ABSTRACT

The American Association of Community Colleges conducted a study that examined policies, practices, and trends of remedial education in community colleges. The study was designed to gather detailed information on remedial education in community colleges at a national level. Over 400 institutions returned survey instruments and the analysis of the surveys provided empirical answers to questions where anecdotal answers existed previously. Results from the study indicate that most students take fewer remedial courses than myth indicates, community colleges use available technology to aid students in remedial education, and institutions mandate the majority of policies on remedial education currently in place. Nearly half (45%) of the institutions in this survey contracted remedial education to business and industry, with 61% using collaborative efforts between the employer and institution to create the curricula. Although the issue of contract training was not examined in great detail, the results help to disprove the myth that all students taking remedial courses are "straight out of high school." The percentage of institutions using computers in remedial courses was high with more than 80% of institutions either sometimes or frequently using computers in most courses. This supports the assumption that community colleges are using the technology available to better aid their students. (VWC)
Institutional Policies and Practices in Remedial Education: A National Study of Community Colleges

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Abstract

The American Association of Community Colleges conducted a study that examined policies, practices and trends of remedial education in community colleges. The study was designed to gather detailed information on remedial education in community colleges at a national level. Over 400 institutions returned survey instruments and analysis of the surveys provided empirical answers to questions where anecdotal answers existed previously. Results from the study indicate that most students take fewer remedial courses than myth indicates, community colleges use available technology to aid students in remedial education, and institutions mandate the majority of policies on remedial education currently in place.
Institutional Policies and Practices in Remedial Education: A National Study of Community Colleges

Community colleges have long been proponents of open access to education regardless of academic preparation. Research examining student success in remediation has been conducted (Boylan and Bonham, 1992), however, few studies examined, on a national level, the institution’s role in providing remedial education (National Center for Education Statistics, 1996). This AACC study examined the community colleges’ handling of remedial education in the areas of course specific policies, faculty, credit offered, contract training, and a variety of other practices to present a national snapshot of how community colleges shape remedial education.

According to a national study (NCES, 1996), 41 percent of freshmen entering community colleges are enrolled in remedial courses, and this percentage is not likely to decrease. The students of today are the workforce of tomorrow, and according to recent research, 85 percent of the jobs in America by 2010 will require skilled workers (McCabe and Day, 1998). This statistic illustrates the need for remedial education to prepare students deemed “unprepared” for college-level work. The good news is that the students who complete this coursework do as well or better in college-level courses than students who did not require remediation (Boylan and Bonham, 1992).

Community colleges were built on the cornerstone of open access, and this policy has led to these institutions being the main proponent and deliverer of remedial education. The mission has always been to prepare students, whether it is for transfer, contract training, workforce development, or any of the other community college
missions. The community college has always been available and accessible to students who need to learn, or relearn, basic skills. Research has been conducted to examine the success of students who take remedial courses and the quality of various schools labeled as "exemplary" in their remedial practices (Roueche and Roueche, 1999), but little research has been done to examine the institutional role in remedial education at a national level.

Several reports served as important backdrops for the development of the current study. The National Center for Education Statistics' Postsecondary Education Quick Information Survey (PEQIS) Report on Remedial Education (NCES, 1996) served as a good starting point for focus areas; and the questions were generic enough to be tailored toward community colleges. The Commonwealth of Massachusetts Community College Developmental Education Committee's study on remedial education, "Access and Quality," examined the status of remedial education in Massachusetts' community colleges with a greater amount of detail and specificity (Commonwealth of Massachusetts Community College Developmental Education Committee, 1998).

These studies served as the background for the development of the American Association of Community Colleges (AACC) "National Survey on Remedial Education." This study sought to answer questions about the institutional role in providing remedial education. This survey was designed for community colleges and contained a greater level of detail in regards to contract training, limitations, course specific policies and additional areas than previous research studies. This study was conducted to provide national data on policies and practices in remedial education at community colleges.
Institutional Policies and Practices

Methodology

The survey instrument was mailed to nearly 1,200 community colleges. It contained 34 questions and was designed to take between 30 and 45 minutes to complete. Almost 40 percent of surveyed institutions returned surveys to AACC and various analyses were conducted on the data. Of the responding institutions, 36 percent of public community colleges and 11 percent of private community colleges were represented in this sample.

