



M E M O R A N D U M

SUBJECT: RESPONSE AND COMMENTS

FROM: John R. Bellefleur, Social Science Department

TO: Martin A. Orlowski, Institutional Research

DATE: August 24, 1993

The study, "The Financial Implications of Meeting the Needs of Underprepared Students at Oakland Community College" offers intense reading and invites equally intense contemplation. In my view the assumptions used in it were credible, the outcomes believable, and the conception of the study a model of technical expertise. I hope this study gets wide attention and much discussion, here and at the level of professional expertise.

Always the gentle critic, I would change only one sentence. The word "youth" on Page 22 needs to be more inclusive: "The national need for a well-educated labor pool is so great that if our country is to remain economically viable and competitive, every effort is needed to insure that the intellectual resources of our citizens are fully developed." The age 31 to 40 year old age group was the largest in my Spring-Summer classes.

And as a result of this study I can imagine more clearly the financial implications of involving the ASQ (Attributional Style Questionnaire) in OCC's student personnel process. Considering that well prepared students may profit from the coaching the ASQ might make possible, its costs may be even greater than those defined within this estimate. Further study is needed of the other side of the equation: what is the potential benefit of each of the components (such as ASQ coaching) of our student personnel process? The next study, the cost-benefit study, will be more difficult and likely much more controversial!

If I might add another comment. This study raises the question as to what a community college is to do. Are we or are we not to offer remedial courses. If our community thinks "not" then the potential response to the study may be to justify the rejection of the notion of remediation as too costly and wasteful of scarce resources. Whether or not there is a new world order, there certainly seems to be a rebirth of conservatism, if not tribalism, in the world around this community college. Our community literally killed a reasonable school funding reform that passed nearly everywhere else in the state. Our voter/taxpayers seem to want individual resolution to questions that were resolved so clearly as collective and community concerns in the Northwest Ordinance of 1789. This may be a dangerous time to define to our community how much more expensive our remediation project might become. The culture now seems opposed to collective solutions, and until culture moves away from individualism the recommendations implicit in this finely executed study could give comfort to those who would throw out public schools along with public school finance.

jrb

(Ref.:MARTIN,AU3)

**THE FINANCIAL IMPLICATIONS
OF MEETING THE NEEDS OF
UNDERPREPARED STUDENTS
AT OAKLAND COMMUNITY COLLEGE**

**Prepared by:
The Office of Institutional Planning & Analysis, July, 1993**

MEETING THE NEEDS OF UNDERPREPARED STUDENTS

EXECUTIVE SUMMARY

- According to Oakland Community College's (OCC) Vision/Value Statement, "Oakland Community College is a dynamic, accessible, learning-centered community dedicated to excellence." Due to this commitment to accessibility, OCC must be aware of the implications of open enrollment.
- A large number of OCC students are underprepared for college-level work. In Academic Year 1992-93, at least 5,986 students scored lower than College Level on the ASSET test; more than 50% of the students who took the test each semester scored lower than College Level. These students are adults who may benefit from specific support, known as "developmental education."
- Developmental education programs both assist students in the elimination of academic deficiencies that prevent their full admission to collegiate-level courses and help students to negotiate the regular postsecondary curriculum.
- Seventy-four percent of U.S. colleges and universities offer developmental education courses, and 94% of all public institutions offer at least one developmental course. The percent of Fiscal Year Equivalent Students enrolled in developmental instruction in community colleges in Michigan has risen 123% from 1986 to 1992.
- Currently, OCC offers a few programs which are mainly used by underprepared students. These services include: developmental courses, orientation classes such as IIC 057 and CNS 110, the Program for Academic Support Services (PASS), a campus based Peer Writing Tutor program, Mentoring, and the English Language Institute.
- The College Skills committee investigated various methods of serving underprepared students at the College. For the most part, their ideas evolved into the "Student Academic Success Plan." Most of the ideas in this report are based on this committee's findings.
- Due to fiscal constraints and uncertainties, approximately two-fifths of *all* students' needs are being met. This has especially affected underprepared students as funding for services and programs for them has been reduced over the past few years.
- The total projected cost of serving underprepared students at OCC in Academic Year 1993-94 is \$5,935,722. This cost is over and above what the College has spent in the past for developmental education. The cost covers: more intensive and individualized counseling, mandated orientation courses, expanded PASS services, mandated IIC computer use and availability, college-wide peer writing tutors, expanded mentoring, a student tracking system, and smaller developmental class sizes.

ACKNOWLEDGEMENTS

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THE FINANCIAL IMPLICATIONS OF MEETING THE NEEDS OF UNDERPREPARED STUDENTS AT OAKLAND COMMUNITY COLLEGE

Introduction

Purpose Statement

According to the College's Vision/Value Statement, "Oakland Community College (OCC) is a dynamic, accessible, learning-centered community dedicated to excellence." The College is accessible to all who desire its services, and because of this commitment to accessibility, OCC must be aware of the implications of open enrollment. Many of the College's customers are students who are underprepared for college level work. Although faculty and staff at OCC want to ensure that all students are successful in meeting their educational goals, assisting all students is becoming an increasingly difficult task as underprepared students continue to enroll in sizable numbers at a time when the College faces financial constraints. The purpose of this report is to gauge the needs of underprepared students, describe what the College is now doing for them and project the costs of expanding these services.

There are many programs and services for underprepared students which are used and proposed by other institutions and professional experts. However, this report does not examine these alternative approaches, instead it focuses on what the College is now doing and how these services could be enhanced and expanded to reach more students. This format does not represent disinterest in other methods and programs, in fact, further study of alternative services is suggested to ensure that the College is serving underprepared students in the most appropriate and effective mode possible. Therefore, this report is limited to some extent, however, it is an important first step as it determines the level of resources which are needed to reach all underprepared students based on the current scenario of staff and services offered by OCC.

