-year Colleges -- www.nn2.org; the Health Professions Network -- www.healthpronet.org) and several relevant articles were identified (listed in Appendix 1).

The literature available on this topic proved to be somewhat limited. Whereas much has been written on areas such as skills competencies and curriculum development for allied health programs, there are few references that directly address student success and provide research to support claims of improvement, particularly as evidenced by high program or course completion and low attrition. Most of the literature available on strategies to improve student success in allied health programs describes various methods and approaches colleges have implemented (that is the emphasis is on processes rather than outcomes) but one can only infer the impact on student success. However, a number of strategies could be identified through this literature search and they are summarized and discussed in the next section.

FINDINGS

The literature on the topic suggests that the overall success of students in allied health programs, as in other programs, stems from the convergence of multiple approaches and strategies that span across all stages of the student flow through the higher education system. That is, the focus should not be only on what happens in the classroom, although this is the most important part of the educational process. Rather the literature emphasizes that initial recruitment strategies and outside classroom activities such as mentoring, counseling, tutoring, peer interaction, partnerships and collaboration with entities on and off campus can play an important role in the overall success of students. As a result, the findings from the literature review are grouped around several major themes identified in various articles, books and conference presentations studied:

- Recruitment and Retention
- Predictors of Student Success
- Teaching and Learning Strategies
- Collaboration and Partnerships

1. Recruitment and Retention

According to ASAHP and NN2 (2002), the numbers of applications and student enrollments in allied health programs have declined. The decline is attributed to a multitude of factors including negative perceptions of careers in allied health, in general; and the low profile of such careers. The term “allied health” covers a cluster of health professions encompassing as many as 200 occupational titles (besides physicians and nurses) (Castro, 2000). In addition, the increasing degree requirements are not commensurate with salaries and earning potential in most disciplines. Fewer scholarships and grants are now available making it necessary for students to take loans that result in significant debt before completion of the program occurs. Another challenge relates to the need for preparing a workforce that reflects the diversity of the population that these occupations serve.

The convergence of these factors leads to an increased need for more aggressive outreach and marketing activities. In addition, specific strategies are needed to recruit and retain targeted underrepresented groups in allied health professions. Such groups may include minorities, non-traditional adult learners, and second career students. Various colleges have developed programs aimed at recruiting and retaining targeted groups of students (e.g., Berger, 1991; Davis, 1999; Dolberry, 1991).

The most frequent approaches to targeted recruitment start with identifying groups, which have been traditionally under-represented in allied health programs. Dolberry (1991) describes the Salish Kootenai College project for recruitment and retention of Native Americans in Associate Degree Nursing. A program with a similar targeted group is described by the University of North Dakota Grand Forks (1996). Hrabowski (1991) discusses the Meyerhoff Scholarship Program of the University of Maryland Baltimore County. University of Alabama (1990) focuses on the recruitment and retention of African-American males in health and science programs. These programs combine targeted marketing (e.g., promotional flyers and newsletters distributed in the community) and outreach (e.g., planned activities and direct communication with community based groups to increase the awareness about allied health programs and careers), intensive orientations and monthly to bi-monthly follow-ups, involvement of staff members belonging to the minority groups targeted to work with the recruited students as well as scholarships and other forms of financial aid support for targeted students. Other programs developed student support systems, which emphasize peer group involvement, leadership by a special advisor, and establishing professional role model contacts for students. Generally, such programs involve collaboration between multiple units in campus: the allied health departments, marketing and/or public information officer, and counseling and financial aid. In the case of traditional college age students, Hrabowski (1991) indicates that parent participation helped increase the number of African-American students who entered and successfully completed science programs.

High school students are another group identified in the literature as the focus of special programs such as summer camps and apprenticeship programs designed to help prepare students to enter allied health programs and elicit their interest in such careers (Davis, 1999; Mullins, 1998). The Research Apprenticeship Program at Ohio State University (Davis, 1999) is a pre-college level program with the goal to provide meaningful experiences in various aspects of health-related research for minority high school students and teachers. The program activities involve assignment of students to faculty mentors during eight weeks in the summer. Participants work as full-time apprentices and participate in career development activities. Med-Start is a 5-week program that encourages rural, minority, and economically disadvantaged high school seniors throughout Arizona to pursue careers in health professions (Arnold and Keller, 2002). In order to assist these students in making the transition from high school to college and then to the professional school, Med-Start provides academic coursework and seeks to help students enhance critical thinking skills. The program combines Web based and face-to-face instruction.

Similar approaches could be also employed for at risk freshmen (Haught, 1996). A summer intervention program was developed in West Virginia to encourage minority and financially, socially, or educationally disadvantaged incoming, freshmen to pursue career goals in health professions. The program consisted in a four-week residential summer program in which students received a weekly monetary allowance. Participants were tested in biology, chemistry, mathematics, reading, writing and study skills. The results of these tests were used to develop individualized programs. During the program, students participated in formal seminars, site visits and group social activities. They also completed the Learning and Study Strategies Inventory (LASSI) and the Perceptions, Expectations, Emotions and Knowledge About College (PEEK) instrument. LASSI is designed to measure college students' use of learning and study strategies and methods and has been useful in assessing student improvement and course effectiveness in study strategies programs. PEEK was designed to assess students' ideas, attitudes, beliefs, and expectations about what college will be like for them. Researchers suspect that student expectations about college are critical factors that may help determine success or failure. Students who completed the summer intervention program attempted and earned significantly more credit hours during the next fall semester than non-participating students (Haught, 1996, p. 11). No significant difference in semester or cumulative GPA was observed. Results of the LASSI pre- and post-tests indicated that the students who participated in the summer program perceived themselves as less anxious, better able to concentrate, better time managers, able to select main ideas more easily, and better able to process information after completing the summer intervention program.

2. Predictors of Student Success

Many variables affect the degree of success encountered by students in completing any educational program and in remaining in that career (Lam, 1980). A number of studies point to the importance of early identification of student characteristics that could be used in predicting success in the allied health programs. Identifying such characteristics can guide staff in allied health programs regarding the type of students to be targeted for recruitment or for special interventions once admitted into the program. Furthermore, based on these characteristics, college staff – admissions officers, counselors and faculty advisors - can guide students in career planning and job counseling.

Petty and Todd (1985) conducted a comprehensive study of several allied health programs in the North Carolina Community College System. The data analysis revealed that age, specific admissions tests, and student personal characteristics had predictive power in relation to one measure of students' success – their GPA in the allied health program. Carmichael (1986) conducted a study to identify and test predictors of success of African Americans in a college-level pre-health profession program. He found that traditional variables such as high school GPA and ACT scores are good predictors. In this study success was defined as persisting in the pre-health program and entering the junior year with a GPA of 2.5 or higher. The combination of ACT composite score and high school GPA differentiated between successful and unsuccessful students well, classifying 82.3 percent of the cases correctly. Schmalz (1990) found that scores on the Otis Quick-Scoring Mental Abilities Tests, admissions essays, number of credits earned at a previous institution, and GPA were significant predictors of students' academic success in allied health programs. Jensen (1989) found that the greater predictors of student success in allied health programs were the natural science subscore on the ACT, high school GPA, high school class rank, age and composite ACT score.

Polizzi and Ethington (1996) examined data from the Community College Student Experiences Questionnaire national survey in order to compare differences in the quality of student efforts in various college experiences and in their perceptions of career preparation gains. The study measured responses of almost 2,000 students from four groups of vocational programs: business, health, technical/communications, and trade industry. Other variables examined were: gender and age, grades, full- or part-time status, and number of units being taken, and involvement, defined as hours per week spent studying. The results indicated differences among vocational groups not only in the amount of effort exerted but also in perceived gains in career preparation. The analysis indicated that influences of student characteristics and quality of effort also differed among the four groups. Among findings was that students in health programs, who were generally older and predominantly female, differed substantially from the other

students, in that they spent more time studying, exerted greater effort, and perceived the greatest gains in career preparation.

Other authors stress the importance of non-cognitive variables, such as personality characteristics, in predicting students' choice for and success in allied health programs. In an article reviewing literature regarding personality types and learning styles preferences of students enrolled in various allied health fields, Lam (1980) cites studies which found that such factors as demographic attributes, socioeconomic background, academic ability, self-image, and values influence outcomes as one's probable major, actual major, career choice, and choice of specialty within a career.

Lam (1980) also discusses the use of the Myers-Briggs Type Indicator (MBTI) to determine personality characteristics of students in allied health professions. Specifically the instrument identifies four bipolar preferences: extraversion (E) – introversion (I); sensing (S) – intuition (N); thinking (T) – feeling (F); and judging (J) – perceiving (P). Thus an individual can be classified according to one of 16 types: ISTJ, ISTP, ESTP, ISFJ, ESFP, ESFP, ESFJ, INFJ, INFP, ENFP, ENFJ, INTJ, INTP, ENTP, and ENTJ. Although all 16 types are found in all allied health fields, the patterns of attraction differ. Lam points to studies which found that feeling types in particular are attracted to health professions. Many sensing types are attracted to health professions and the –S-J types have a special interest in health, particularly among medical technology, pharmacy, dentistry, and physician's assistants. It was also noted that the S type appears to have a special interest in patient care. Types differ in their scores on verbal measures of academic aptitude and achievement. The sensing types, who appear especially attracted to many health careers, typically score low on aptitude measures, particularly if these are timed.

In a study administering the MBTI to a large sample of nursing students found that the lowest dropout rate occurred among the types most interested in nursing – FJ. The dropout rate for STJ types was significantly lower than for the NEJ types. These findings were opposite of what would be predicted from aptitude scores because S types average 7 points lower than N types on IQ and 50 points lower on the SAT. The worst dropout rate occurred among the SP types who have neither the intuitive's advantage in aptitude nor the judging type's advantage in application. In summary, personality characteristics can be related to career choice in the health occupations, to academic aptitude and achievement, and to persistence in allied health programs.

3. Learning and Teaching Styles and Strategies

In the past two decades, there has been a growing emphasis on student-centered teaching and learning processes. Learning is defined as a change in behavior resulting from experience (LeFrancois, 1975 cited in Lam, 1980, p. 11). Learning

style preferences are defined as an individual's affective preference for a particular instructional methodology or environment (Newman, 1980 cited in Lam, 1980, p. 11). In allied health fields where students are expected to acquire knowledge and achieve the competency levels of the professions, it is critical that students should be exposed to optimal learning experiences so that they might reach those goals. Given the increased demand of students for relevance in learning experiences, faculty should be investigating more nontraditional methods of teaching and learning. In order to plan effectively, faculty should have knowledge of individual students so that, when possible, instruction can be individualized thereby increasing relevance of learning and aiding in attainment of competencies.

Lam (1980) reviews a number of learning style inventories utilized to identify learning style preferences of students in allied health programs. Such inventories include those developed by Kolb (1977); Kesler and French (1975); and Canfield and Lafferty (1974). Studies reporting results of using these various inventories indicate that although there may be association between students' learning style preferences and career choice, there are also variances in styles among students in a given allied health program. Nevertheless, some findings seem to suggest that applying these inventories can help instructors seek instructional methods that maximize interest, motivation, and achievement of students.

Other articles investigate the usefulness of various teaching and learning methods in allied health. Jensen and Saylor (1993) studied the usefulness of portfolios for professional development and reflection in the disciplines of physical therapy and nursing. The authors consider portfolios as one educational strategy that helps reconnect students to the practice elements of a discipline through an active, reflective learning process (p. 3). The use of portfolios for student assessment within the health professions is increasing as the complexity of what professionals are expected to do continues to increase. In this study, portfolios were prepared by students and used in combination with student self-evaluations and instructor assessments. The portfolios included student papers, course evaluations, student self-assessments, student projects, and copies of program curriculum materials. The study found that the use of portfolios promoted student reflection on professional development and better communication between students and instructors.