The institutions in this sample represented a range of enrollments, levels of urbanicity, and states. The size of institutions in the sample varied greatly with 50 percent having more than 3,500 students in fall 1998. Only Alaska and South Dakota did not have institutions that participated in this study. Nearly half of the institutions were located in either large or mid sized cities, and the remainder in either the suburbs or rural settings.

Many of the variables in this study have been examined by the urbanicity of respondents, region of respondents, or both. Analysis revealed that a response bias did exist between the universe of two-year institutions and those in this sample; however, interesting and substantial variances did exist by region and urbanicity. It should be noted that these variables are broad in nature and that further analysis, such as institutions with high minority status, were not examined. It should not be inferred that urbanicity
was used as a substitute for examining institutions with higher percentages of minorities. Previous research (Adelman, 1999) indicates that additional variables such as socio-economic status, quality of high school curriculum, and academic resources must be examined to account for differences by race or in institutions with a high percentage of minorities. The recommendation is that caution be exercised when attempting to use the data for comparative purposes.

Findings

The main purpose of this survey was to collect information on the policies and practices associated with remedial education in community colleges. In addition to collecting institutional policy and practice information, descriptive information about the students and faculty participating in remedial education was collected.

Students

A wide range existed for the percentage of total students enrolled in remedial education in fall 1998. The percentages ranged from 0 to 80 with half of the responding institutions reporting more than 20 percent of their total population was enrolled in remedial courses. Analysis by urbanicity revealed a significant difference in enrollments (F=4.302, p<.05) with half of the institutions in large cities having at least 27 percent of their population in remedial education. Examination by region found significant differences (F=6.454, p<.05) with 50 percent of the institutions in the Southwest indicating 27 percent or more of their student population were enrolled in remedial courses.
The percentage of students new to higher education enrolled in remedial education was even more varied, ranging from one half of one percent to 95 percent. Analysis by region revealed a significant variation ($F=4.475$, $p<.05$) with half of the institutions in the Mid East reporting that more than 46 percent of first-time freshman were enrolled in remedial education. The overall median percentage of students new to higher education enrolled in remedial courses was 36 percent, a number similar to the 41 percent found by the Department of Education’s 1995 study on remediation (NCES, 1996).

There is a common belief that students regularly spend hour after hour in remedial courses. Results from this survey and the Department of Education’s Postsecondary Education Quick Information Survey (NCES, 1996) indicated just the opposite, that most students enrolled in remedial courses take relatively few courses. According to the Department of Education’s survey, 90 percent of students in remedial courses spent less than one year in these courses. The results from this study concurred with those results as half of the students spent less than 7.4 hours in remedial courses and took fewer than 2 courses.

Analysis by urbanicity of the institutions showed a significant difference in the number of hours spent in remedial courses ($F=8.178$, $p<.05$) and courses taken ($F=2.851$, $p<.05$) with institutions in large cities having the highest median of hours spent (10) and courses taken (3). The amount of time and number of remedial courses taken by students

Insert Figure 2 about here
Institutional Policies and Practices

were also examined by region in the sample. There was a significant variation by region for time spent in remedial courses (F=3.183). Half of the responding colleges in the Far West reported that students spent more than 9.6 hours in these courses.

Insert Figure 3 about here

Faculty

In addition to gathering some basic information about the students taking remedial courses, the survey also gathered some basic information about the faculty who teach remedial courses. When examining faculty in community colleges, public and private community colleges should be researched separately due to different staffing patterns. Private community colleges tended to have more full-time faculty than part-time faculty (76 percent) while public community colleges had a majority of part-time faculty (66 percent) (Phillippe and Patton, 1999). The ratio of full-time and part-time faculty teaching remedial courses did not deviate greatly from the overall ratio found in community colleges. Private community colleges in this survey reported that 60 percent of faculty teaching remedial education were full-time and public community colleges reported that 64 percent of the faculty teaching remedial education were part-time.

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Institutional Policies and Practices

The majority of part-time and full-time instructors who taught remedial courses taught college-level courses simultaneously, however, a higher percentage of full-time faculty in private community colleges taught only remedial courses. Little difference existed between private and public community colleges in the percentage of faculty required to have training specific to remediation prior to teaching. Twenty percent of respondents required full-time faculty and 17 percent required part-time faculty to possess training specific to remediation prior to teaching remedial courses. The students and faculty involved in remedial education are the "who" in remedial education; the remainder of the study examined the "what" (policies, practices, and trends) of remedial education in community colleges.