Definition and Description of Developmental Education

Nationally, institutions of higher education continue to face the problem of coping with an ever growing proportion of low achieving college students who cannot read, write or compute at college levels. The size and importance of this problem became clear in the mid-1960s. Since then, the problem of underprepared students at the postsecondary level has greatly increased, and the trend will most likely continue through the 1990s and beyond. Observable and projected changes in the diversity of levels of preparedness of high school graduates, sociological and technological change, employment trends, increased standards, and other demographic factors will continue to create educational needs that will require higher education's special attention.

Underprepared students may exhibit any of a great variety of learning deficiencies, but they most often fall into the basic categories of reading, writing, mathematics, and study skills. According to Tomlinson (1989), from a cognitive perspective, these underprepared students are often found to function at a literal thinking level (used for memory, translation, and interpretation in reading) and are unfamiliar with higher thinking levels (used for analysis, synthesis, and evaluation in reading) and/or abstract thinking (often required in problem solving).

Developmental education programs both assist students in the elimination of academic deficiencies that prevent their full admission to college-level courses and help students to negotiate the regular postsecondary curriculum. According to Tomlinson (1989), developmental programs have many names including, "academic development" "learning assistance" and "developmental studies." There are also many terms used to denote the type of educational program, including: "remedial:" the correction of poor habits; "developmental:" the effort to bring something into being as if for the first time; and "compensatory:" the provision of knowledge, abilities, or skills that will substitute for others that are required. In practice, any program serving students at the postsecondary level who have failed to demonstrate required proficiencies may be involved in a delivery of services that encompass remedial, developmental, and compensatory approaches. For the purposes of this report, the term "developmental education" will be used as an umbrella term for a variety of instructional programs and individualized services which are intended to assist underprepared students.

One of the traditional roles of education in the United States has been to broaden opportunities for productive and rewarding participation in the affairs of society by developing the skills and credentials necessary for economic and social satisfaction. Postsecondary developmental programs have helped to fulfill the mission of providing equal educational opportunity in a democratic society by helping individuals overcome their skill deficiencies. These programs have provided a "last chance" for many individuals to obtain desired experiences in higher education. Developmental programs should aim to provide instruction to all individuals seeking postsecondary education who demonstrate interest, effort, and persistence in pursuing further education and who are in need of improvement in any of the basic skill areas.

Within institutions of higher education, the overall purpose of developmental studies' programs has been to eliminate academic deficiencies that diminish students' potential to succeed in college-level courses. Services typically focus on reading, writing, math, test taking strategies, personal adjustment, and goal commitment and achievement. The scope of services in any program may include laboratory tutorials and self-paced activities; experiential activities on and off campus such as plays, poetry readings, and job training; computer-monitored feedback on individual progress; intensive counseling; and peer support. According to Education Week (May 22, 1991) 74% of the U.S.'s colleges and universities offered remedial-education courses during the 1989-90 academic year. According to the Journal of Reading (September 1992), 94% of all *public* institutions offer at least one developmental course. Of these, 98%

offer at least one support service, such as peer tutoring and counseling; and 97% conduct at least one evaluation of remedial programs, such as reviewing student completion rates of remedial courses. A total of 30% of all college freshmen took at least one remedial course in 1989-90. Twenty-one percent took mathematics, 16% writing, and 13% reading (National Center for Education Statistics). Even the most selective institutions in the nation have underprepared students who need services. At the University of California, in 1992, nearly half of the entering freshmen, students who came from the *top 12%* of the high school graduating classes, were advised to take remedial writing.

Two current issues facing developmental programs are funding and public perception. While institutions are attempting to serve the diversified learning needs of increasing numbers of individuals who do not meet regular admissions criteria, various factions within the public sector have questioned the relevance, feasibility, and academic status of such programs. There are those who still believe that no student should apply for college admission who is not fully prepared for postsecondary education; i.e., they argue that it is the secondary and elementary schools' responsibility to adequately prepare students for higher education. However, according to Tomlinson (1989), "Since the 17th century, American higher education has always had to help prepare some of its students to be academically capable for the intellectual rigor of higher education." For example, in 1866, the achievement levels of the first students at Vassar were described in the president's annual report to the board as "a range of grade levels from a point appropriate for a college junior to a point lower than any scale used could indicate!" In addition to the historic tradition of helping underprepared students at the college level, "The present quality of the national secondary school system is so inconsistent that it is unrealistic to expect that all students who are intellectually capable of a postsecondary education will have received adequate training by the time they leave high school" (Tomlinson, 1989). In addition, instead of diluting academic programs, many experts stress that developmental programs support and enrich the regular curriculum so that more students will succeed. According to Bloom (1971), 95% of all students can learn a subject to a high level of mastery if given sufficient learning time and appropriate types of help. According to the National Center for Education Statistics May 1991 report, 77% of those taking remedial reading courses, 73% taking remedial writing courses, and 67% taking remedial mathematics courses passed them.

Description of Oakland Community College's Programs and Services

Data based on a 1985 survey done by Wright and Cahalan indicate that remedial students are more likely to attend two-year, public, open admission colleges such as OCC. According to the Michigan State Department of Education, the percentage of Fiscal Year Equivalent Students (FYES) enrolled in developmental/preparatory instruction in community colleges in Michigan has risen *123%* from 1986 to 1992. Institutions in Michigan that report offering developmental education typically provide

traditional classroom experiences; self paced instruction by way of learning labs; specific career guidance; and college orientation.