Along the lines of making practice a greater presence during teaching and learning processes in allied health, Melton (1993) discusses table clinics as a method to enrich health education and improve students' knowledge and competencies attainment. Table clinics are short presentations on techniques related to some phase of research, diagnosis, or treatment. To present a table clinic, students must choose a topic which lends itself to a 5- to 7-minute presentation and which imparts knowledge which participants can take back to their workplace and implement with minimum cost and effort. After choosing the topic, students must review the literature on the topic to determine its usefulness and to help narrow it. Students must then research further, either performing their own investigations or

using approximately three to four sources. Once the research has been organized, a script must be developed that has both valid, reliable content and grammatical correctness. Next, students must select the format of the clinic, which will include live demonstrations, poster board presentations and discussion, or combinations of different types of media. Preparing the display board provides students the opportunity to interact, allowing them to assist each other with the development of the board. Finally, presentation of the clinic should be concise, but students should not memorize the presentation to maintain the informal, interactive nature of the clinic.

Collaborative learning has increased in popularity in all disciplines, including allied health. Collaborative learning organizes students into small groups in which they assist each other to solve problems and integrate skills and knowledge (Kleffner and Dadian, 1997). It can be used in classrooms, laboratories and clinical settings. Learning occurs through small group discussion, with students responsible for helping each other achieve desired learning outcomes. Instructors manage content through design of learning activities rather than lecturing.

Service learning is an educational approach that has garnered extensive attention from all allied health programs, particularly nursing (Connolly, 1996; Norbeck, Connolly, and Koerner (Eds.), 1998). Although there are many definitions of service learning, the National and Community Service Trust of 1993 defines it as:

“... a method under which students or participants learn and develop through active participation in thoughtfully organized service that is conducted in and meets the needs of a community and is coordinated with an elementary school, secondary school, institution of higher education, or community-service program, and with the community, helps foster civic and social responsibility, is integrated into and enhances the academic curriculum of the student’s program or the educational competencies of the community-service program or the educational competencies of the community-service program in which the participants are enrolled, and includes structured time for the students and participants to reflect on the service experience” (Norbeck, Connolly, and Koerner (Eds.), 1998, p. 1).

Two core elements are considered essential to service learning: 1) service activities help meet community needs that the community identifies as important, and 2) educational components are structured to enhance critical thinking and reflection on the service activities and communities needs (Norbeck, Connolly, and Koerner (Eds.), 1998, p. 1). Although very closely associated with pedagogy and curricular revision, service learning engages participants in opportunities to explore civic and social responsibilities of allied health education, practice, and research perspectives. This comprehensive monograph on service learning associated with nursing acknowledges that evaluation research is needed at two levels: evaluation of student learning and development, and evaluation of outcomes of the service delivery at the community level. The monograph is rich in

examples of nursing service learning programs, including syllabi, service learning assignments, and student essays. However, the evaluation part of the impact of these programs on student success defined as either course or program completion or retention in the career is missing. The emphasis, as in many of the other resources identified in the literature review, is on processes.

Finally, various forms of distance education have been utilized for decades in higher education, online education becoming a booming approach for many colleges. This literature review found one study that analyzes the academic performance of students enrolled in a distance education, interactive television, dental hygiene program at Northcentral Technical College (NTC) in Wausau, Wisconsin (Olmstead, 2001). The college shares its dental hygiene program with a number of cooperating college (distance) sites. The achievement of the learners at the host and cooperating college sites was compared based on the students' GPA and performance on the National Board of Dental Hygiene Examination. No statistically significant differences between the scores achieved by the two groups of learners on the NBDHE were identified. Neither were any significant differences between students' GPAs in 10 of the 11 core dental hygiene courses found. It was concluded that the distance educational technology of interactive television used in NTC's dental technology program resulted in acceptable levels of learner performance.

4. Collaboration and Partnerships

The literature identifies collaboration and partnerships with various off campus entities as important avenues for recruitment and for enhancing the learning experiences and skill attainment of students. Indirectly, these approaches appear to also impact the student success in terms of increased program completion and career retention.

There are many articles that describe such collaborations and partnerships. Baldwin (1991) describes the University of Alabama at Birmingham's Linkage Program whose goal is to increase the number of health care professionals in rural Alabama. Students attend a local community college for one year and the university for another year. Major clinical internships are done near the students' hometowns. Seventy percent of the graduates return to work in their home areas. Mullins (1998) describes a cooperative education program between a Veterans Affairs Medical Center and St. Petersburg Junior College where students interested in health care professions spend two semesters in the field. Stern and Rahn (1995) discuss the tech prep sequences in health occupations developed by the University of California with community colleges. Berger (1991) describes the partnership between Lehman College in New York and Montefiore Hospital and Medical Center's labor union in training health care workers to function as members of interdisciplinary health care teams. Undergraduate training is provided in social work, nursing and health services administration. The author found the

program successful based on high retention rates, academic achievement and student motivation. Connolly (1996) discusses the partnership between the Division of Health Technologies at Northern Virginia Community College and local community agencies which resulted in the implementation of the Mobile Nurse-Managed Health Center Program.

DISCUSSION AND CONCLUSIONS

The primary purpose of the literature review portion of this project was to identify strategies used to promote successful completion of allied health programs. Although there is much written about processes, methods, and approaches employed in allied health programs, the evidence regarding their success as measured by high program completion rates and low attrition rates is fairly scarce. In most studies the samples investigated and analyzed were rather small. Moreover, the majority of the articles deal with case studies thus making generalizability of findings problematic. Nevertheless, in spite of these shortcomings, the articles identified reveal a host of strategies that deserve consideration by allied health faculty and practitioners.

The literature clearly emphasizes the importance of approaching student success from a broad perspective that takes into account all phases of the various stages involved in student participation in any higher education program from recruitment, to enrollment, to teaching and learning, and ending with graduation and joining the workforce. Several major themes permeate the literature related to allied health programs:

- aggressive recruitment and retention strategies, particularly targeting underrepresented and at risk groups;
- relevance of predictors of student success;
- varied teaching and learning methods and styles;
- collaboration and partnerships with outside groups and organizations.

Although other types of programs would most likely share these themes, the specific strategies identified through this literature review appear to have some direct benefits for allied health programs. Recruitment approaches focused on increasing participation of minority, economically and socially disadvantaged students have particular significance for health occupations as the literature underscores the importance of preparing a diverse workforce capable to serve diverse populations. California is by far one of the most diverse states in the nation. Given the shortage of health care professionals and the expected increase in population diversity over the next decade, community colleges in California would be well served by pursuing aggressively underrepresented groups for recruitment into allied health programs. Strategies such as summer camps for high school students and at risk groups, special advising, counseling, peer mentoring and financial support for students have been in place to varying extents in

community colleges in California. Enhancing these approaches could prove beneficial for allied health programs.

Various variables have been identified as good predictors of student success in allied health programs. Such variables include both traditional predictors such as ACT, SAT scores, high school GPA and non-traditional variables such as personality characteristics. The benefit of gathering and analyzing these data is twofold: 1) it helps faculty and counselors better determine the makeup of the entering cohorts in allied health programs, and 2) it serves as a guide for targeted interventions that increase the likelihood of student success. Academic preparation is clearly identified as the most powerful predictor of student success in allied health programs.

The literature regarding teaching and learning styles and methods is rich with examples ranging from learning styles inventories aimed at helping faculty design non-traditional, personalized learning assignments and environments to collaborative and service learning. Allied health programs are particularly well suited for collaborative and service learning approaches as they emphasize practice and skills competencies. It is unclear the extent to which California community colleges have integrated such approaches in their health occupations programs.

Collaboration and partnerships serve multiple purposes including: sources for student recruitment; practice-oriented learning; easier transition into the workforce; and enhanced relationships with local communities. In addition, such partnerships can serve as financial support for allied health programs. California community colleges have as core components of their mission workforce and economic development. Collaboration and partnerships are good avenues towards these core mission components.

Embedded throughout the various articles reviewed are references to barriers students may encounter in pursuing and completing allied health programs. Most allied health programs are organized in a traditional college format requiring, in most cases, full time attendance throughout the duration of the program with the majority of classes offered during the day. Whereas this type of instruction may serve well some of the traditional college age students, it poses a major challenge to making these programs accessible to re-entry, older students who must work to support themselves or their families. Factors such as money, time, child care, motivation, fear, feeling too old, health issues, and lack of direction were found as perceived obstacles by women health care workers considering continuing their education in allied health programs. In a recent study of nursing students, the primary reasons for student attrition were: demands of family and work (87.5%); academic performance (70.8%); and financial need (41.7%) as well as the unavailability of part-time training options in allied health programs (Bradley, 2002).

Academic preparation is another significant barrier. For traditional college age students, high school GPA and ACT/SAT scores have been found in many studies as the most powerful predictors of students' GPA in allied health programs. Whereas personality characteristics also play a role in students' success, as pointed out earlier, academic preparation and readiness far supercede the predictive value of other characteristics. Allied health programs would be well served by ensuring that students enter these programs after possible needs for remedial education have been addressed. Early alert programs that track students' academic success from the outset could be another useful tool to be utilized by faculty in allied health programs.

RECOMMENDATIONS

Based on the literature review several recommendations for improving student recruitment, retention and successful program completion emerge:

1. Students' success depends on both academic and support services. Allied health programs should collaborate with various units on campus (i.e., counseling, financial aid) to ensure that possible barriers to students' retention and completion are addressed.
2. Allied health programs need to provide part-time training options, including evening and weekend training.
3. Needs for remedial education should be identified and addressed at the outset.
4. Personality characteristics should be another aspect that allied health faculty and counselors could identify and consider in developing personalized modes of instruction.
5. Systematic and continuous tracking of students' academic performance is an important component in students' overall success.
6. Student support systems that combine strategies such as mentoring, advising (by peers and faculty), counseling (both academic and career related), and tutoring should be provided throughout the duration of the program.
7. Instruction should emphasize the connection with practice and work environments upon graduation. Service learning could be one option for ensuring that such connection is established early in the program. Collaborations and partnerships with community organizations and hospitals are also important.

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University of North Dakota Grand Forks. (1996). Nursing. A Tradition of Caring. Quentin N. Burdick Indians into Nursing Program. ED411105

APPENDIX 1
TITLES IDENTIFIED THROUGH THE LITERATURE SEARCH

ERIC_NO: ED267186

TITLE: A Model to Improve the Success Rate of Students in Selected Health Career Programs in the North Carolina Community College System.

Final Report.

AUTHOR: Petty, Norman H.; Todd, Anne

PUBLICATION_DATE: 1985

ABSTRACT: A project sought to identify variables that are associated with student success in allied health care programs in order to provide program directors with better admissions information. Forty-nine allied health programs provided data on over 1,800 students. One questionnaire generated these basic program data for each participating program: dropout rates, class sizes, types of admissions tests used, and general admissions criteria. Program directors also provided information on student factors they thought might be related to student success. Participating programs were associate degree nursing, dental hygiene, medical laboratory technology, physical therapy, radiologic technology, and respiratory therapy. Program directors subsequently completed student data profiles. Data analysis revealed that age, specific admissions tests, and student personal characteristics had predictive power in relation to the measure of student success--grade point average (GPA). Preliminary program-specific admissions models showing the relationship between the dependent variable GPA and various independent or predictive variables were developed for four programs: nursing, radiology, respiratory therapy, and physical therapy. Future research should be undertaken to determine the dimensionality of the 11 perceived factors (student personal characteristics), set up experimental comparisons between admissions tests within specific program areas, and develop specific admissions models. (Instruments and correspondence are appended.) (YLB)

MAJOR_DESCRIPTOR: Admission Criteria; Allied Health Occupations Education; College Admission; Models; Success;

MINOR_DESCRIPTOR: Allied Health Occupations; Community Colleges; Postsecondary Education; Two Year Colleges;

PUBLICATION_TYPE: 141

PAGE: 75; 1

CLEARINGHOUSE_NO: CE043699

EDRS_PRICE: EDRS Price - MF01 Plus Postage. PC Not Available from EDRS.

