

**SURVEY FINDINGS**

**PROMISING PRACTICES AT WORK**

**In**

**CALIFORNIA COMMUNITY COLLEGE**

**HEALTH OCCUPATIONS PROGRAMS**

**The Center for Student Success**

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**Introduction:** The Health Care Initiative for the California Community Colleges recently received a grant to investigate best practices associated with successful student completion in health care training programs. The project has a particular focus on underrepresented and special population students. To this end, the Center for Student Success (CSS) was employed to assist the Health Care Initiative in this endeavor.

A three-pronged approach was used in the investigation, including a literature review of successful practices in health profession training, a survey instrument querying health care directors in California community colleges about successful practices in their programs, and finally, ethnographic site visits to colleges determined by the CSS staff to have promising practices.

The following are the results of the survey research effort.

**Methodology:** There are numerous health care training programs in California's community colleges. Because of the large number of varying training programs, the survey was limited to the seven highest enrollment programs. These included RN/LVN Nursing, Respiratory Therapy, Radiology Technician, Paramedic/EMT, Psychiatric Technician, Medical Assistant and Dental Hygienist/Assistant.

The survey instrument was developed in consultation with the Health Care Initiative staff and pilot tested with current community college health care directors. Six different areas were addressed, including the following:

- Completion rate
- Success factors
- Barriers to success
- Barriers to success for underrepresented and special populations
- Strategies currently used to promote success
- Suggestions for improving success in their programs

In addition to the above areas, the directors were asked how they determined their answers, which provided a validity check.

**Results:** The administration of the survey was conducted over the web using the Chancellor's Office server. A total of 213 surveys were emailed to health care directors throughout the state. Of these, 23 emails were returned as undeliverable. This resulted in a total of 190 valid potential respondents. Of these, 107 surveys were completed, resulting in a good response rate of 56%.

The following are the overall results for all training programs combined.

Slightly over 100 surveys were received from program directors throughout the California community colleges with health care programs. The text below details their responses.

*1. On average, what percent of the students who begin the program complete the program?*

Success rates ranged from the low thirties to over ninety. Based on the responses, the average success rates are just under 80%.

*2. What are **three** critical skills, knowledge, or behaviors students need in order to be successful in the program?*

As expected, good reading, critical thinking and writing skills topped the list of those qualities students needed to be successful in their health professions program. Each of these areas was mentioned by almost half of the respondents. Good math, communication and study habits/skills were cited by about a third of the directors surveyed. Time management/enough time, motivation/desire to be successful, and a good background in science were mentioned by respondents about one-third of the time.

*3. Please list **three** significant barriers students face in trying to complete the program.*

Almost 50% of the respondents referred to students needing sufficient monetary resources to complete the program. Directors didn't elaborate too much on this, but obviously it was felt that with sufficient financial resources, students could focus their energies on the program, and not their job. Along this same theme, family and work responsibilities were mentioned by a third of the respondents. Moreover, lack of time or time management skills was listed a little less than a third of the time. About a quarter of the respondents cited inadequate reading and study skills as a significant barrier to program completion. Over fifteen percent of the respondents listed ESL, poor math and writing, as well as poor overall preparation, as barriers.

*4. In regard to special population or non-traditional students, list **three** significant barriers these students face in trying to complete the program.*

Language/communication skills was mentioned as a barrier by 50% of the respondents. Family needs as well as poor financial resources were also mentioned frequently, about 25% of the time. Cultural issues, a sound basic education, poor study skills and time management were cited by about 15% of the respondents.

*5. What strategies/services does the department or college employ (if any) to help students be successful in the program?*

College tutoring was the most frequent response, listed by about 50% of the program directors. Program-specific tutoring was cited about a third of the time. Strategies to assist students in program completion included having a faculty member serve as mentor/coach, offering special classes to prepare students for program demands, and increasing financial aid.

6. *What would you suggest to help to ensure that students successfully complete the program?*

Of the suggestions offered, three rose to the top: ensuring students are academically prepared, developing better pre-admission screening, and increasing the amount of financial aid/stipends.