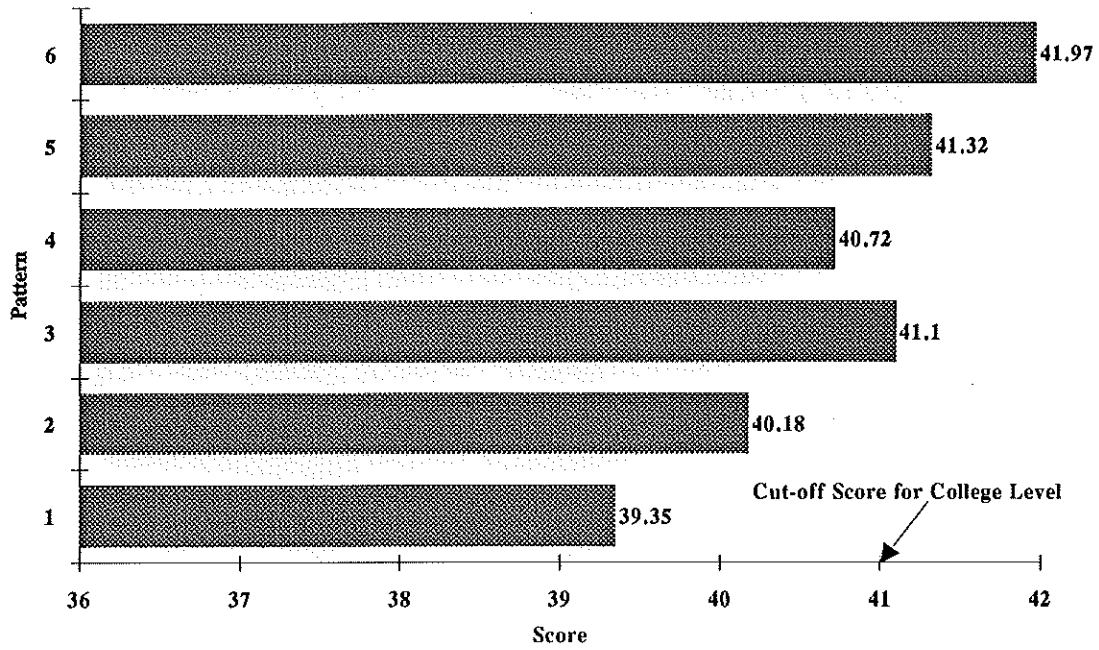
Currently, at OCC, first-time entering students are assessed by the ASSET test. Students scoring below "College Level" are advised to enroll in courses that meet their ability and if they score below College Level on the Reading or Writing Skills sections, they are restricted from taking college level English courses (ENG 151 and above). However, students are not currently restricted from taking other college level courses. Allocated seats in most developmental courses is at either 27 or 37 students, the same number allowed in regular classes.

Students who have taken ASSET are tracked and placed in one of six enrollment patterns:

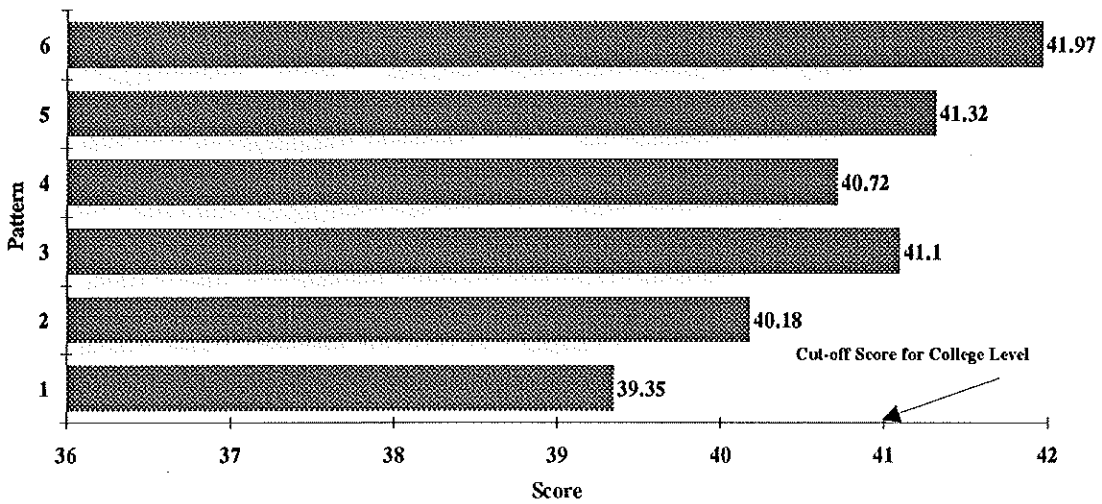
- 1: Student did not enroll in the College, and therefore did not complete a semester, and did not return the subsequent semester.
- 2: Student did not enroll, did not complete, but did return the subsequent semester.
- 3: Student did enroll, but did not complete and did not return.
4. Student did enroll, did not complete, but did return.
5. Student enrolled, completed, but did not return.
6. Student enrolled, completed, and returned.

As is evident from the charts below, it is clear that those who score higher on the ASSET Writing, Reading, and Numerical Skills sections are more likely to enroll, complete the term and enroll in a subsequent term. Therefore, students who score lower on the test may benefit from additional assistance in order to complete their educational goals.

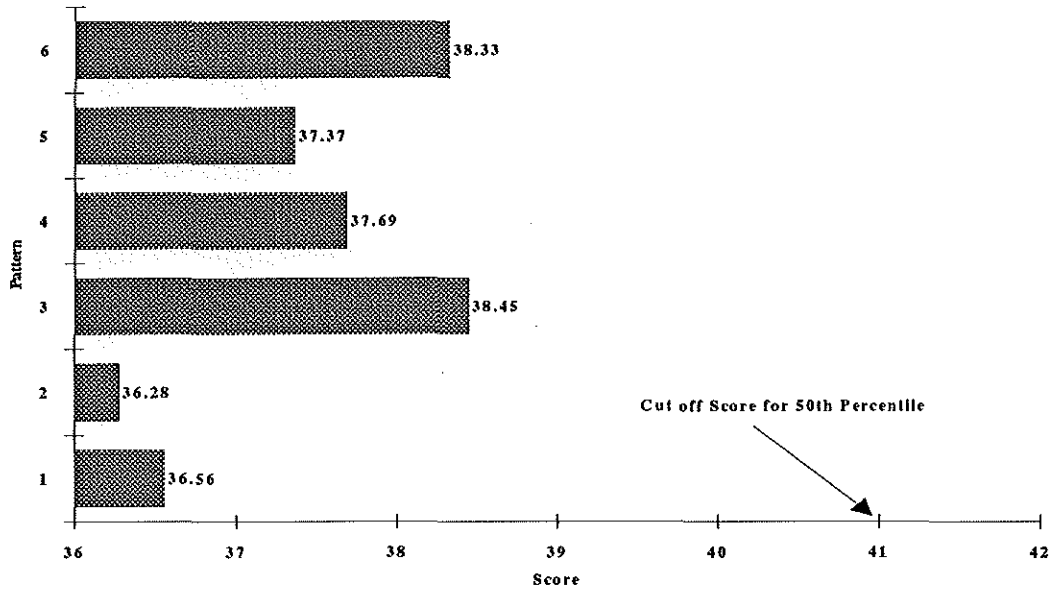
Enrollment Patterns Based on Writing Skills ASSET Scores (Fall Term, 1991)