LEVEL: 2

LANGUAGE: English

GEOGRAPHIC_SOURCE: U.S.; North Carolina

NOTE: 75p.; Document is printed on colored paper.

ERIC_NO: EJ433129

TITLE: Untapped Sources for Recruiting Minority BSW Students.

AUTHOR: Berger, Ruth
PUBLICATION_DATE: 1991
JOURNAL_CITATION: Journal of Social Work Education; v27 n2 p168-75 Spr-Sum 1991
ABSTRACT: Lehman College (New York) and Montefiore Hospital and Medical Center's labor union cooperate in training health care workers to function as members of interdisciplinary health care teams. Undergraduate training is made available in social work, nursing, and health services administration. Retention rates, academic achievement, and student motivation demonstrate the program's success. (MSE)
MAJOR_DESCRIPTORs: Hospital Personnel; Interdisciplinary Approach; Minority Groups; Social Work; Student Recruitment; Unions;
MINOR_DESCRIPTORs: Higher Education; Program Descriptions; Teamwork; Undergraduate Study;
IDENTIFIERS: *City University of New York Lehman College; Montefiore Hospital NY
PUBLICATION_TYPE: 080; 141
CLEARINGHOUSE_NO: HE529003
REPORT_NO: ISSN-1043-7797
AUDIENCE: Administrators; Practitioners
LANGUAGE: English

ERIC_NO: EJ512881
TITLE: Culture-Centered Counseling Skills as a Preventive Strategy for College Health Services.
AUTHOR: Pedersen, Paul B.
PUBLICATION_DATE: 1995
JOURNAL_CITATION: Journal of American College Health; v44 n1 p20-26 Jul 1995
ABSTRACT: Successful counseling is possible if health care providers learn to interpret behaviors within cultural context. The paper describes a culture-centered approach, using a grid that matches same/different behaviors and expectations. Culturally accurate knowledge and skills provide a developmental sequence for more appropriate health-care guidance in multicultural settings. (SM)
MAJOR_DESCRIPTORs: Counselor Training; Counselors; Cultural Influences; School Health Services; Skill Development;
MINOR_DESCRIPTORs: College Students; Consciousness Raising; Counseling; Cultural Awareness; Cultural Differences; Health Promotion; Higher Education;
IDENTIFIERS: *Diversity (Student)
PUBLICATION_TYPE: 055; 080
CLEARINGHOUSE_NO: SP524569
REPORT_NO: ISSN-0744-8481
LANGUAGE: English

ERIC_NO: ED337218

TITLE: Salish Kootenai College Project for Recruitment and Retention of Native Americans in Associate Degree Nursing. Final Report.

AUTHOR: Dolberry, Jacque

PUBLICATION_DATE: 1991

ABSTRACT: The purpose of the Salish Kootenai College (SKC) Project for Recruitment and Retention of Native Americans in Associate Degree Nursing was to increase the numbers of Native American registered nurses providing health care to the Native American population of Montana and the northwest mountain states. Recruitment and retention efforts targeted Licensed Practical nurses (LPNs), non-traditional adult learners, second career students, and high school and middle school students on reservations in rural Montana and the northwest mountain states. Project results included the following: (1) of the 11 LPN's who were identified throughout Montana reservations, 3 completed requirements for advanced standing, were admitted into the second year of Associated Degree Nursing classes, and graduated in June 1991, 2 entered first year classes and will graduate in June 1992, 4 completed prerequisites and will be admitted in fall 1991, and two will be admitted in fall 1992; (2) of the 75 adult learners identified and recruited from Montana reservations, 25 were attending SKC as pre-nursing students, 28 were attending other tribal colleges as pre-nursing students, and 16 will be admitted to SKC in fall 1991; (3) 30 Native American students from grades 4 through 12 attended a one-week Health Careers summer program LPNs who on the SKC campus; and (4) factors identified as most critical to successful recruitment and retention of the target population included intensive orientation and monthly to bi-monthly followup. The project budget, promotional flyer, and brief news articles about the project are included. (PAA)

MAJOR_DESCRIPTOR: American Indians; Career Awareness; Nursing; Nursing Education; Reservation American Indians; Student Recruitment;

MINOR_DESCRIPTOR: Academic Achievement; Community Colleges; Intermediate Grades; Program Evaluation; Secondary Education; Two Year Colleges; Workshops;

IDENTIFIERS: Native Americans

PUBLICATION_TYPE: 141

PAGE: 15; 1

CLEARINGHOUSE_NO: JC910454

EDRS_PRICE: EDRS Price - MF01/PC01 Plus Postage.

LEVEL: 1

LANGUAGE: English

GEOGRAPHIC_SOURCE: U.S.; Montana

NOTE: 15p.

ERIC_NO: ED411105

TITLE: Nursing...A Tradition of Caring. Quentin N. Burdick Indians into Nursing Program.

PUBLICATION_DATE: 1996

ABSTRACT: American Indians are underrepresented in the nursing profession. In fall 1990, the University of North Dakota (UND) College of Nursing received funding to increase the number of nurses providing health care to Indian people. In 1992, Recruitment/Retention of American Indians into Nursing (RAIN) became one of three Quentin N. Burdick Indian Health Programs at UND. RAIN aims to recruit American Indians into UND baccalaureate and master's nursing programs and to provide services to American Indian students to foster self-confidence and success. To further these goals, the program recruited American Indian staff members, established support networks within the university, and planned activities to increase awareness of Indian culture among faculty and students. Indian community support and involvement included an Indian advisory board, direct communication with tribes in the target area, recruitment activities on reservations, and other activities. The program's conceptual framework is based on Tinto's model of retention, which argues that retention is more a function of institutional experience than pre entry attributes and that students' academic and social integration are essential to retention. Since the inception of the RAIN program, American Indian admission and graduation rates for the UND College of Nursing have increased steadily. This document also describes mentoring, nonacademic retention strategies, multicultural activities, application procedures, various tracks and certifications within the nursing program, and student financial aid. Include photographs. (SV)

MAJOR_DESCRIPTOR: American Indian Education; College Programs; Nursing Education; School Holding Power;

MINOR_DESCRIPTOR: Academic Persistence; American Indians; College Students; Higher Education; Program Descriptions; Social Integration; Student Recruitment;

IDENTIFIERS: *Student Support Services; *University of North Dakota Grand Forks

PUBLICATION_TYPE: 141

PAGE: 15; 1

CLEARINGHOUSE_NO: RC020812

EDRS_PRICE: EDRS Price - MF01/PC01 Plus Postage.

CONTRACT_NO: ISD000396-06

LEVEL: 1

LANGUAGE: English

GEOGRAPHIC_SOURCE: U.S.; North Dakota

NOTE: 15p.; Photographs may not reproduce adequately.

ERIC_NO: ED246254

TITLE: Allied Health Educational Research. Licensure.

AUTHOR: Stolpe, Ernest J.

PUBLICATION_DATE: 1984

ABSTRACT: This study was designed to ascertain, from the empirical evidence available, the common characteristics of successful licensure efforts in the allied health occupations. A pattern of three steps to licensure for health care

occupations emerged from the literature. The first step is birth (of a new occupation), often caused by new technology (new hardware) that causes a department to justify the investment by maximization of use. The second step, creation of an association, stems from a need to communicate. The association has the effect of enhancing the status of the profession by establishing the scope of practice and the effect of enhancing income. The third step is regulating the new occupation, which is caused by turf-consciousness as the group strives to keep other groups from performing its activities (regulation). (Those groups that actually achieved licensure had three main characteristics: they fulfilled a social or national need; they had a minimum of four years of college or university schooling leading to a baccalaureate degree; and they were self-policing.) The study suggests that the three steps (birth, organization, regulation) could form a genesis role model enabling an originating occupation to use the successful efforts of other occupations as steps of progress to guide their own efforts. The model can also be used to pilot further research that will define the characteristics a specific occupation should acquire before seeking licensure. (KC)

MAJOR_DESCRIPTOR: Allied Health Occupations; Certification; Credentials; Emerging Occupations; Models; Quality Control;

MINOR_DESCRIPTOR: Accrediting Agencies; Allied Health Personnel; Health Services; Organizational Objectives; Postsecondary Education; Professional Associations; Professional Occupations; Program Development; Qualifications; Standards; State Licensing Boards; Technical Occupations; Technological Advancement;

PUBLICATION_TYPE: 120; 143

PAGE: 16; 1

CLEARINGHOUSE_NO: CE039296

EDRS_PRICE: EDRS Price - MF01 Plus Postage. PC Not Available from EDRS.

LEVEL: 2

LANGUAGE: English

GEOGRAPHIC_SOURCE: U.S.; Michigan

NOTE: 16p.

ERIC_NO: ED253712

TITLE: Issues in Associate Degree Nursing. Bridge to Success. Education and Service: A Partnership for Associate Degree Nursing.

PUBLICATION_DATE: 1984

ABSTRACT: This publication is a compilation of highlights from papers presented at the Associate Degree Nursing (ADN) project's regional conferences during 1983-84. Papers address pertinent issues in ADN education and practice. "AD Education: Are the Parameters Real?" (Julia Perkins) examines the parameters of associate degree nursing education from a historical perspective, in terms of what the literature says regarding the parameters of this type of education and practice, and by performance and use of graduates. "Transition Shock" (Anastasia Hartley) discusses the need for cooperative planning between education and service personnel to ease transition into the workplace. "AD Education: Parameters

Espoused and in Use" (Georgeen H. DeChow and Jo C. Pierce) discusses the espoused parameters (what educators say) and describes those in use (what educators do). "Expectations of AD Graduates: An Educator's Perspective" (Sarah L. Etkin) uses the competency statements and premises of the National League for Nursing to describe the expected characteristics of ADN practice. "Bridges to Success" (Ann Larowe) also examines the parameters and philosophy of AD education. "A Competency-Based Curriculum: Process at Kennesaw College" (Ann Crutchfield and Vanice W. Roberts) describes the process of competency development in the AD program. "Performance Differences in Graduates of Associate and Baccalaureate Degree Programs" (Annette Bairan, Leslie Brown, Pamela Chally, and Beverly Farnsworth) reports findings from a study conducted at the University of Vermont to demonstrate performance differences of graduates from AD programs versus baccalaureate programs. "Proposed Solutions to Issues in ADN" (Zeila W. Bailey and Dorothy Scott) suggests improvements for ADN education. "Expectations of AD Graduates: A Nursing Service Director's Perspectives" (Jacqueline Mardan) cites necessary skills and standards of performance. "The Reality of the Workplace" (Mona Raborn) stresses the need for leadership training. "An Educational Clinical Preceptorship" (Marianne Crouse, Emily Slunt, and Brenda Carter) and "An Internship Program" (Frances E. Casillo) describe these programs. "AD/BSN Competency Differentiation" (S. Joan Gregory) compares competencies of nurses from AD and Bachelor of Science in Nursing programs. "Opportunities for Success in the 80s" (Katherine Vestal) considers nurse utilization in a changing health care environment. "Clinical Competence Validation" (Carol Singer) summarizes a method of validating clinical competence of AD students. A bibliography concludes the document. (YLB)

MAJOR_DESCRIPTOR: Associate Degrees; Competence; Nurses; Nursing Education; Performance;

MINOR_DESCRIPTOR: Bachelors Degrees; Comparative Analysis; Higher Education; Job Skills; Nursing; Use Studies;

PUBLICATION_TYPE: 021; 120; 141

PAGE: 61; 1

CLEARINGHOUSE_NO: CE040697

EDRS_PRICE: EDRS Price - MF01/PC03 Plus Postage.

LEVEL: 1

LANGUAGE: English

GEOGRAPHIC_SOURCE: U.S.; Georgia

NOTE: 61p.

ERIC_NO: EJ433916

TITLE: Helping Gifted Black Males Succeed in Science.