Assessment/Placement

Assessment and placement of students into remedial courses is one of the most debated aspects of remedial education. Data suggest that students need to be placed into remedial education based on assessment (Roueche & Roueche, 1999) and anecdotal data suggest that with financial constraints, mandatory placement for all students assessed as needing remediation is impossible. Results from the Department of Education's survey on remediation (NCES, 1996) indicated that 69 percent of community colleges require assessment for all students, and results from the AACC study (58 percent) do not vary greatly. There were a variety of criteria used by institutions to exempt students from required participation in assessment testing with. Of institutions exempting students from remediation, the most reported exemption was college entrance exam scores (91 percent).
Institutions responding to this survey indicated that a variety of methods were used to assess students for placement/advising purposes. The most commonly reported methods were paper and pencil assessment measures (60 percent of institutions), computerized assessment measures (63 percent of institutions), college entrance exams (36 percent of institutions), institutionally developed measures (24 percent of institutions), and state developed measures (16 percent of institutions). The institution was responsible for setting the cutoff scores on assessment tests 77 percent of the time and the state set the scores 22 percent of the time.

Based on assessment testing, the majority of community colleges required placement. Results indicate that 75 percent of the institutions required placement based on mandatory assessment testing. Of those institutions that required placement, 65 percent indicated that the mandate was set by the institution/district and 33 percent indicated that the mandate was set by the state.

Location of Remediation

There are a variety of methods institutions use to classify where remedial courses are located. Roueche and Roueche (1999) found that the majority of community colleges offer remedial courses by discipline, but some institutions offer remedial course through a separate, unique department. Results from the AACC National Study on Remediation uncovered similar results. Sixty-one percent of institutions reported that remedial courses
were offered by discipline, 25 percent reported offering remedial courses in a separate department, and 13 percent reported that courses are offered through one academic department.

Another issue in the location of remedial courses is whether English as a second language (ESL) and adult basic education (ABE) courses are considered remedial. Results from the AACC study revealed that the majority of institutions do not classify ESL or ABE courses as remedial.

Levels

Depending on their preparation, some students need multiple courses to reach college-level courses. The number of levels offered across the institutions ranged from a low of 1 across the various subjects levels to 16 levels in math and remedial ESL. The median number of levels across urbanicity illustrated that urbanicity was related to enrollments since urban institutions have consistently more levels of remediation and higher enrollments than the smaller institutions in mid-sized cities/large towns, on the fringe of cities/towns (suburbs), and in rural areas. Half of sample institutions offered more than 3 levels of remedial math, 2 levels of remedial reading, 2 levels of remedial writing, 1 level of remedial science, 3 levels of ESL, and 2 levels of ABE.
Credit Type

There are various forms of credit offered to students in remedial courses including multiple forms of degree credit, institutional credit (credit toward financial aid only), and in some instances, no credit (Roueche & Roueche, 1999). Credit policies were examined at both an institutional level and by discipline. The majority of institutions (76 percent) offered institutional credit for all courses, 5 percent offered degree credit only, and 5 percent offered no credit. Among the remaining institutions (14 percent) which offered multiple forms of credit, degree and institutional credit (6 percent) and institutional and no credit (5 percent), were the most prevalent.

Remedial math, reading, and writing courses mirrored the institutional policies of credit type with a range of 75 to 77 percent of institutions offering institutional credit for these courses. There were, however, variations when looking at remedial science, ESL courses classified as remedial, and ABE courses classified as remedial. For example, only 21 percent of institutions offered institutional credit for ABE courses and none offered degree credit.

Class Size

According to the National Center for Developmental Education (Boylan, Bonham, Jackson, & Saxon, 1995), remedial courses tend to have smaller enrollments than college-level courses due to an increased need for individual attention. Results from
the National Center for Developmental Education's National Study of Developmental Education (Boylan et al., 1995) indicates that courses in remedial math have more students than reading or writing courses, but all have smaller class sizes than college-level courses. Remedial math courses in this study had the highest median class size of all disciplines with half of the institutions reporting class sizes of 25 students or less.

The majority of institutions in this study reported having institutional policies that limit remedial class size. Nearly two-thirds of the institutions in this study (65 percent) reported having a policy that limits class size. Of these, nearly three-quarters (73 percent) reported having a policy specific to remediation. The vast majority of institutions (95 percent) in this study reported that the state did not mandate policies with institutions in only one state having such mandates.