Enrollment Patterns Based on Reading Skills ASSET Scores (Fall Term, 1991)



Enrollment Patterns Based on Numerical Skills ASSET Scores (Fall Term, 1991)



There are at least 5,900 students who score below College Level on ASSET each year; on average, over 50% of those who take the test are scoring below College Level. A variety of alternative approaches has been undertaken by the College to support these students. For two years, OCC experimented with a College Skills Committee; its purpose was to ensure that underprepared students were given enough support and opportunities to succeed in their courses. For example, "College Skills students" at the Orchard Ridge campus signed a contract promising to take part in extra curricular activities such as mentoring and case counseling. In one year, 120 students were part of the Orchard Ridge campus program at a cost of approximately \$55,000. This program is still ongoing at the Highland Lakes campus, and although it has been discontinued on the other campuses, the discoveries made through this experimentation are being implemented as funding warrants. Evaluation of the College Skills Committee's actions demonstrates the effectiveness of intensive advising, mandated orientation programs, the assessment of motivation levels, mentoring, peer tutoring, case conferencing, and smaller class sizes. In other words, their experience suggested that along with smaller class sizes, many students need to spend more time outside of the classroom with special support services in order to be successful in the classroom.

The College Skills Committee has, for the most part, evolved into the Student Academic Success Plan (SASP) committee. While SASP is continuing the exploration of the College Skills Committee's findings, they have commented, "Given the current level of staffing at OCC, we are probably only reaching about one-third to one-half of total new students coming into the College each fall. We need to re-assess the delivery

of counseling and advising services in order to effectively deliver appropriate support to each student. 'At-risk students' [students who are judged as likely to fail their studies] also need additional instructional support, i.e. professional and peer tutoring, IIC services, and computer aided instruction."

Currently, when students come to the College to take the ASSET test, they also participate in a mandatory orientation. This procedure assures that most students participate in an orientation, however the program is not designed to be intensive. For the most part, students are oriented on how to physically and bureaucratically maneuver around the College. However, there are classes available such as IIC 057 and the Counseling courses (CNS 110, 114, 115, and 116) which often serve as a more intensive orientation to college. These courses focus on self esteem, test taking strategies, personal strengths and potentials and other basic survival skills. A recent OCCurrences, the internal College newsletter, (June/July 1993) reported a student as saying that the IIC 057 course was the turning point of his OCC career. He is now embarking on a four year college program.

The Program for Academic Support Services (PASS) targets services to two groups of students:

- 1) Handicapped or disabled, including Learning Disabled
- 2) Disadvantaged (discerned through faculty referral, low ASSET scores, a course GPA of less than 2.0, no high school diploma or GED, or students classified as ESL (English as a Second Language).

Some students meet the criteria of both categories. Tutorial services are available to all of these students. More specific tutoring which is non-content based is also available for ESL students. The PASS program also coordinates "BOLD" (Bridging Opportunities for the Learning Disabled). The BOLD program teaches learning strategies to students as opposed to class content information. Alternative testing is also offered through PASS which includes any needed modifications such as more time to take a test, a quiet environment, or someone to either read the test questions or record the student's answers. During Academic Year 1992-93, approximately 661 disadvantaged students were helped through PASS. Unfortunately, the Director is quite confident that not all students who need these services are being reached; the 661 students comprise approximately 13% of those who scored below College Level on the ASSET test last year.

There is a "Peer Writing Tutor" program at the Orchard Ridge campus coordinated through the Individualized Instruction Center (IIC). Through this program tutors are placed in lower level classes; usually English 052 and 131 where they work with students in small groups concentrating on writing skills.

Mentoring is also available to some students. During the past academic year at the Orchard Ridge campus, 35 faculty/staff volunteers were successfully matched with 83 students for mentoring. The Coordinator believes that "Mentoring had varying degrees of success." Through informal surveys and anecdotal reports, it has been found that some mentoring pairs met regularly throughout the school year. Some of these relationships proved extremely valuable to both the mentor and the mentee; other pairs had minimal contact. Problems included: scant and variable funding, variable administrative support, haphazard clerical help, and inadequate office space. Mentoring is also available at the Royal Oak and Highland Lakes campus, and these programs will continue in the Fall of 1993.

The College also runs the English Language Institute (ELI), a program for students whose primary language is not English. Students cannot take ASSET before demonstrating proficiency in English, thus the ELI is popular with students who want to enroll in college courses. According to the Director, approximately 80-85% of the students enrolled in the ELI will eventually take college-level courses at OCC. Based on ASSET scores, these students are usually placed in English 052, a developmental course. They hardly ever enroll in English 151 or higher, although they are frequently very skilled in math. The Director of the program believes that most of these students feel an allegiance to OCC, and would not enroll in another college after going through the ELI. There were 322 students enrolled in ELI courses during Academic Year 1991-92; enrollment has increased 73% since the program's inception in 1983. As enrollment continues to increase, the College will likely see an increase in the number of students whose primary language is not English and who need special attention in developing their language skills.

In addition to programs offered for underprepared college students, OCC and Detroit Edison jointly sponsor a summer program offered at the Auburn Hills campus for "average" high school students of two inner-city Pontiac high schools. Approximately 86% are minority students. The intent of this program is to build their self-esteem and encourage them to continue their education. Although the annual drop out rate in Pontiac public schools is 10.7% (more than double Oakland County's rate of 4.9%), to date, each OCC/Pontiac Summer Program class has experienced a 100% graduation rate from high school. In addition, based upon initial student survey results, 95% of the Summer Program students attended college and 57% chose OCC.