**Findings and Recommendations:** If the estimates of the success rates are to be believed, there is too wide a disparity. A reasonable range would be 20 to 30 percent, but not 60 percent.

Academic skills was the most frequently mentioned response for all programs, however, nearly as frequently mentioned areas such as good study habits, time and time management, as well as student motivation, get at the “softer,” less measurable areas, that programs pay attention to.

Although academic skills are needed to be successful, clearly the lack of monetary resources can deter students from completing their program. As this issue was mentioned by the majority of respondents, it is clear that the community colleges need to do more to address this issue. Since the cost of health care programs is almost always much more than any other program offered, the completion rate must be maximized in order to lower the real cost, e.g., attrition.

The demands of living, including family and work responsibilities, was another significant barrier cited. Given the type of student entering these programs, e.g., older, likely to have a family, poor finances and a job, is it reasonable to expect the structure of community college programs to stay the same? Are full-time, total immersion programs the appropriate delivery system for these programs? Are there other program designs, e.g., part-time, shorter but more intense periods, such as weekend programs, that might mitigate this salient issue?

In addition to language skill issues, special population or non-traditional students have the same barriers as other students. It is interesting to note that many health care programs showed that they are mostly or only serving special population or non-traditional students.

Colleges have made valiant efforts to increase the program completion rates of their students, but none of the efforts cited had any “hard” evidence beyond the anecdotal. The cost of these programs necessitates that much stronger research efforts be made to determine what interventions can and do impact the success of health program students.

Finally, it is clear that program directors want to start with well-prepared students. Given that resources are limited, this is a reasonable but not easily fulfilled request. The Center for Student Success has developed models for improving the selection process for students in ADN training programs; therefore, it is reasonable to assume that this is possible for other programs as well.

**All Programs:** The following presents the results by each of the programs surveyed, however, the Medical Assistant findings are not reported separately, as the number of respondents was insufficient to provide reliable feedback.

The following are the results for the Respiratory Therapy training program.

A total of 11 responses were received from the directors of this program. Since this is an extremely small number of survey responses, the reader should be very cautious about drawing conclusions from this sample. Below are the summarized results for each question.

*1. On average, what percent of the students who begin the program complete the program?*

Responses ranged from 55% to 90%, with an average of about 70%.

*2. What are **three** critical skills, knowledge, or behaviors students need in order to be successful in the program?*

Critical thinking, math, and communication skills were the most frequently mentioned critical areas students needed to be successful in the Respiratory Therapy training program. These three areas were closely followed by English writing skills, study habits/skills, and motivation to complete the program.

*3. Please list **three** significant barriers students face in trying to complete the program.*

By far, the most frequent barrier to successful completion was inadequate finances. This was followed by poor math and study skills.

*4. In regard to special population or non-traditional students, list **three** significant barriers these students face in trying to complete the program.*

Language/communication skills was the most often cited barrier for special population or non-traditional students. Cited less frequently, but still by a number of respondents, was lack of both finances and child care.

*5. What strategies/services does the department or college employ (if any) to help students be successful in the program?*

Respiratory Therapy directors most often cited the use of faculty mentors/coaches to assist students in completing their program. College tutoring and use of financial aid were the next most frequently cited strategies, followed by peer mentoring/studying, and counseling.

*6. What would you suggest to help to ensure that students successfully complete the program?*

The most frequent suggestion was for students to be academically prepared, followed by adequate financial resources to complete the program.

The following are the overall results for the RN/LVN Nursing training program.

A total of 47 responses were received from the directors of this program. This is a very good response, since there are only 60 RN/LVN community college training programs in California.

Below are the summarized results for each question.

*1. On average, what percent of the students who begin the program complete the program?*

Responses ranged from a low of 15% to a high of 98%, with the majority of responses falling in the 70-90% range.