AUTHOR: Hrabowski, Freeman A., III

PUBLICATION_DATE: 1991

JOURNAL_CITATION: Journal of Health Care for the Poor and Underserved; v2 n1 p197-201 Sum 1991

ABSTRACT: Initiatives are discussed that can increase young Black males' success in science and technology programs. The Meyerhoff Scholarship Program (MSP) of the University of Maryland Baltimore County has successfully increased the number of African Americans who enter/succeed in undergraduate and doctoral/professional science and technology programs by emphasizing parent participation. (SLD)

MAJOR_DESCRIPTOR: Academically Gifted; Black Students; College Students; Males; Parent Participation; Science Programs;

MINOR_DESCRIPTOR: Academic Achievement; Blacks; Course Selection (Students); Higher Education; Minority Groups; Science Education; Self Esteem; Student Educational Objectives; Student Recruitment; Technical Education;

IDENTIFIERS: University of Maryland Baltimore County

PUBLICATION_TYPE: 080; 142; 150

CLEARINGHOUSE_NO: UD516082

REPORT_NO: ISSN-1049-2089

LANGUAGE: English

ERIC_NO: ED376279

TITLE: Health Science Technology Education (HSTE). A Working Model.

AUTHOR: McCarty, Sally; And Others

PUBLICATION_DATE: 1994

ABSTRACT: This document outlines the model that was jointly developed by representatives of the Texas Education Agency and University of Texas at Austin (UTA) to inject the state's existing health science technology education (HSTE) program with tech prep components and Secretary's Commission on Achieving Necessary Skills (SCANS) competencies. Presented first is a flowchart detailing the technical and professional career preparation provided to traditional and reentry students under the HSTE model at the high school and community/technical college levels. Student outcomes for three HSTE courses are listed: health care science, health occupations I, and health occupations II. Provided next are a checklist of SCANS foundation skills and an analysis of the following SCANS competencies: identifies, organizes, plans, and allocates resources; works with others; acquires and uses information; understands complex interrelationships (systems); and works with a variety of technologies. The next section contains the following: graphic representation of the attitudes/skills/knowledge (ASK) feedback model; discussion of its development; and checklists of the attitudes, skills, and knowledge deemed necessary for entry workers. Concluding the document are four sample programs of study for HSTE students in grades 9-12 and a list of tech prep-related resources available from UTA. (MN)

MAJOR_DESCRIPTOR: Allied Health Occupations Education; Competency Based Education; Models; Statewide Planning; Technology Education;

MINOR_DESCRIPTOR: Articulation (Education); Behavioral Objectives; Check Lists; Community Colleges; Entry Workers; Fused Curriculum; High Schools; Two Year Colleges;

IDENTIFIERS: Secretarys Comm on Achieving Necessary Skills; *Tech Prep;
*Texas
PUBLICATION_TYPE: 052
PAGE: 33; 1
CLEARINGHOUSE_NO: CE067503
AVAILABILITY: Extension Instruction and Materials Center, University of Texas,
P.O. Box 7218, Austin, TX 78713-7218.
EDRS_PRICE: EDRS Price - MF01 Plus Postage. PC Not Available from EDRS.
LEVEL: 2
AUDIENCE: Teachers; Practitioners
LANGUAGE: English
GEOGRAPHIC_SOURCE: U.S.; Texas
NOTE: 33p.; For related documents, see CE 067 501-502.

ERIC_NO: ED277298
TITLE: Predictors of Success of Black Americans in a College-Level Pre-Health Professions Program.
AUTHOR: Carmichael, J. W., Jr.
PUBLICATION_DATE: 1986
JOURNAL_CITATION: Advisor; v6 n4 p5-11 Sum 1986
ABSTRACT: Predictors of success for black freshmen entering Xavier University of Louisiana with an interest in the health professions were studied. Health professions were considered as the mainline fields of medicine, osteopathic medicine, dentistry, veterinary medicine, optometry, podiatry, and pharmacy. Students majoring in biology, chemistry, or pre-pharmacy (pre-health) who entered the predominantly-black institution in 1981, 1982, and 1983 were investigated. Success was defined as both persisting in pre-health and maintaining a grade point average sufficiently high to provide a reasonable chance of gaining admission into a health professions school. The following traditional variables were chosen for study: high school grade point average, composite score on the American College Testing Program and scores on its four subsections, scores on the three portions of the Nelson-Denny Reading Test in terms of grade-level equivalents, and sex of students. Complete data were available for 324 students (210 females and 114 males). Of this number 85 were successful by the defined criteria and 239 were not. Almost all the variables distinguished successful from unsuccessful students to some degree. Specific findings are reviewed, along with the question of whether the predictive power varied for black males and females. (SW)
MAJOR_DESCRIPTOR: Academic Achievement; Academic Persistence; Black Students; Health Occupations; Predictor Variables; Premedical Students;
MINOR_DESCRIPTOR: Black Colleges; Dentistry; Higher Education; Optometry; Osteopathy; Pharmacy; Podiatry; Veterinary Medicine;
IDENTIFIERS: *Xavier University of Louisiana
PUBLICATION_TYPE: 080; 143

PAGE: 8; 1
CLEARINGHOUSE_NO: HE019887
EDRS_PRICE: EDRS Price - MF01/PC01 Plus Postage.
LEVEL: 1
LANGUAGE: English
GEOGRAPHIC_SOURCE: U.S.; Louisiana
NOTE: 8p.

ERIC_NO: ED246283

TITLE: A Post Secondary Prevocational Education Model: A Guide for Implementation. A Research Verified Training Program to Help the High-Risk Student Complete Post Secondary Education.

AUTHOR: Blattner, Bruce E.; And Others

PUBLICATION_DATE: 1984

ABSTRACT: This guide comprises a summary of the development of and materials for use in the implementation of a research-verified model training program to help high-risk students complete postsecondary education programs. Discussed first is the original pilot project that was implemented to serve the high-risk postsecondary vocational students entering the health occupations courses at Missoula Vocational Technical Center (MVTC) in Missoula, Montana. The second chapter describes the success of the pilot project in helping 116 of the 175 participants in the prevocational program to complete it successfully. Addressed next are reasons for prevocational programs, components of such programs in relation to the importance of flexibility, and concerns and pitfalls in implementing prevocational education. The fourth chapter, a program model, consists of course outlines, course objectives, day-by-day teaching schedules, procedures for identifying high-risk students and enrolling them in prevocational programs, and exit interview procedures for use in the following subject areas: reading, study skills, mathematics, and career counseling. Appendixes to the guide include sample program correspondence, pre- and posttest data on MVTC program participants, ground rules for learning groups and for group counseling, a career awareness scale, a sample health occupations course pretest, and a bibliography. (MN)

MAJOR_DESCRIPTOR: Allied Health Occupations Education; Developmental Studies Programs; High Risk Students; Potential Dropouts; Prevocational Education; Remedial Programs;

MINOR_DESCRIPTOR: Basic Skills; Career Counseling; Classroom Techniques; Compensatory Education; Educational Diagnosis; Educational Needs; Enrollment; Guidelines; Instructional Materials; Learning Activities; Lesson Plans; Mathematics Skills; Models; Postsecondary Education; Pretests Posttests; Program Implementation; Questionnaires; Reading Skills; Records (Forms); Self Evaluation (Individuals); Student

Evaluation; Study Skills; Validated Programs;

IDENTIFIERS: Montana; Special Needs Students

PUBLICATION_TYPE: 141; 052

PAGE: 204; 3
CLEARINGHOUSE_NO: CE039345
EDRS_PRICE: EDRS Price - MF01/PC09 Plus Postage.
LEVEL: 1
AUDIENCE: Administrators; Teachers; Practitioners
LANGUAGE: English
GEOGRAPHIC_SOURCE: U.S.; Montana
NOTE: 204p.

ERIC_NO: ED207954
TITLE: Personality Characteristics and Learning Style Preferences of Allied Health Students.

AUTHOR: Lam, Rebecca

PUBLICATION_DATE: 1980

ABSTRACT: Identifying personality types and learning style preferences of students and professionals in the allied health professions can aid college students in academic achievement and in career decision making. A literature review regarding personality types and learning style preferences of students enrolled in various allied health fields is presented. Research using the Myers-Briggs Type Indicator (MBTI) to determine personality characteristics has been performed in allied health professions. The MBTI identifies four bipolar personal preferences: extraversion-intraversion; sensing-intuition; thinking-feeling; and judging-perceiving. This provides a system for classifying individuals according to one of sixteen personality types. Examples are offered of personality profiles of students and their relationship to choice of field in the health professions. In assessing learning styles, an inventory is demonstrated that includes six dimensions of learning preferences: abstract; concrete; individual; interpersonal; student-structured; and teacher-structured. Differences and similarities in learning styles among these students are pointed out. Suggestions are made for using these measurements for matching students' preferences and personalities to assure greater academic and career success. (JD)

MAJOR_DESCRIPTOR: Allied Health Occupations Education; Career Choice; Cognitive Style; Job Satisfaction; Personality Traits; Student Characteristics;

MINOR_DESCRIPTOR: Academic Achievement; Allied Health Personnel; College Students; Curriculum Design; Higher Education; Student Attitudes; Teaching Methods;

PUBLICATION_TYPE: 143

PAGE: 18; 1

CLEARINGHOUSE_NO: SP018753

EDRS_PRICE: EDRS Price - MF01/PC01 Plus Postage.

LEVEL: 1

LANGUAGE: English

GEOGRAPHIC_SOURCE: U.S.; Georgia

NOTE: 18p.; Best copy available.

ERIC_NO: ED414855

TITLE: A Comprehensive Support System for Improving Retention of Black Students in Premedical Programs.

PUBLICATION_DATE: 1990

ABSTRACT: This final report describes activities and accomplishments of a 3-year, federally supported project at the University of Alabama (Tuscaloosa) to improve the retention of African-American students in undergraduate premedical programs by developing an improved personal and social support system for black students interested in the health professions. A Student Support System (SSP) emphasizing peer group involvement, leadership by a special advisor, and professional role model contacts was established. Program success was indicated by a substantial increase in the number of African-American students applying to health professional schools; 58 percent have matriculated in professional schools. These results represented a twofold increase compared to the preceding 8 years. A substantially greater retention rate was also found for SSP participants when compared with nonparticipants. However, the goal of improving the academic record and entrance-test qualifications of participants was not achieved. Program evaluation also indicated the importance of the SSP advisor as a source of support for students. Attached tables detail the project's results. (DB)

MAJOR_DESCRIPTOR: Allied Health Occupations Education; Black Students; Premedical Students; School Holding Power;

MINOR_DESCRIPTOR: Academic Advising; Academic Aspiration; Academic Persistence; Career Choice; Dropout Prevention; Higher Education; Peer Relationship; Role Models; Social Support Groups; Undergraduate Study;

IDENTIFIERS: African Americans; *University of Alabama

PUBLICATION_TYPE: 141

PAGE: 42; 1

CLEARINGHOUSE_NO: HE030845

EDRS_PRICE: EDRS Price - MF01/PC02 Plus Postage.

CONTRACT_NO: P116BO1154

LEVEL: 1

LANGUAGE: English

GEOGRAPHIC_SOURCE: U.S.; Alabama

NOTE: 42p.

ERIC_NO: ED116733

TITLE: Project 30: An Evaluation and Review. A Project Designed to Strengthen and Support Minority Students Matriculating in Mathematics, Science, Technology, and the Allied Health Fields at Sacramento City College.

AUTHOR: Kinnebrew, Elbert L.