Along with the specific programs set up for underprepared students, the College offers both touch-tone and on-site registration which maximizes access for all students. The Learning Resource Centers are well-staffed and have computerized search programs for easy access to information. Through the counseling department, advising and personal counseling services are also available to all students. Professional tutors and computers are available through the Individualized Instruction Center and these services are utilized by all students.

In summary, along with services which reach all students, OCC offers developmental classes; "orientation classes" such as IIC 057 and CNS 110; a mentoring program; a peer writing program; the expanding ELI program; the PASS program, and the Pontiac summer program.

Projected Program Costs for Academic Year 1993-94

Note: This study was undertaken within a generally conservative framework. Where alternative choices were available, the most conservative figures were used. For example, although between 5,642 and 8,237 students each year have scored lower than College Level on at least one section of the ASSET test, estimates are based on 5,000 students. The projected costs presented in this study are over and above any money the College is now spending on programs and services for underprepared students. Please refer to Appendix A for further information regarding methodology.

Over the past few years, College enrollment of underprepared students has ranged from at least 5,986 students to approximately 8,847 entering the College each year. This number does not take into account underprepared students who are returning to the College from previous semesters. Based on the ASSET test, in Academic Year 1992-93, there were:

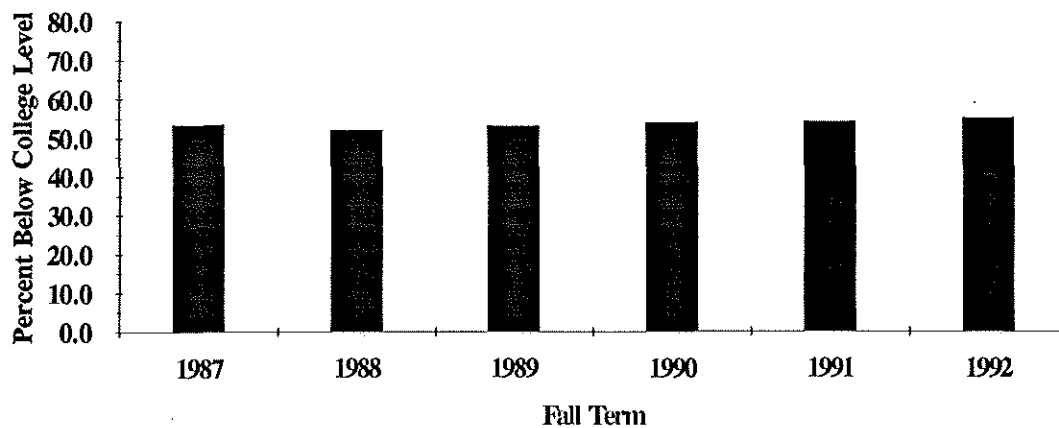
-5,986 students scoring below College Level in Writing Skills

-5,658 students scoring below College Level in Reading Skills

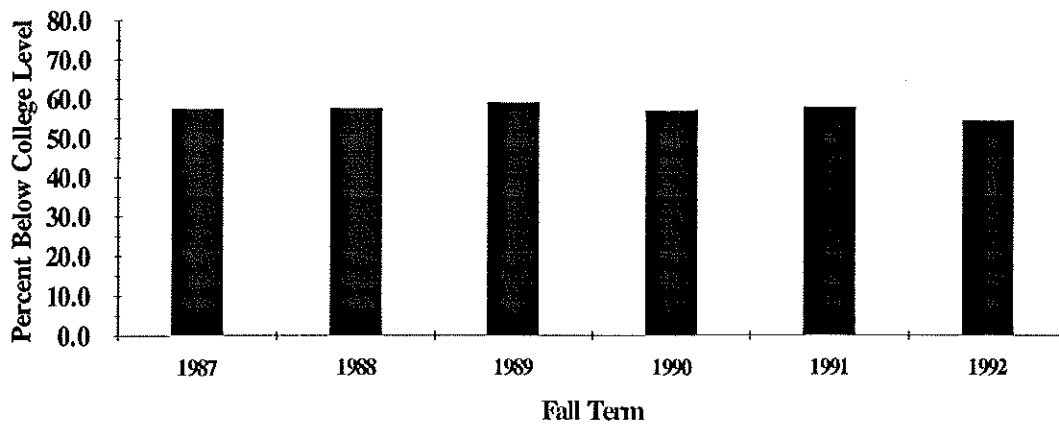
-5,321 students scoring below the 50th Percentile in Numerical Skills

The following charts illustrate the percentage of entering students scoring below College Level on the Reading Skills, Writing Skills, and Numerical Skills sections of the ASSET test during Fall semester, 1987-1992. The percentages of entering students scoring below College Level are high for all three tests; *more than 50% of OCC's students tested by ASSET score below College Level on the Reading and Writing Skills test and over 65% score below the 50th percentile on the Numerical Skills test.*

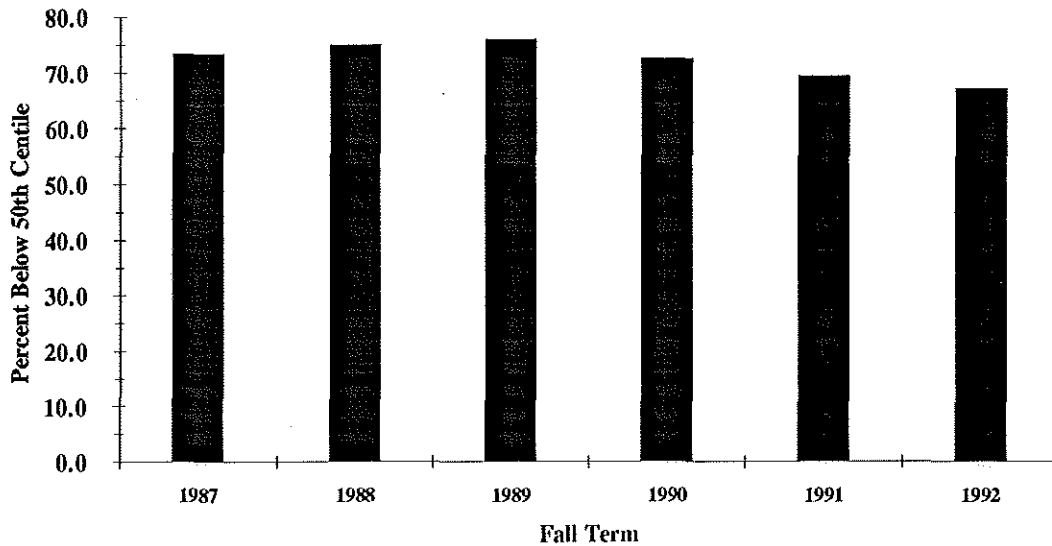
Trends in Reading Skills of Entering Students (Fall 1987-1992)