Institutional Limits

Institutions have received increased pressure in recent years to limit the number of times a student may enroll in remedial courses or the amount of times he may enroll in one course (Rouche & Rouche, 1999). In addition, there is a limit to the amount of federal aid a student can receive for remedial education. Results from this study found that 23 percent of institutions limit students from taking remedial courses through various methods. Twenty percent of institutions that limited remediation did so by increasing tuition, 32 percent by preventing students from taking additional remedial courses, 30
percent limited students by ending non-federal funding, and 19 percent of institutions limited students through “other” methods (e.g. limiting attempts, semesters, etc.). Of those institutions that did set limitations, 45 percent did so by state mandate and 54 percent did so at the institutional level.

Another limitation employed by institutions is limiting the number of times a student can take the institution’s remedial assessment test. The majority of institutions (83 percent) allowed students to retake the assessment test. More than half of institutions (58 percent) limited the number of times a student could retake the assessment test at once or twice, however, a substantial number (42 percent) indicated that the number is set differently. “Other” limits imposed on retaking the remedial assessment test included limiting students to a specified number of retakes per course, semester or year. Most institutions (86 percent) indicated that the retake policy was not mandated by the state.

The survey also examined whether students were permitted to take college-level courses while enrolled in remedial courses. College-level courses were further examined by courses specific to degree/certificate programs. Ninety-nine percent of institutions reported that students could take college-level courses while in remedial courses with 60 percent of those indicating that students could take these courses only “under certain circumstances.” Ninety-nine percent of institutions also indicated that students could enroll in degree/certificate courses while taking remedial courses, but 49 percent of institutions allowed concurrent enrollment only “under certain circumstances.”
Exiting Remediation

The issue of when students are determined to no longer need remedial courses was also examined in this study. The majority of institutions (56 percent) used more than one measure to assess whether students were prepared to leave remedial coursework. The method employed by the majority of the institutions (91 percent) to assess whether a student was prepared to leave remedial coursework was successful completion of the remedial course.

Course Offerings

Research indicates that institutions should be "flexible" with their course offerings to best serve students in remedial education (Roueche & Roueche, 1999). One method of flexibility used by respondent colleges was the offering of open entry, open exit courses. This study examined the number of institutions that used self-paced courses as part of their remedial offerings. Results from this study indicated that nearly half (45 percent) of institutions offered self-paced courses to their students. Another area of interest was whether remedial education was offered via distance education. This question was posed in this survey and approximately one quarter (26 percent) of the responding institutions offered remedial courses through distance education.
Technology

Many community colleges have introduced technology into their curriculum through the use of computers; however, the extent to which computers are used in remedial education has rarely been examined. This survey looked, not only at whether computers are used, but looked at usage by discipline. Respondents were asked to rate computer usage as never, rarely, sometimes, or frequently. The majority of institutions (95%) used computers in at least one discipline area.

Contract Training

Previous research examining the contracting of remediation to business and industry (NCES, 1996) indicated that half of the public community colleges and 5 percent of the private community colleges provided remedial education courses to business and industry. Results from this study revealed similar results. Forty-five percent of all institutions in this study reported contracting remediation with 47 percent of public community colleges and 7 percent of the private community colleges. Analysis by region illustrated that a variance existed for institutions offering contracted remediation. Though 45 percent of the sample institutions offered contracted remediation, 59 percent of institutions in the Great Lakes contracted remediation while only 28 percent of institutions in the Southeast contracted remediation to business and industry.
Responsibility for development of the curricula was another area of contracted remediation examined in this study. Respondents were asked whether the college, employer, or both developed the remedial curriculum. Thirty-five percent of institutions reported that the college was the sole developer of the curriculum, 4 percent indicated that the employer was the sole developer, and the majority of colleges (61 percent) indicated that remedial curriculum development was a joint effort between the employer and the college.

Another area of interest in this study was what remedial courses were offered through contracted remediation. The results indicated that remedial math, reading, and writing were offered more frequently than science, ESL, or ABE. A small percentage of the respondents also offered courses specified by the business or industry. The majority of the institutions that contracted remediation to business and industry (65 percent) indicated that no credit was awarded to students.

Future Changes

In addition to collecting information on current policies and practices, this study also collected information on projected changes in remedial education. The majority of
the changes fell into a remedial course/program/departmental category. One change identified frequently was a need to increase the number of remedial specific student services. These services included the creation of orientation programs, instituting pre-enrollment programs (immersion included), hiring and training more tutors, and the creation of remedial specific advising, tutoring, and mentoring services. The introduction of these and other student services would create a holistic approach to remedial education identified by previous research as developmental education (Roueche and Roueche, 1999).