*2. What are **three** critical skills, knowledge, or behaviors students need in order to be successful in the program?*

Respondents cited four areas significantly more frequently than anything else: critical thinking, math skills (in particular, algebra), reading, and English. Communication skills and study habits/skills were cited somewhat less often. Time management was mentioned somewhat less frequently along with problem solving ability and a background in science courses.

*3. Please list **three** significant barriers students face in trying to complete the program.*

It is interesting to note that the most frequently cited barriers listed were not lack of the above mentioned skills, but rather family commitments and lack of money as well as commitments to a job. Some academic areas were also listed by respondents, including ESL problems and poor reading skills, but these were listed less frequently than the time commitment related factors. Time management, study skills, poor preparation and a poor support system were also mentioned by a significant number of respondents.

*4. In regard to special population or non-traditional students, list **three** significant barriers these students face in trying to complete the program.*

While some of the barriers were the same as those for the general student population, the most significant barrier for special population or non-traditional students is language/communication skills. This was followed by family commitments, financial limitations, work commitments, cultural differences, and poor reading and time management skills. Also cited, but less frequently, were poor math skills, study skills and the lack of a strong basic education.

*5. What strategies/services does the department or college employ (if any) to help students be successful in the program?*

College tutoring was the service mentioned most frequently by respondents, followed by Nursing-specific tutoring. Counseling, financial aid, special classes for Nursing success, and faculty coaches/mentors were also frequently mentioned. These strategies/services were followed by partnering with local hospitals and peer mentoring/studying.

*6. What would you suggest to help to ensure that students successfully complete the program?*

Numerous suggestions were received from respondents. The most frequently cited suggestions included more financial aid, such as scholarships/stipends, and insuring that students are academically prepared to succeed in the program. These were followed by better pre-admission screening and remediation of deficiencies before beginning the program.

The following are the results for the Dental Hygienist/Assistant training program.

A total of 21 responses were received from the directors of this program. Below are the summarized results for each question.

*1. On average, what percent of the students who begin the program complete the program?*

Respondents generally provided high success rates ranging from 30% to 100%, with a majority of responses falling between the high eighties to the high nineties.

*2. What are **three** critical skills, knowledge, or behaviors students need in order to be successful in the program?*

Communication skills topped the list for the most frequently mentioned: reading, English and communication. These three were followed by critical thinking, study habits/skills, and desire/motivation. Also rated highly were physical coordination/dexterity, time management, ability to work with people, and honesty.

*3. Please list **three** significant barriers students face in trying to complete the program.*

Study skills and insufficient finances were the two barriers most frequently listed. Time management skills and writing ability closely followed, with reading ability, family commitments, and ability to transfer theory to clinical practice rounding out the most frequently cited topics.

*4. In regard to special population or non-traditional students, list **three** significant barriers these students face in trying to complete the program.*

Language barriers/communication skills was far and above the most frequently mentioned barrier for special population/non-traditional students. Adequate finances, cultural issues and physical coordination/dexterity rounded out the most frequently cited barriers.

*5. What strategies/services does the department or college employ (if any) to help students be successful in the program?*

College tutoring was the most frequent service mentioned by respondents. Additional assistance such as EOPS, faculty coaching/mentoring, and counseling were also mentioned frequently.

*6. What would you suggest to help to ensure that students successfully complete the program?*

A broad range of suggestions were made by Dental Hygienist/Assistant program directors. The most frequent were improved pre-admission screening and having academically prepared students. Scholarships/stipends, increased communication skills, improved study skills, and individual tutoring were also frequently mentioned.

The following are the results for the Radiology Technician training program.

A total of 10 responses were received from the directors of this program. Since this is an extremely small number of survey responses, the reader should be very cautious about drawing conclusions from this sample. Below are the summarized results for each question.

*1. On average, what percent of the students who begin the program complete the program?*

Respondents stated that success rates ranged from 75% to 95%, with seven of the responses at 80% or higher.

*2. What are **three** critical skills, knowledge, or behaviors students need in order to be successful in the program?*

Communication skills barely outnumbered the responses listed for English writing and study habits/skills. These were closely followed by critical thinking, math skills, and time management skills.