Trends in Writing Skills of Entering Students (Fall 1987-1992)



Trends in Numerical Skills of Entering Students (Fall 1987-1992)



There is evidence suggesting that College faculty are concerned about the underprepared students entering OCC. According to the Office of Institutional Planning & Analysis survey of instructional staff, there is particular concern about placement in both English and math courses and the level of commitment of some students. Comments included:

More college skills classes; support of college skills program in all disciplines.

Many of my students have been improperly placed in my classes. I would like to see more pre-testing of students to determine what level class best suits their needs.

The students who are under-prepared for college should be given the opportunity to reach their potential and the College should highly encourage them to take classes that will enable them to succeed in college.

We have too many underprepared students who should not be attempting college-level courses.

Need better developmental education, assessment testing, student advisement and counseling.

That the guidelines set for the SASP be mandatory, not voluntary.

Although there are many services which are available to all students, *it is important to keep in mind that the students who need the most help are often the least likely to seek it.* This was described in the literature and confirmed by representatives of the IIC offices who work with students on a daily basis. Studies have shown that most underprepared students are not internally motivated to seek help when it is needed. For example, in 1964, Speilberger and Weitz found that the freshman underachiever was most likely not to seek help or volunteer for service which may eliminate an under achievement pattern. Therefore, it has been suggested that colleges need to intervene and inject services and programs into the experiences of underprepared students. The SASP committee has proposed new interventions and services for underprepared students during Academic Year 1993-94. The proposed services include a system of tracking students for intervention purposes and a more intense orientation process. The SASP committee has also recommended, "Placement at English 050 or 052 requires additional counseling; it is recommended that these students also participate in mentoring, PASS, and formal academic advising through the counseling office."

Many of the SASP recommendations are centered on more counseling and advising services. During an average Fall semester, the college-wide ratio of students to full time counselors is 1,180 to one. Of course, not all these students need counseling and there are adjunct counselors used "during the busy times." Since not all students need intensive counseling, it may be less expensive in the long run to set up a computerized advising program which could be accessible to all students. Approximately half of all students could be adequately served by such a computer system, i.e. those who want to take a sports or leisure course or who want to see which classes are transferable to other institutions. Student employees could help people use the computers, a programmer could maintain the system, and clerks could input data such as which classes transfer to which institutions. In order to implement such a system, new computers would be needed. Estimated cost for a computerized counseling system would be approximately:

\$186,250	<i>annual employee salaries</i>
<u>\$ 25,000</u>	<i>computer costs</i>
\$211,250	

The SASP committee believes that underprepared students would greatly benefit from more intensive personal counseling. These are students who are attending college for the first time or are at risk in some other way, including those who score below College Level on ASSET. Since those who score below College Level on ASSET are less likely to enroll in a semester, complete a semester or enroll for a second semester, College efforts can be focused on these students. Counselors now spend approximately 30 hours each week meeting with students. Given the quality of interaction needed for underprepared students, a potential case load each year could be 400 students per

counselor. This support level requires a full time equivalent (FTE) counseling staff of 37. The College now has 25, therefore, between 10-12 more FTE counselors would be necessary to meet the projected counseling need:

\$480,417 *annual employee salaries*

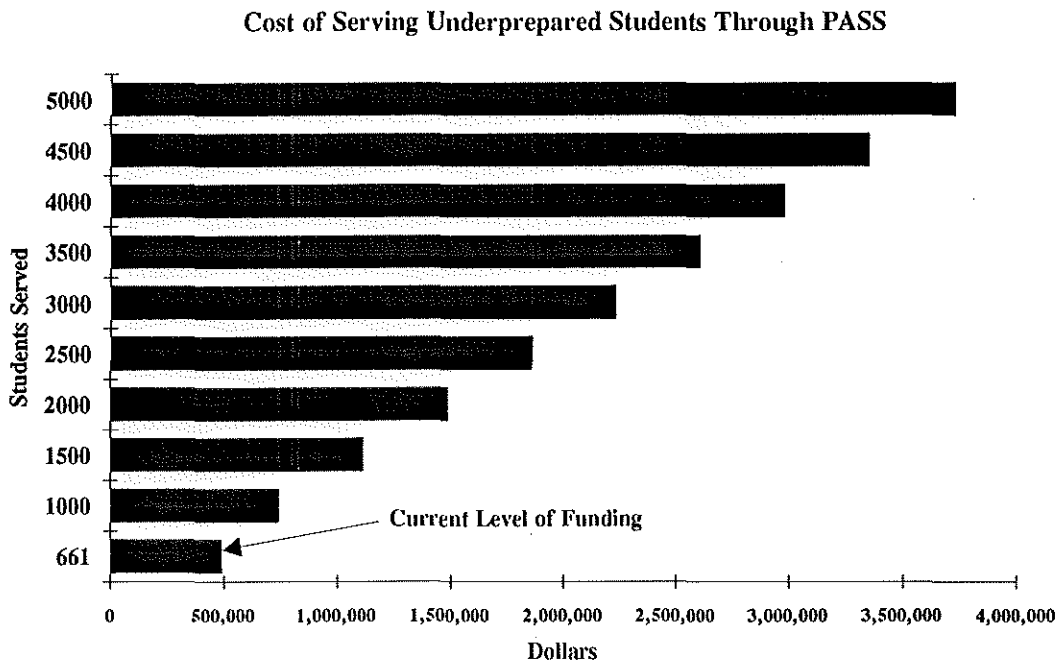
The expansion of orientation programs would also require more funding. Even though orientation is mandatory college-wide, it may not be satisfying the needs of all students. For example, on the Auburn Hills campus, funding for orientation has been cut. Students participate in orientation on the same day they take the ASSET test; therefore, if they register late, they have to register, take the test and go through orientation on the same day, which does not leave much time for orientation. When the campus had more funding, Auburn Hills offered a more in-depth orientation which lasted for three hours. However, since that orientation was not attached to ASSET, not all students took advantage of the program. Tying orientation to ASSET ensures that all students learn how to find offices and people at the College, which is necessary but not intensive enough for everyone. Perhaps another orientation program could be mandated for those who either score below College Level on the ASSET or are otherwise designated as "At-Risk." In this scenario, all students would receive a minimal orientation, and those students who need more attention would receive an intensive orientation to college that teaches the "survival skills" necessary for success. There are prototype classes now offered which could be mandated for those students who need the help.