PUBLICATION_DATE: 1975

ABSTRACT: Since fall 1972, Sacramento City College has operated a pilot project designed to provide minority students with extra tutorial and laboratory assistance and, thereby, to encourage them to pursue careers in mathematics, science,

technology, and the allied health fields. The primary focus of the program was placed on one-to-one tutorials intended to remedy the problems faced by minority students in their regular classes. To this end, a laboratory was established centrally in the science complex and was staffed by a project director and six qualified peer tutors. In order to evaluate the success of the pilot project, questionnaires were distributed to students who had participated in the program and to minority students who had enrolled in mathematics, science, technology, or allied health courses, but who had not participated in the program. The responses from Asian, black, Mexican-American, and Native American students are presented separately. As a result of this evaluation study, it is recommended that the pilot phase of this program be ended and that the program be continued on a regular basis. The questionnaires are appended, as are descriptions of the auto-tutorial aids currently utilized in the program laboratory. (DC)

MAJOR_DESCRIPTOR: Minority Groups; Peer Teaching; Science Education; Tutorial Programs; Two Year Colleges;

MINOR_DESCRIPTOR: Allied Health Occupations Education; Autoinstructional Aids; Educational Technology; Learning Laboratories; Mathematics Education; Technical Education; Tutoring;

IDENTIFIERS: Sacramento City College CA

PUBLICATION_TYPE: 143

PAGE: 49; 1

CLEARINGHOUSE_NO: JC760051

EDRS_PRICE: EDRS Price - MF01/PC02 Plus Postage.

LEVEL: 1

NOTE: 49p.

ERIC_NO: ED463421

TITLE: The Allied Health Professions: Opportunities for Minority Students. Career Guidebook.

AUTHOR: Castro, Maria

PUBLICATION_DATE: 2000

ABSTRACT: The term "allied health" refers to a cluster of health professions encompassing as many as 200 occupational titles (exclusive of physicians and nurses) involved with the delivery of health or related services pertaining to the identification, evaluation, prevention, and treatment of diseases and disorders; dietary and nutritional services; and rehabilitation and health systems management, among others. This guidebook was developed to encourage minority students to pursue allied health careers and to provide information to those considering such careers. The guide covers definitions of allied health occupations, the need for minority groups in allied health professions, and steps in preparing for a career in allied health. It also describes 23 of the allied health professions and the educational requirements for each. The guide provides lists of 23 allied health professional associations, and colleges and universities serving minority students and offering allied health professions programs (73 serving Asian-Americans, 199 serving Hispanic students, 94 historically or predominantly

black colleges and universities, and 31 tribal colleges and universities). The guide lists 80 sources of scholarships, federal government financial aid programs, and resources and internships serving African-American, Native American, and Hispanic students. (Contains 15 references.) (KC)

MAJOR_DESCRIPTOR: Allied Health Occupations; Allied Health Occupations Education; College Programs; Educational Resources; Minority Groups; Student Financial Aid;

MINOR_DESCRIPTOR: Affirmative Action; American Indian Education; American Indians; Black Colleges; Black Students; Career Choice; Career Development; Hispanic American Students; Occupational Information; Postsecondary Education; Student Recruitment; Tribally Controlled Education;

IDENTIFIERS: African Americans; American Indian Students

PUBLICATION_TYPE: 055

PAGE: 70

CLEARINGHOUSE_NO: CE083008

AVAILABILITY: For full text: <http://www.hrsa.gov//bhpr/publications/ahguide00.pdf>

EDRS_PRICE: EDRS Price MF01/PC03 Plus Postage.

INSTITUTION_NAME: BBB23963 _ Health Resources and Services Administration (DHHS/PHS), Rockville, MD. Bureau of Health Professions.

LEVEL: 1

AUDIENCE: Students

LANGUAGE: English

GEOGRAPHIC_SOURCE: U.S.; Maryland

NOTE: Revised by Charmika Schuster and edited by Ledis Hernanadez. Prepared for the Division of Public Health and Allied Health Professionals.

ERIC_ISSUE: RIEOCT2002

ERIC_NO: ED430494

TITLE: The Research Apprenticeship Program: Promoting Careers in Biomedical Sciences and the Health Professions for Minority Populations.

AUTHOR: Davis, Denise D.

PUBLICATION_DATE: 1999

ABSTRACT: This study examined the career decisions of 54 high school students who participated in the Research Apprenticeship Program (RAP) at Ohio State University during 1990-92. RAP is a precollege program which aims to provide meaningful experiences in various aspects of health-related research for minority high school students and teachers. RAP activities are centered on the assignment of students to faculty preceptors/mentors during eight weeks in the summer. Participants work as full-time apprentices and participate in various career development activities, including maintaining a written record of their experience, conducting a research project in their assigned health area, and participating in a science fair. Data on 54 former participants were collected concerning the precollege program experience, student background characteristics, and individual factors (such as academic ability, personality, and motivation). Of the respondents, 37 (68 percent) had chosen to pursue a health profession immediately following

high school, and 17 percent (32 percent) had decided not to pursue a health professional immediately following high school. Analysis indicated that personality, cognitive, and motivational factors, along with family characteristics, experiential learning, socioeconomic status, and the RAP program had a significant impact on the career decision-making process of these students. (Contains 33 references.)

(DB)

MAJOR_DESCRIPTOR: Apprenticeships; Minority Groups;

MINOR_DESCRIPTOR: Allied Health Occupations Education; College Bound Students; Experiential Learning; Health Occupations; High School Students; High Schools; Higher Education;

IDENTIFIERS: *Ohio State University

PUBLICATION_TYPE: 141; 150

PAGE: 30

CLEARINGHOUSE_NO: HE032085

EDRS_PRICE: EDRS Price MF01/PC02 Plus Postage.

LEVEL: 1

LANGUAGE: English

GEOGRAPHIC_SOURCE: U.S.; Ohio

NOTE: Paper presented at the Annual Meeting of the American Educational Research Association (Montreal, Ontario, April 19-23, 1999).

ERIC_ISSUE: RIEOCT1999

ERIC_NO: ED312397

TITLE: Health Occupations Education National Research Conference (3rd, University Park, Pennsylvania, October 5-6, 1989). Proceedings.

AUTHOR: Richards, Beverly, Ed.

PUBLICATION_DATE: 1989

ABSTRACT: This document contains the proceedings of a research conference on health occupations of education and includes an agenda of the conference, a list of co-sponsors, and 10 papers: "The Need for Research in Education of Human Service Workers" (C. Junge); "Status of Health Occupations Teacher Certification" (C. Chappelka); "Commitment to Change: A Study of Health Occupations Teachers and Staff Development Personnel in Health Care Settings" (D. Witmer); "An Open System Planning Model" (V. Klaus); "Factors Related to the Completion of Community College Allied Health Programs" (C. Rzonca); "Self Perception of Needs: A Study of Secondary Health Occupations Education Teachers" (K. Gable); "Current and Future Use of the Multiskilled Health Worker" (J. Brandt); "Leadership Training Topics: Perceptions of High School Leaders of Health Occupations Students of America" (N. Walters, J. Wilmoth, and J. Robinson); "Issues in Developing Computer Software for Health Occupations Students of America" (J. Sandiford); and "Articulation Program" (M. Malinchok). (NLL)

MAJOR_DESCRIPTOR: Allied Health Occupations Education; Health Occupations; Vocational Education;

MINOR_DESCRIPTOR: Articulation (Education); Computer Software; Educational Change; Health Personnel; Health Services; High Schools; Human

Services; Leadership Training; Staff Development; Student Organizations;
Teacher Certification; Teacher Qualifications; Two Year Colleges;
IDENTIFIERS: *Health Occupations Students of America
PUBLICATION_TYPE: 021; 143; 141
PAGE: 219; 3
CLEARINGHOUSE_NO: CE053467
EDRS_PRICE: EDRS Price - MF01/PC09 Plus Postage.
LEVEL: 1
LANGUAGE: English
GEOGRAPHIC_SOURCE: U.S.; Pennsylvania
NOTE: 219p.; Co-sponsored by Auburn University, Florida International University,
Indiana University, and Pennsylvania State University in cooperation with the U.S.
Department of Education, and the American Vocational Association.

ERIC_NO: ED394588
TITLE: Rocky Chairland: Educating a Changing Health Care Workforce.
AUTHOR: Connolly, Charlene
PUBLICATION_DATE: 1996
ABSTRACT: Recognizing the need to be proactive in redefining the role of nursing
and allied health practitioners at the associate degree level and transforming
curricula to meet the changing demands of health care, the Division of Health
Technologies at Northern Virginia Community College, in partnership with local
community agencies, implemented the Mobile Nurse-Managed Health Center
Program (MNMHCP). The purpose of the MNMHCP is to develop a model of
community-based clinical practice incorporating service learning as a structured
part of the curriculum. The program's objectives are structured around the
following three components: (1) community impact, focusing on the provision of
health care to underserved populations and developing health education
resources; (2) participant impact, including improving the civic commitment and
leadership skills of 150 nursing and allied health students by engaging them in
direct provision of primary care services; and (3) institutional impact, focusing on
the development of new curricula and stronger partnerships with community
organizations. Students in the program participate in 64 hours of service-learning
during a 4-week community-based practicum, while health care services are
offered 4 days a week at over 10 sites. Appendixes include a chart and objective
forms illustrating differences between the current Nursing Program curriculum and
the proposed Nursing Service Learning Curriculum developed as part of MNMHCP
project. (TGI)
MAJOR_DESCRIPTOR: Allied Health Occupations Education; Clinical
Experience; Community Health Services; Curriculum Development; Nursing
Education; Service Learning;
MINOR_DESCRIPTOR: Community Colleges; Community Services; Experiential
Learning; Partnerships in Education; School Community Relationship; Social
Responsibility; Two Year Colleges;
IDENTIFIERS: *Northern Virginia Community College

PUBLICATION_TYPE: 141; 150
PAGE: 8; 1
CLEARINGHOUSE_NO: JC960323
EDRS_PRICE: EDRS Price - MF01 Plus Postage. PC Not Available from EDRS.
LEVEL: 2
LANGUAGE: English
GEOGRAPHIC_SOURCE: U.S.; Virginia
NOTE: 8p.; In: The Olympics of Leadership: Overcoming Obstacles, Balancing Skills, Taking Risks. Proceedings of the Annual International Conference of the National Community College Chair Academy (5th, Phoenix, AZ, February 14-17, 1996); see JC 960 276.

ERIC_NO: EJ539609
TITLE: Using Collaborative Learning in Dental Education.
AUTHOR: Kleffner, John H.; Dadian, Taline
PUBLICATION_DATE: 1997
JOURNAL_CITATION: Journal of Dental Education; v61 n1 p66-72 Jan 1997
ABSTRACT: Collaborative learning organizes students into small groups in which they assist each other to solve problems and integrate skills and knowledge. It can be used in classrooms, laboratories, and clinical settings. Learning occurs through small group discussion, with students responsible for helping each other achieve desired learning outcomes. Instructors manage content through design of learning activities rather than lecturing. (Author/MSE)
MAJOR_DESCRIPTOR: Clinical Teaching (Health Professions); Cooperative Learning; Dental Schools; Discussion (Teaching Technique); Teacher Role;
MINOR_DESCRIPTOR: Allied Health Occupations Education; College Faculty; Dental Students; Educational Attitudes; Higher Education; Problem Solving; Professional Education; Self Esteem; Small Group Instruction; Student Attitudes;
PUBLICATION_TYPE: 142; 052; 080
CLEARINGHOUSE_NO: HE536541
REPORT_NO: ISSN-0022-0337
AUDIENCE: Teachers; Practitioners
LANGUAGE: English