A trend listed in future changes was increasing the use of technology in remediation. One of the changes that was mentioned more than once, was using computerized assessment measures instead of paper and pencil. Some institutions suggest going even further by offering online assessment. The creation of distance education courses for remediation in institutions not currently offering it was another projected change.

Another group of future changes listed regarded the faculty teaching remedial courses. A frequently reported change was that institutions will be hiring, not just more faculty, but more full-time faculty. Another change listed was that faculty will be required to obtain training specific to remediation prior to teaching and will attend professional development opportunities once hired to expand teaching styles and delivery methods.
Summary

This study reinforces results found in previous surveys and adds to the wealth of knowledge by providing greater detail and a more directed insight. Even more importantly though, many of the results from this study gave empirical evidence verifying anecdotes of how community colleges manage remedial education.

Information on the percentage of students new to higher education has not changed significantly in recent years, a finding echoed in the Journal for Developmental Education (Journal of Developmental Education, 1999). Perhaps one of the more interesting findings was that the part-time to full-time ratio of faculty in remedial education did not differ greatly from the ratio of the general population.

Another key finding in the study was that institutional policies, for the most part, are mandated at the institutional level, not the state level. Cutoff scores set for the assessment tests were mandated by the institutions more than 75 percent of the time. Although 65 percent of the institutions had a policy limiting class size, only one state represented in this study mandated class size. Results in the study also indicated that most institutions awarded institutional credit for remedial course work and the majority of the colleges (55 percent) had their credit policies mandated at the institutional/district level. As expected, the majority of institutions did not set limits on student attempts in remedial courses, and the majority of those who did (55 percent) had those limits set at the institutional/district level.

In addition to the information that has been looked at in depth, there were results from areas not examined in depth at a national level before. Nearly half (45 percent) of
the institutions in this survey contracted remedial education to business and industry with 61 percent using collaborative efforts between the employer and institution to create the curricula. Although the issue of contract training was not examined with great detail, the results help to disprove the myth that all students taking remedial courses are “straight out of high school.” The percentage of institutions using computers in remedial courses was high with more than 80 percent of institutions either sometimes or frequently using computers in most courses. This supports the assumption that community colleges are using the technology available to better aid their students.

Community colleges have always had an open door to students desiring an education regardless of preparation. With more and more state and local governments eliminating remedial education from the four-year institutions, community colleges will have to be more flexible than ever. Flexibility, however, has always been the strong suit of America's community colleges. The flexibility to adapt to fit the needs of its community, to give second chances to students, and to educate the workforce of tomorrow.
References


Figure 1: Urbanicities of Sample Institutions and Total Population
Figure 2: Hours Spent & Courses Taken in Remediation by Urbanicity
Figure 3: Hours Spent & Courses Taken in Remediation by Region
Figure 4: Faculty in Remedial & College Level Courses by Institution Type
Figure 5: Exemptions From Required Assessment Testing
Figure 6: The Classification of ESL and ABE Courses

Percentage of Institutions

- Always as Remedial
- Sometimes as Remedial
- Never as Remedial

ESL Courses Classification

ABE Courses Classification
Figure 7: Type of Credit Offered for Remedial Courses
Figure 8: Median Class Size by Discipline

- Remedial Math
- Remedial Reading
- Remedial Writing
- Remedial ESL
- Remedial ABE
- Remedial Science

Class Size
Figure 9: Methods of Exiting Remediation

- Completion on Course: 90%
- Exit Exam: 20%
- Student Evaluation: 70%
- Retake Assessment Test: 30%
- Other: 10%
Figure 10: Computer Usage by Discipline

- Remedial Math
- Remedial Reading
- Remedial Science
- Remedial ESL
- Remedial ABE

Percent of Institutions

- Frequently
- Sometimes
- Rarely
- Never
Figure 11: Percent of Institutions in each Region with Contracted Remedial Education
Figure 12: Contracted Remediation by Discipline

Percent of Institutions Contracting the Discipline

- 0%
- 10%
- 20%
- 30%
- 40%
- 50%
- 60%
- 70%
- 80%
- 90%

- Other
- Remedial ABE
- Remedial ESL
- Remedial Science
- Remedial Writing
- Remedial Reading
- Remedial Math
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