*3. Please list **three** significant barriers students face in trying to complete the program.*

Communication skills and inadequate finances topped the list, closely followed by inadequate reading, writing, and math training, having to work, family obligations, and inadequate study skills.

*4. In regard to special population or non-traditional students, list **three** significant barriers these students face in trying to complete the program.*

Language barriers/communication skills was mentioned more than any other barrier. A number of other areas were mentioned including family responsibilities, time management, attitude, ageism, reading, writing and study skills, and the physical demand of the practice.

*5. What strategies/services does the department or college employ (if any) to help students be successful in the program?*

Tutoring, both discipline-specific and general college tutoring, as well as special preparation classes, were the most frequent services mentioned for assisting students in the Radiology Technician program. Counseling, additional assistance from other services, such as EOPS, and scholarships/stipends were also mentioned.

*6. What would you suggest to help to ensure that students successfully complete the program?*

The most frequent suggestion was to increase scholarships/stipends and to ensure that students have fewer work and other commitments outside the program so that they would have more time to study.

The following are the results for the Paramedic/EMT training program.

A total of 10 responses were received from the directors of this program. As stated previously, this is considered a small number of responses and the reader should be cautious about drawing conclusions from this sample. Below are the summarized results for each question.

*1. On average, what percent of the students who begin the program complete the program?*

Respondents stated that success rates ranged from a low of 34% to a high of 90%. Three of the respondents stated that their pass rate was 90%, three 75%, two sixty percent, one 50% and one 34%.

*2. What are **three** critical skills, knowledge, or behaviors students need in order to be successful in the program?*

Program directors stated that critical thinking was the most valuable skill, followed by study skills/habits. Reading and physical coordination skills were cited somewhat less frequently.

*3. Please list **three** significant barriers students face in trying to complete the program.*

The demands of having to work, as well as lack of adequate finances were the most frequently mentioned responses. These were followed by family demands and lack of time to commit to the program. Poor academic preparation was also mentioned but less frequently.

*4. In regard to special population or non-traditional students, list **three** significant barriers these students face in trying to complete the program.*

Language barriers and poor communication skills were the top rated items mentioned for this group of students. Inadequate finances was also a frequently mentioned barrier. Cultural barriers and lack of a sound basic education rounded out the list.

*5. What strategies/services does the department or college employ (if any) to help students be successful in the program?*

When it comes to strategies, Paramedic/EMT program directors listed discipline-specific tutoring as the top strategy. Having a faculty member serve as a mentor also was cited more frequently than other responses.

*6. What would you suggest to help to ensure that students successfully complete the program?*

This group of program directions did not offer a large number of suggestions. Of those that were offered, the need for adequate academic preparation was the most frequently cited. In addition, many mentioned the need for adequate finances while enrolled in the program.

The following are the results for the Psychiatric Technician training program.

A total of 5 responses were received from the directors of this program, so, again, the reader should be very cautious about drawing conclusions from this sample. Below are the summarized results for each question.

*1. On average, what percent of the students who begin the program complete the program?*

Success rates ranged from 50% to 90% with the average about 75%.

*2. What are **three** critical skills, knowledge, or behaviors students need in order to be successful in the program?*

Time management and reading skills were cited the most frequently by respondents. Study habits/skills was also mentioned more than other responses.

*3. Please list **three** significant barriers students face in trying to complete the program.*

Time constraints topped the list, followed by poor study skills and inadequate reading ability.

*4. In regard to special population or non-traditional students, list **three** significant barriers these students face in trying to complete the program.*

Time management, the bias against older students, and program demands were all barriers listed for special population or non-traditional students.

*5. What strategies/services does the department or college employ (if any) to help students be successful in the program?*

Respondents stated that they use discipline-specific tutors and special supplemental classes as strategies to help students complete the Psychiatric Technician program.

*6. What would you suggest to help to ensure that students successfully complete the program?*

Of the suggestions offered, having academic prepared students, partnerships with facilities, and students with adequate financial resources were the most frequently mentioned.