ERIC_NO: ED449735
TITLE: Caring and Community: Concepts and Models for Service-Learning in Nursing. AAHE's Series on Service-Learning in the Disciplines.
AUTHOR: Norbeck, Jane S., Ed.; Connolly, Charlene, Ed.; Koerner, JoEllen, Ed.
PUBLICATION_DATE: 1998
ABSTRACT: This volume is part of a series of 18 monographs on service learning and the academic disciplines. These essays focus on nursing, examining partnerships between education and service, nurse and person, and profession and community. Chapters describe both theoretical and experiential ways in which

nursing has begun to incorporate service-learning as a methodology in many diverse settings and with many communities of interest. Following the Introduction by Jane S. Norbeck, Charlene Connolly, and Jo Ellen Koerner, three theoretical essays include: "Humanistic Learning in the Context of Service: The Liberal Arts in Nursing Education" (Jean E. Bartels); "Preparing Nurses for Roles That Will Improve Community Health: Two National Programs Enhance Relationships between Providers and Educators" (Mary Kay Kohles, Maryalice Jordan-Marsh, and Margaret T. McNally); and "Service Education Partnerships Create Community Service-Learning Opportunities in a Rural Region" (Sharon P. Aadalen, Mary Kay Hohenstein, Mary I. Huntley, and Annette J. McBeth). Seven essays on classroom applications follow, including: "Service-Learning as a Pedagogy in Nursing" (Elaine Cohen, Susan Johnson, Lois Nelson, and Connie Peterson); "Case Study of a Service-Learning Project in a Nurse-Managed Clinic for Homeless and Indigent Individuals" (Carol L. Macnee, Deborah H. White, and Jean C. Hemphill); "A Case Study in Service-Learning Using a Collaborative Community-Based Caring Model" (Evelyn C. Atchison and Patricia A. Tumminia); "Community Empowerment through Service-Learning" (Leanne C. Busby, Cathy Taylor, and Linda Norman); "Nursing Clinical Education in an Urban Public School System" (Donna Miles Curry, Kimberley X. Hickok, and Kate Cauley); "The Community as Classroom: Service-Learning in Tillery, North Carolina" (Nina P. Shah and Mary A. Glascoff); and "Service-Learning Lessons from the Chambered Nautilus" (Evelyn D. Quigley, Betty Sayers, and Ruth Hanson). Sets of sample syllabi and assignments are provided for four of the essays. A 65-item annotated bibliography, organized by topic, and a list of practitioners is appended. (All papers contain references.) (SM)

MAJOR_DESCRIPTOR: Nursing Education; Service Learning;

MINOR_DESCRIPTOR: Allied Health Occupations Education; Case Studies; Clinical Teaching (Health Professions); Clinics; College Students; Community Services; Elementary Secondary Education; Higher Education; Homeless People; Humanistic Education; Intellectual Disciplines; Liberal Arts; Nurses; Partnerships in Education; Poverty; Public Health; Public Schools; Rural Areas; School Community Programs; Student Participation; Student Volunteers; Urban Schools;

IDENTIFIERS: Caring; Community Empowerment

PUBLICATION_TYPE: 010; 020

PAGE: 199

CLEARINGHOUSE_NO: HE033735

AVAILABILITY: American Association for Higher Education, One Dupont Circle, Suite 360, Washington, DC 20036-1110 (\$28.50). Tel:

202-293-6440; Fax: 202-293-0073; E-mail: pubs@aahe.org; Web site: www.aahe.org.

EDRS_PRICE: EDRS Price MF01/PC08 Plus Postage.

ISBN: ISBN-1-56377-009-1

INSTITUTION_NAME: FGK01523 _ American Association for Higher Education, Washington, DC.

LEVEL: 1

AUDIENCE: Practitioners

LANGUAGE: English
GEOGRAPHIC_SOURCE: U.S.; District of Columbia
NOTE: For other documents in this series, see HE 033 726-743. Initial funding for this series was supplied by Campus Compact. Published in cooperation with Community-Campus Partnerships for Health.
ERIC_ISSUE: RIEJUL2001

ERIC_NO: ED403786
TITLE: Factors Affecting Gains in Career Preparation: A Comparison of Vocational Groups. ASHE Annual Meeting Paper.

AUTHOR: Polizzi, Tissy B.; Ethington, Corinna A.

PUBLICATION_DATE: 1996

ABSTRACT: This study, based on data from the Community College Student Experiences Questionnaire national survey, examined comparative differences in the quality of student efforts in various college experiences and in their perceptions of career preparation gains. The study measured responses of students (N=1,891) from four groups of vocational programs: business, health, technical/communications, and trade industry. Other variables examined were: gender and age; grades, full- or part-time status, and number of units being taken; and involvement, defined as hours per week spent studying. The results indicated differences among vocational groups not only in the amount of effort exerted but also in perceived gains in career preparation, while regression analysis indicated that influences of student characteristics and quality of effort also differed among the four groups. Among findings was that students in health programs, who were generally older and predominantly female, differed substantially from the other students, in that they spent more time studying, exerted greater effort, and perceived the greatest gains in career preparation. Two tables summarize variable means and standard deviations for the total sample and each vocational group; and separate regression analyses of each of the four vocational groups. (Contains 17 references.) (CH)

MAJOR_DESCRIPTOR: Community Colleges; Student Evaluation; Vocational Education;

MINOR_DESCRIPTOR: Adult Students; Allied Health Occupations Education; Business Education; Career Education; Career Guidance;

National Surveys; Nontraditional Students; Postsecondary Education; Predictive Measurement; Statistical Analysis; Student Characteristics; Student Educational Objectives; Student Surveys; Technical Occupations; Two Year Colleges; Vocational Evaluation; Vocational Maturity;

IDENTIFIERS: *ASHE Annual Meeting; *Community College Student Experiences Quest

PUBLICATION_TYPE: 150; 143

PAGE: 22; 1

CLEARINGHOUSE_NO: HE029767

EDRS_PRICE: EDRS Price - MF01/PC01 Plus Postage.

LEVEL: 1

LANGUAGE: English

GEOGRAPHIC_SOURCE: U.S.; Tennessee
NOTE: 22p.; Paper presented at the Annual Meeting of the Association for the Study of Higher Education (21st, Memphis, TN, October 31-November 3, 1996).

ERIC_NO: ED399406

TITLE: Obstacles to Continuing Education in Health Care for Women.

AUTHOR: Gercke, Timothy

PUBLICATION_DATE: 1991

ABSTRACT: A quasi-experimental research study identified obstacles to continuing education for women in the health care fields to determine if these obstacles were characteristic to continuing education for women in general. Questionnaires were distributed to 50 women health care providers within one hospital in a small community in Arizona and to 50 students in a nursing program at the local community college. Sixty-nine responses were used: 46 hospital employees and 23 students. A high correlation was noted between the real and perceived obstacles to continuing education by the health care workers and those obstacles overcome by the nursing students. The obstacles perceived by health care workers as those preventing their continuing education were: money, time, child care, motivation, fear, feeling too old, health issues, and lack of direction. The research indicated that multidimensional sociological factors played a significant role in the true barriers to continuing education for women. Due to the nature of specific skill-based training of many health care workers, continuing education obstacles were symptomatic of other needs that were potentially negatively reinforced by the health care infrastructure. (Appendixes contain the instrument and a list of 98 references.) (YLB)

MAJOR_DESCRIPTOR: Access to Education; Allied Health Occupations; Continuing Education; Females; Nursing Education; Sex Discrimination;

MINOR_DESCRIPTOR: Educational Discrimination; Postsecondary Education; Professional Development; Sex Fairness;

PUBLICATION_TYPE: 040; 160

PAGE: 101; 2

CLEARINGHOUSE_NO: CE072506

EDRS_PRICE: EDRS Price - MF01/PC05 Plus Postage.

LEVEL: 1

LANGUAGE: English

GEOGRAPHIC_SOURCE: U.S.; California

NOTE: 101p.; Thesis, University of Phoenix.

ERIC_NO: EJ436521

TITLE: UAB and Community Colleges Link Forces to Train Health Care Professionals.

AUTHOR: Baldwin, Fred

PUBLICATION_DATE: 1991

JOURNAL_CITATION: Appalachia; v24 n3 p12-17 Sum 1991
ABSTRACT: The University of Alabama at Birmingham's (UAB) Linkage Program aims to increase the supply of health-care professionals to rural Alabama. Students attend a local community college for one year and UAB for another year. Major clinical internships are done near the students' hometowns. Seventy percent of graduates return to their home areas to work. (KS)
MAJOR_DESCRIPTOR: College School Cooperation; Community Colleges; Health Occupations; Rural Areas; Student Attitudes;
MINOR_DESCRIPTOR: Associate Degrees; Corporate Support; Higher Education; School Business Relationship;
IDENTIFIERS: Alabama; *University of Alabama Birmingham
PUBLICATION_TYPE: 080; 141
CLEARINGHOUSE_NO: RC508567
REPORT_NO: ISSN-0003-6595
LANGUAGE: English

ERIC_NO: EJ566051
TITLE: School to Work: Preparing Students for Careers in Healthcare.
AUTHOR: Mullins, Dennis W.
PUBLICATION_DATE: 1998
JOURNAL_CITATION: Journal of Career Planning & Employment; v58 n2 p37-39,41 Win 1998
ABSTRACT: Describes a cooperative education program between a Veterans Affairs Medical Center and St. Petersburg Junior College where students interested in health care professions spend two semesters exploring the field. Students are chosen for the program at the medical center and assigned a mentor with whom they are involved in research activities. (MKA)
MAJOR_DESCRIPTOR: College Students; Cooperative Education; Health Occupations; MINOR_DESCRIPTOR: College Faculty; Higher Education; Hospital Personnel; Journal Writing; Mentors; Self Evaluation (Individuals)
; PUBLICATION_TYPE: 080; 141
CLEARINGHOUSE_NO: CG552175
REPORT_NO: ISSN-0884-5352
LANGUAGE: English

ERIC_NO: ED457334
TITLE: Longitudinal Analysis of Student Performance between Host and Cooperating College Learners in the Dental Hygiene Program at Northcentral Technical College in Wausau, Wisconsin.
AUTHOR: Olmstead, Jodi L.
PUBLICATION_DATE: 2001
ABSTRACT: The academic performance of students enrolled in a distance education dental hygiene program at Northcentral Technical College (NTC) in Wausau, Wisconsin, was analyzed in a comparative, quasi-experimental study.

The study sample consisted of five cohorts of program graduates (students graduating in 1997-2001). The experiment groups were divided based upon whether they pursued the program at the host college or one of the cooperating college (distance) sites with which NTC shares its dental hygiene program. The achievement of the learners at the host and cooperating college sites was compared based on their grade-point averages (GPAs) and their performance on the National Board of Dental Hygiene Examination (NBDHE). No statistically significant differences between the scores achieved by the two groups of learners on the NBDHE were identified. Neither were any significant differences between students' GPAs in 10 of the 11 core dental hygiene courses found. It was concluded that the distance educational technology of interactive television used in NTC's dental technology program resulted in acceptable levels of learner performance. (Contains 43 references. Appended are a listing of dental hygiene core curriculum courses, the NTC grading scale, and 17 tables summarizing the two groups' performance in core courses.) (MN)

MAJOR_DESCRIPTOR: Allied Health Occupations Education; Dental Hygienists; Distance Education; Outcomes of Education; Program Evaluation;

MINOR_DESCRIPTOR: Academic Achievement; Community Colleges; Comparative Analysis; Competence; Consortia; Core Curriculum; Definitions; Delivery Systems; Educational Environment; Environmental Influences; Grade Point Average; Interactive Television; Intercollegiate Cooperation; Literature Reviews; Longitudinal Studies; Performance Factors; Quasiexperimental Design; Scores; Technical Institutes; Telecourses; Two Year Colleges;

IDENTIFIERS: Impact Studies; National Board of Dental Hygiene Examination;

*North Central Technical College WI

PUBLICATION_TYPE: 040

PAGE: 67

CLEARINGHOUSE_NO: CE082334

EDRS_PRICE: EDRS Price MF01/PC03 Plus Postage.

LEVEL: 1

LANGUAGE: English

GEOGRAPHIC_SOURCE: U.S.; Wisconsin

NOTE: Research paper submitted to the Graduate College, University of Wisconsin-Stout in partial fulfillment of the requirements for the degree of Education Specialist with a major in Industrial and Vocational Education.

ERIC_ISSUE: RIEMAR2002

ERIC_NO: ED322970

TITLE: A Comprehensive Review of Dental Assisting and Dental Hygiene Programs in Community Colleges and Area Vocational-Technical Centers: Program Review Report.

PUBLICATION_DATE: 1989

ABSTRACT: In 1989, the Florida State Board of Community Colleges (SBCC), in conjunction with the Division of Vocational, Adult and Community Education

(DVACE) of the State Board Department of Education, conducted a review of the state's dental assisting and dental hygiene programs. The two major sources of information for the review were public hearings and responses to a survey mailed to each public institution's program director. The study identified several areas of concern, including: (1) curricular inconsistency and lack of standards for converting clinical experience to semester hours among the colleges offering accredited programs; (2) lack of articulation to assist program graduates in entering degree completion programs; (3) outdated equipment and inadequate facilities; (4) need for in-service faculty education; (5) lack of order and consistency in state policies; (6) declines in applications; (7) the need for expanded student recruitment activities; (8) shortages of trained personnel; (9) underrepresentation of males and minorities in program enrollments; (10) the need for greater cooperation with the dental profession; and (11) the need for continuing education options. Drawing from study findings, a program review team developed 13 recommendations related to the development of program approval criteria, the creation of a center for health statistics, supplemental program funding, student financial aid, and student recruitment focused on underrepresented groups. Appendixes include list of persons attending hearings or submitting testimony, and a copy of the survey questionnaire. (JMC)

MAJOR_DESCRIPTOR: Allied Health Occupations Education; Dental Assistants; Dental Hygienists;

MINOR_DESCRIPTOR: Academic Persistence; College Admission; Community Colleges; Curriculum Evaluation; Dentistry; Educational Facilities; Enrollment Trends; Program Evaluation; Questionnaires; State Agencies; State Surveys; Student Recruitment; Tables (Data); Two Year Colleges;

IDENTIFIERS: *Florida

PUBLICATION_TYPE: 142; 110; 160

PAGE: 77; 1

CLEARINGHOUSE_NO: JC900467

EDRS_PRICE: EDRS Price - MF01/PC04 Plus Postage.

LEVEL: 1

LANGUAGE: English

GEOGRAPHIC_SOURCE: U.S.; Florida

GOVERNMENT: State

NOTE: 77p.

ERIC_NO: EJ323147

TITLE: Influential Factors in Recruitment and Retention of Minority Students in a Community College.

AUTHOR: Quintilian, Ellen M.

PUBLICATION_DATE: 1985

JOURNAL_CITATION: Journal of Allied Health; v14 n1 p63-70 Feb 1985

ABSTRACT: To determine effective ways in which retention and recruitment programs could be enhanced in two-year colleges, the most influential and least influential factors were identified through a survey of successful minority graduates

of allied health programs in a large two-year college. Survey results are reported and discussed. (Author/CT)

MAJOR_DESCRIPTOR: Allied Health Occupations Education; Community Colleges; Minority Groups; Recruitment; School Holding Power;

MINOR_DESCRIPTOR: Graduate Surveys; Student Attitudes; Two Year Colleges;

PUBLICATION_TYPE: 080; 143

CLEARINGHOUSE_NO: CE516064

LANGUAGE: English

ERIC_NO: ED274786

TITLE: Educational Progression of Licensed Practical Nurses to Registered Nursing Programs. Project Report.

AUTHOR: Hosch, India, Comp.

PUBLICATION_DATE: 1986

ABSTRACT: A project was conducted to develop a structural mechanism for articulation between colleges and vocational schools in West Virginia. Such articulation would permit licensed practical nurses (LPNs) desiring to become registered nurses to transfer credits for their licensed practical nursing courses and thereby eliminate unnecessary repetition of some basic nursing courses. Staff from Mercer County Vocational Technical Center and Bluefield State College collaborated to develop an advanced placement program for LPNs at the college and an action plan for articulation among nursing programs in West Virginia. LPNs who had graduated from an accredited LPN program and who had either passed a nursing mobility profile or obtained a composite ACT score of 18 could enroll in a two-part transition course for which they could earn 11 credit hours. In addition, LPNs who had received their practical nursing education in West Virginia could receive three credits for social science, which could be counted as an elective course. Thus, participation in the advanced placement program allowed LPNs to complete the first year of the college's nursing program by enrolling in 4 as opposed to the traditional 15 hours of nursing courses. The program was slated for implementation in the fall semester of 1986. (Appendixes, constituting two-thirds of this report, include various tables of demographic data on LPNs in West Virginia, a position statement on awarding academic credit for LPN experience, information sheets, copies of the entrance examinations and a discussion of their advantages and disadvantages, data on educational mobility of LPNs and differing admissions criteria in 11 states, and guidelines for articulation agreements.) (MN)

MAJOR_DESCRIPTOR: Allied Health Occupations Education; Articulation (Education); Nurses; Nursing Education; Practical Nursing; Statewide Planning;

MINOR_DESCRIPTOR: Advanced Placement; Curriculum Development; Educational Policy; Policy Formation; Postsecondary Education;

IDENTIFIERS: *West Virginia

PUBLICATION_TYPE: 141

PAGE: 193; 2

CLEARINGHOUSE_NO: CE045118

EDRS_PRICE: EDRS Price - MF01/PC08 Plus Postage.

LEVEL: 1

LANGUAGE: English

GEOGRAPHIC_SOURCE: U.S.; West Virginia

NOTE: 193p.

ERIC_NO: EJ561261

TITLE: Lessons Learned from the Competency-Based Curriculum Initiative at Baylor College of Dentistry.

AUTHOR: McCann, Ann L.; Babler, William J.; Cohen, Peter A.

PUBLICATION_DATE: 1998

JOURNAL_CITATION: Journal of Dental Education; v62 n2 p197-207 Feb 1998

ABSTRACT: Chronicles development of the Baylor College of Dentistry (Texas) competency-based curriculum and outlines 11 lessons learned concerning strategic planning, external accountability, value of significant and continuing faculty participation, administrative support structures, linking planning and assessment, using multiple assessment methods, observing real work to certify competence, involving faculty in assessment, curriculum review, competencies for beginning professional practice, and curriculum modification. (MSE)

MAJOR_DESCRIPTOR: College Outcomes Assessment; Competency Based Education; Curriculum Design; Curriculum Development; Dental Schools;

MINOR_DESCRIPTOR: Accountability; Accreditation (Institutions); Allied Health Occupations Education; Change Strategies; College Faculty; Entry Workers; Higher Education; Professional Education; Strategic Planning; Teacher Participation;

IDENTIFIERS: Baylor University TX

PUBLICATION_TYPE: 080; 141

CLEARINGHOUSE_NO: HE537836

REPORT_NO: ISSN-0022-0337

LANGUAGE: English

ERIC_NO: ED362230

TITLE: Table Clinics: A Valuable Learning Experience for Allied Health Students.

AUTHOR: Melton, Jimmie H.

PUBLICATION_DATE: 1993

ABSTRACT: Table clinics, or short oral presentations on techniques related to some phase of research, diagnosis, or treatment, can be used to enrich allied health education. To present a table clinic, students must choose a topic which lends itself to a 5- to 7-minute presentation and which imparts knowledge that participants can take back to their workplace and implement with minimum cost and effort. After choosing a topic, students must review the literature on the topic to determine its usefulness and to help narrow it. Students must then research further, either performing their own investigations or using approximately three to four sources. Once the research has been organized, a script must be developed that has both valid, reliable content and grammatical correctness. Next, students

must select the format of the clinic, which will include live demonstrations, poster board presentations and discussion, or combinations of different types of media. Preparing the display board provides students the opportunity to interact, allowing them to assist each other with the development of the board. Finally, presentation of the clinic should be concise, but students should not memorize the presentation to maintain the informal, interactive nature of the clinic. Examples are drawn from the field of dental education. (MAB)

MAJOR_DESCRIPTOR: Allied Health Occupations Education; Classroom Techniques; Learning Activities; Student Developed Materials; Student Projects;

MINOR_DESCRIPTOR: Community Colleges; Student Research; Theory Practice Relationship; Two Year College Students; Two Year Colleges;

IDENTIFIERS: *Table Clinics

PUBLICATION_TYPE: 055; 150

PAGE: 11; 1

CLEARINGHOUSE_NO: JC930453

EDRS_PRICE: EDRS Price - MF01/PC01 Plus Postage.

LEVEL: 1

LANGUAGE: English

GEOGRAPHIC_SOURCE: U.S.; North Carolina

NOTE: 11p.; Paper presented at the Annual International Conference of the National Institute for Staff and Organizational Development on Teaching Excellence and Conference of Administrators (15th, Austin, TX, May 23-29, 1993).

ERIC_NO: ED394468

TITLE: Impact of Intervention on Disadvantaged First Year Students Who Plan To Major in Health Sciences.

AUTHOR: Haught, Patricia A.

PUBLICATION_DATE: 1996

ABSTRACT: This report describes a program designed to encourage minority and financially, socially, or educationally disadvantaged incoming, freshman students to pursue health profession career goals. Sixteen at-risk students were selected to participate in a summer intervention program in West Virginia; a control group of 16 pre-medicine or pre-dentistry subjects was used for comparison. The intervention program was a four-week residential summer program in which students received a monetary weekly allowance with all meals, room and board, and transportation provided. Subjects were pretested in biology, chemistry, mathematics, reading, writing, and study skills; individualized programs were set up based on testing results. Study halls were mandatory, and each student received social support from instructors, formal seminars, site visits, and group social activities. Intervention students completed the Learning and Study Strategies Inventory (LASSI) and the Perceptions, Expectations, Emotions, and Knowledge About College (PEEK) instrument; all participants completed the Nelson-Denny Reading Test. It was found that incoming, at-risk freshmen who planned to pursue professional health care training, and who completed the one-month intensive intervention program, were more academically successful than

control students during the first semester of college. Student LASSI scores changed significantly in five categories after the intervention. In addition, intervention participants attempted and earned significantly more credit hours than students in the control group.

(Contains 24 references.) (NAV)

MAJOR_DESCRIPTOR: Academic Achievement; Allied Health Occupations Education; High Risk Students; Intervention; Transitional Programs;

MINOR_DESCRIPTOR: College Freshmen; Economically Disadvantaged; Educational Counseling; Educationally Disadvantaged; Higher Education; Minority Groups; Premedical Students;

IDENTIFIERS: West Virginia

PUBLICATION_TYPE: 150; 141

PAGE: 32; 1

CLEARINGHOUSE_NO: HE029164

EDRS_PRICE: EDRS Price - MF01/PC02 Plus Postage.

LEVEL: 1

AUDIENCE: Practitioners

LANGUAGE: English

GEOGRAPHIC_SOURCE: U.S.; West Virginia

NOTE: 32p.; Paper presented at the Annual Meeting of the American Educational Research Association (New York, NY, April 8-13, 1996).

ERIC_NO: ED346237

TITLE: Retention Patterns in an Adult Basic Education Program for Health Care Workers Preparing for College.

AUTHOR: Perin, Dolores; Greenberg, Daphne

PUBLICATION_DATE: 1992

ABSTRACT: A study examined a unique workplace literacy program designed for college preparation. Factors related to retention were studied in a group of paraprofessional health care workers who were attending the program as a step toward career advancement. The 153 participants were mainly women of minority backgrounds who spoke English fluently but not necessarily as a first language and had considerable family responsibilities. Many of the participants had previously obtained high school equivalencies through union programs. Student characteristics, perceptions of the program, reasons for leaving prior to completion, and literacy gains were studied as a function of length of time in the program. Included in this study were two groups often overlooked in the research literature: nonattenders (those accepted to a program who never attend, n=28) and leavers (those who spend 12 or fewer hours in instruction before leaving, n=26). Length of time in the program was clearly associated with literacy gain. The 47 completers had higher literacy scores at various points during the program than groups who stayed for shorter amounts of time. Completers also had stronger English language backgrounds. Consideration of the combined effect of literacy gain, background characteristics, and perceptions of the program led to the

conclusion that educational and practical concerns seemed to work together to affect decisions whether to stay or go. (22 references) (KC)
MAJOR_DESCRIPTOR: Academic Persistence; College Programs; Dropouts; Literacy Education; Participant Characteristics; Program Attitudes;
MINOR_DESCRIPTOR: Adult Basic Education; Adult Literacy; Allied Health Occupations; Language Proficiency; Outcomes of Education; Time on Task;
IDENTIFIERS: *Workplace Literacy
PUBLICATION_TYPE: 150; 143
PAGE: 34; 1
CLEARINGHOUSE_NO: CE061051
EDRS_PRICE: EDRS Price - MF01/PC02 Plus Postage.
CONTRACT_NO: V198A00214
LEVEL: 1
LANGUAGE: English
GEOGRAPHIC_SOURCE: U.S.; New York
NOTE: 34p.; Paper presented at the Annual Meeting of the American Educational Research Association (San Francisco, CA, April 1992). For a related report, see CE 061 271.

ERIC_NO: ED312455
TITLE: Cooperative Education: Characteristics and Effectiveness. ERIC Digest No. 91.
AUTHOR: Kerka, Sandra
PUBLICATION_DATE: 1989
ABSTRACT: Cooperative education can enhance classroom instruction by providing practical work experience that is relevant to students' career goals. Among co-op's benefits to students are increased relevance of learning and motivation for study; improved self-reliance, self-confidence, and responsibility; contacts with potential employers; and higher starting salary after graduation. Among the benefits to participating institutions are improved relationships with business and the community; enhanced student retention and graduate placement; workplace-tested curriculum; and less need to maintain expensive state-of-the-art facilities. Among the benefits to employers are effective screening and recruitment; higher employee retention and productivity; and improved public relations. Co-op education appears to work best in metropolitan settings, in community colleges, and for students who major in engineering, business, and health occupations. However, fewer than 2 percent of all full-time postsecondary students and no more than 10 percent of all secondary vocational education students are involved in co-op programs. Some research on the effects of co-op education has been criticized for methodological weaknesses. Among the suggestions for increasing co-op's impact are to recruit larger numbers of the students most likely to benefit from it and to promote co-op as a viable alternative to heavy borrowing for college expenses. (Eleven references are included.) (CML)

MAJOR_DESCRIPTOR: Cooperative Education; Education Work Relationship; Instructor Coordinators; Program Effectiveness; School Business Relationship; Work Experience Programs;
MINOR_DESCRIPTOR: Cooperative Programs; Educational Benefits; Educational Cooperation; Experiential Learning; Field Experience Programs; Outcomes of Education; Postsecondary Education; Relevance (Education); Secondary Education; Vocational Education;
PUBLICATION_TYPE: 071; 073
PAGE: 4; 1
CLEARINGHOUSE_NO: CE053549
EDRS_PRICE: EDRS Price - MF01/PC01 Plus Postage.
CONTRACT_NO: RI88062005
REPORT_NO: EDO-CE-89-91
LEVEL: 1
AUDIENCE: Practitioners
LANGUAGE: English
GEOGRAPHIC_SOURCE: U.S.; Ohio
NOTE: 4p.

ERIC_NO: EJ417744
TITLE: The Use of Pre-Admission Data to Predict Levels of Success in Selected Allied Health Students.
AUTHOR: Schmalz, Gretchen M.; And Others
PUBLICATION_DATE: 1990
JOURNAL_CITATION: Occupational Therapy Journal of Research; v10 n6 p367-76 Nov-Dec 1990
ABSTRACT: A study of 82 occupational therapy, 84 physicians' assistant, and 117 physical therapy students found that scores on the Otis Quick-Scoring Mental Abilities Tests, admissions essays, number of credits earned at a previous institution, and cumulative grade point average were significant predictors of students' academic success. (SK)
MAJOR_DESCRIPTOR: Academic Achievement; Admission Criteria; Allied Health Occupations Education; Predictor Variables;
MINOR_DESCRIPTOR: Cognitive Ability; College Entrance Examinations; Essays; Grade Point Average; Higher Education; Scores; Selective Admission;
IDENTIFIERS: Otis Quick Scoring Mental Ability Tests
PUBLICATION_TYPE: 080; 143
CLEARINGHOUSE_NO: CE522073
REPORT_NO: ISSN-0276-1599
LANGUAGE: English

ERIC_NO: ED295980
TITLE: More-Than-Just-an-Academic-Survival Kit: Suggestions and Techniques for Effective Learning.
AUTHOR: Frierson, Henry T., Jr.; Munro, Molly

PUBLICATION_DATE: 1988

ABSTRACT: This manual covers study behavior and attitudes and specific study techniques for health profession students, including scheduling, comprehension, memory, and test-taking techniques. Much of the approach emphasizes self-discipline and honesty. Focus is on how students in a health professions program can make their study time more productive and efficient. Learning behavior and habits, daily study practices, class preparation and note taking, comprehension skills, and self-assessment skills are discussed. Techniques outlined include reward systems, reading and other pre-lecture preparation activities, after-lecture reviews, maintenance of concentration, retention of information, use of imagery and conceptual frameworks, learning support groups, formulation of study questions and answers, paraphrasing reading material, building mental networks, understanding terminology, and practice examinations. (TJH)

MAJOR_DESCRIPTOR: Allied Health Occupations Education; Comprehension; Learning Strategies; Memory; Study Skills; Time Management;

MINOR_DESCRIPTOR: College Students; Higher Education; Independent Study; Learning Activities; Learning Motivation; Medical Students; Notetaking; Scheduling; Study Habits; Test Wiseness;

PUBLICATION_TYPE: 143; 055

PAGE: 29; 1

CLEARINGHOUSE_NO: TM011801

EDRS_PRICE: EDRS Price - MF01/PC02 Plus Postage.

CONTRACT_NO: ISD-0010801

LEVEL: 1

LANGUAGE: English

GEOGRAPHIC_SOURCE: U.S.; North Carolina

NOTE: 29p.

ERIC_NO: EJ504980

TITLE: How Health Career Academies Provide Work-based Learning.

AUTHOR: Stern, David; Rahn, Mikala

PUBLICATION_DATE: 1995

JOURNAL_CITATION: Educational Leadership; v52 n8 p37-40 May 1995

ABSTRACT: Work-based learning is essential to career-related education models. Committed to developing work-related programs for all interested students, teachers in California health career academies have created a curriculum sequence meeting all University of California admission requirements while stressing practical work skills. They are also developing tech prep sequences with community colleges. (MLH)

MAJOR_DESCRIPTOR: Allied Health Occupations Education; Career Education; Education Work Relationship; Integrated Curriculum; Vocational Education;

MINOR_DESCRIPTOR: Community Colleges; High Schools; Interdisciplinary Approach; Models; Postsecondary Education; Student Employment;

IDENTIFIERS: *California; *Career Academies

PUBLICATION_TYPE: 141; 080
CLEARINGHOUSE_NO: EA530665
REPORT_NO: ISSN-0013-1784
LANGUAGE: English

ERIC_NO: EJ408144

TITLE: Predictors of Success for Allied Health Students.

AUTHOR: Jensen, Steven C.

PUBLICATION_DATE: 1989

JOURNAL_CITATION: Journal of Studies in Technical Careers; v11 n4 p297-304
Fall 1989

ABSTRACT: A study of 424 allied health students (259 dental hygiene, 104 radiologic technology, and 61 respiratory therapy) found that the greater predictors of their academic success were the natural science subscore on the American College Test (ACT), high school grade point average, and class rank, age, and composite ACT score. (SK)

MAJOR_DESCRIPTOR: Academic Achievement; Allied Health Occupations Education; Class Rank; Grade Point Average; Predictor Variables;

MINOR_DESCRIPTOR: Dental Hygienists; Higher Education; Radiologic Technologists; Respiratory Therapy; Scores;

IDENTIFIERS: *American College Testing Program

PUBLICATION_TYPE: 080; 143

CLEARINGHOUSE_NO: CE521557

LANGUAGE: English

ERIC_NO: ED358148

TITLE: Portfolios and Professional Development in the Health Professions.

AUTHOR: Jensen, Gail M.; Saylor, Coleen

PUBLICATION_DATE: 1993

ABSTRACT: The usefulness of portfolios for professional development and reflection was studied in the disciplines of physical therapy and nursing. The student sample may not represent the larger population of professional students, but data are presented as useful in understanding more about the general phenomenon of use of portfolios in professional education. Subjects were 32 entry-level master's degree physical therapy students in a research course, 12 baccalaureate nursing students in a community health practicum, and 5 master's degree nursing students in a clinical teaching practicum. Portfolios were prepared by students and used in combination with student self-evaluations and instructor assessments. Data suggest that the use of portfolios promoted student reflection on professional development. Identified portfolio components and implementation benefits and barriers are relevant findings for educators wishing to facilitate reflection. One table lists some example guidelines for portfolio development. (SLD)

MAJOR_DESCRIPTOR: College Students; Nurses; Physical Therapists; Portfolios (Background Materials); Professional Development;

MINOR DESCRIPTORS: Allied Health Occupations; Educational Assessment; Evaluation Utilization; Higher Education; Masters Programs; Medical Education; Pilot Projects; Self Evaluation (Individuals); Student Evaluation; Test Use;
IDENTIFIERS: *Performance Based Evaluation; *Reflection Process
PUBLICATION_TYPE: 142; 150
PAGE: 21; 1
CLEARINGHOUSE_NO: TM019943
EDRS_PRICE: EDRS Price - MF01/PC01 Plus Postage.
LEVEL: 1
LANGUAGE: English
GEOGRAPHIC_SOURCE: U.S.; California
NOTE: 21p.; Paper presented at the Annual Meeting of the American Educational Research Association (Atlanta, GA, April 12-16, 1993).

ERIC_NO: ED464128
TITLE: Cultures of Medicine: A Technology Based Learning Environment To Enhance Critical Thinking Skills.
AUTHOR: Arnold, Joanna C.; Keller, Jill L.
PUBLICATION_DATE: 2002
ABSTRACT: Med-Start is a 5-week program that encourages rural, minority, and economically disadvantaged high school seniors throughout Arizona to pursue careers in the health professions. In order to assist these students in making the transition from high school to college and then to professional school, Med-Start provides academic coursework and seeks to help students enhance critical thinking skills. In past years, one course, a Cultures of Medicine class, has required students to complete technology-based assignments. After several years, instructors had been unable to document any change in students' critical thinking as a result of the course, and student discontent with the course was obvious. The redesign of the course was undertaken to achieve enhanced critical thinking through the use of technology. Using the framework of pragmatic constructivism (Cobb, 2002) to guide the instructional design process, course developers created a 7.5 hour course. This framework supported an instructional design approach that considered the technological environment, the student learning process, and the teacher's role within this environment while allowing for ongoing evaluation and revision of the course. Within this framework, using results for 2 classes of 60 students each, it was determined that a learning environment can be created in which technology enhances students' critical thinking skills in a relatively short time. (Author/SLD)
MAJOR_DESCRIPTORS: Critical Thinking; Educational Technology; High School Students;
MINOR_DESCRIPTORS: Allied Health Occupations; Constructivism (Learning); Disadvantaged Youth; Educational Environment; High Schools; Instructional Design; Rural Youth; Thinking Skills;
IDENTIFIERS: Culture of Science
PUBLICATION_TYPE: 143; 150

PAGE: 10

CLEARINGHOUSE_NO: TM033811

EDRS_PRICE: EDRS Price MF01/PC01 Plus Postage.

LEVEL: 1

LANGUAGE: English

GEOGRAPHIC_SOURCE: U.S.; Arizona

NOTE: Paper presented at the Annual Meeting of the American Educational Research Association (New Orleans, LA, April 1-5, 2002).

ERIC_ISSUE: RIEOCT2002

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Spratley, E. and Associates. (2000). The Registered Nurse Population: Findings from the National Sample Survey of Registered Nurses.

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