The IIC course (057), for example, is a four credit orientation class titled "College Success Skills" and counselors usually advise the more underprepared students to take this class. The course is designed to, "provide students with the skills that contribute to academic success." The course discusses note taking, test taking, and time management skills; as well as contextual analysis, memory improvement, goal setting, an awareness of college resources, and other college survival skills. In Academic Year 1992-93, 457 students enrolled in IIC 057. In that same year, more than 5,000 students scored below College Level on at least one section of the ASSET test. If more sections could be offered to reach the remaining 4,500 students the cost would be:

\$1,283,800 *annual employee salaries*

The SASP committee also stressed that, "The College must expand PASS services." Last year there was less money allocated to the PASS program. Even before this budget cut, it is believed that not all students' needs were being met. Present budget cuts were unexpected, however the office of Student/Academic Support which runs PASS was able to avoid a deficit by cutting several services. In the past year, both faculty and students have complained about the lack of services, and the

Director concedes that there are not enough funds to meet the demands. During Academic Year 1992-93, PASS gave assistance to 661 disadvantaged students. The following chart illustrates resource needs to reach more students.



If all 5,000 underprepared students were to take advantage of PASS services annually, the cost to reach the additional 4,300 students is estimated at:

\$3,209,290 *annual employee salaries/equipment costs*

The IIC's professional and computer tutoring services are available for use by all students. Although usage varies by campus, few underprepared students take advantage of those computer services. (Approximately 5-10% of the students at the Orchard Ridge campus who use computer services are "underprepared.") If all underprepared students were either compelled or persuaded to take advantage of the IIC's services, far more computers would be needed. Perhaps a separate room could be equipped with computers dedicated to underprepared students. College-wide, 70 computers would be enough to ensure that all underprepared students have access to a computer for an hour each week. A technician would be needed to help students run the computers, and ideally, three tutors would be on hand: a language tutor, a math/science tutor, and a sociology/humanities tutor. The cost of providing this service would be approximately:

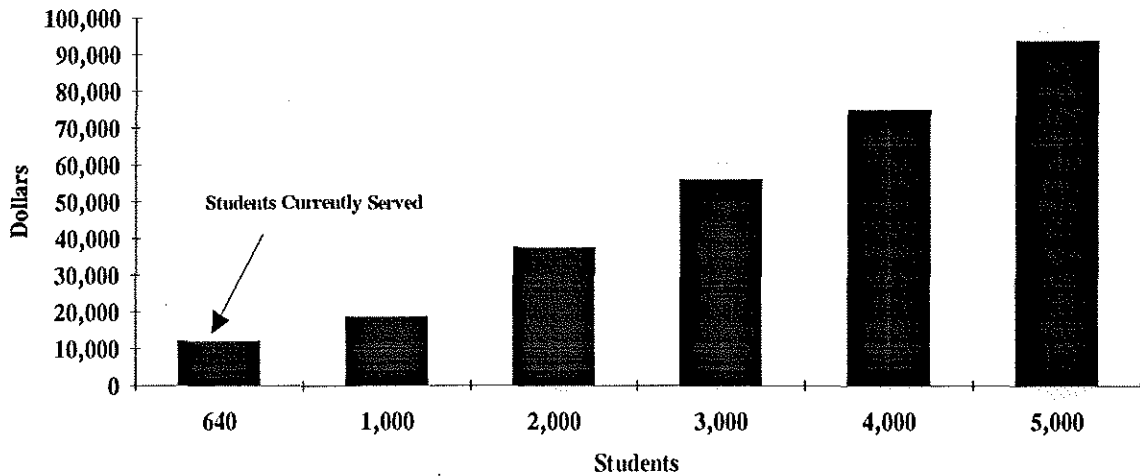
\$51,000 *annual employee salaries*

\$56,000 *computer costs*

\$107,000

The Orchard Ridge IIC requested \$25,000 for the Peer Writing Tutor program for Fiscal Year 93-94, but was only allocated \$12,000; the shortfall in funding could potentially exclude many students who need this intervention. The allocated amount will allow approximately 32 classes to be staffed with a peer tutor. If there are 20 students in each class, this program can potentially reach 640 students next year at the Orchard Ridge Campus. However, college-wide there will be approximately 5,500 new students coming in next year who score below College Level on the ASSET test for Writing Skills and may benefit from access to the Peer Writing Tutor programs. More than seven times the amount now being spent would be needed to make this program a reality college-wide:

Projected Costs for a College-Wide Peer Writing Program



\$81,750 *annual employee salaries*

The coordinator of the mentoring program at the Orchard Ridge campus has targeted 186 students to participate in mentoring during Fall Semester 1993. Despite the success of this program, the coordinator found neither enough administrative support nor enough time to do a thorough job. He would recommend that someone work at least part time on this program in the future. Although he did not track all the costs associated with his responsibilities, the time he spent working on it was valued at approximately \$10,000. While representatives on other campuses are not paid specifically to coordinate mentoring; the value of the time they spend on it is still a factor. If more students are to be reached, more time would need to be allocated to this program; either new personnel may be employed, or current staff working on the program could be appropriately compensated. If this service were to become available to all underprepared students, the cost would be approximately:

\$50,000 *annual employee compensation*

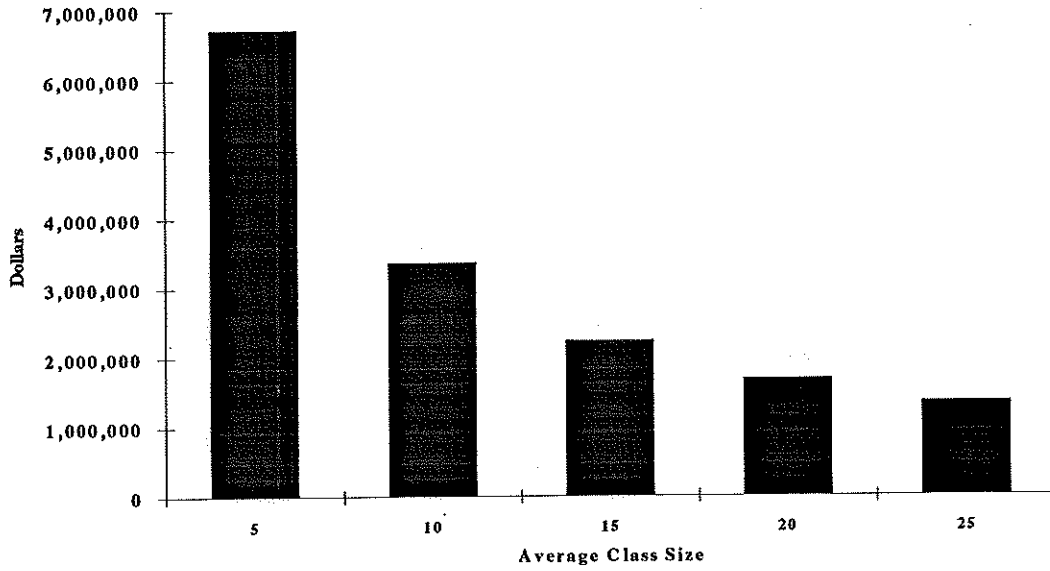
The SASP committee would like to have a mechanism in place which would code the students' scores on various assessment measures, record their classes, grades and course completions, list any faculty referrals, and record their dates of last attendance if they drop out of a class or the College. This information would be utilized for intervention purposes; so College staff could time interventions and make sure they are reaching the students who need help. This tracking system represents an additional cost of:

\$25,000	<i>program development (1st year)</i>
\$7,000	<i>program maintenance (subsequent years)</i>

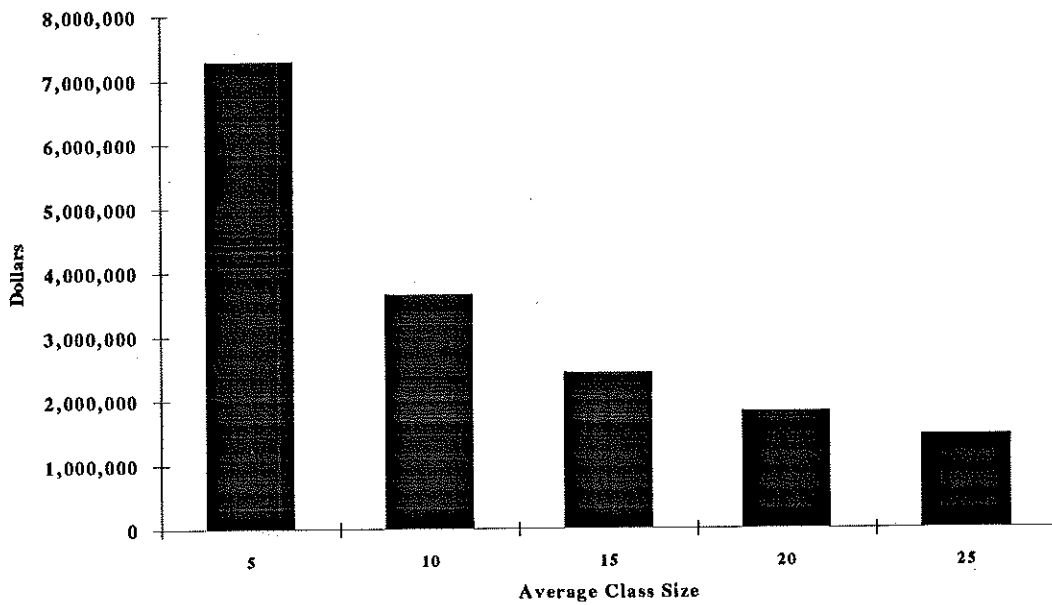
The SASP committee has also proposed, "Registration into other courses prior to completing remedial coursework should not be possible." Eventually, students who score below College Level on the ASSET test will be directed to enroll in developmental courses prior to taking most other college courses. When this process becomes procedure, enrollment in these courses will increase and more instructors will be needed. However, before this becomes a reality, the SASP committee foresees limiting the number of students in developmental courses to 20. A smaller group is proposed in order to provide the time and attention recommended for these students, however, this is also more expensive as more faculty members are needed to teach additional courses. The following three graphs illustrate instructional costs based on average class sizes for English, math and all developmental classes combined.

Note: The numbers used for these charts are based on actual enrollment numbers using duplicated headcounts. In other words, the number of students who have enrolled in these courses in the past was used in the calculations. For example, there were 6,105 seats occupied in developmental English classes in Academic Year 1992-93, but the same student may have enrolled in more than one course throughout the year; therefore the count is "duplicated." The costs represented in these charts are total costs which do take into consideration what is now being spent.

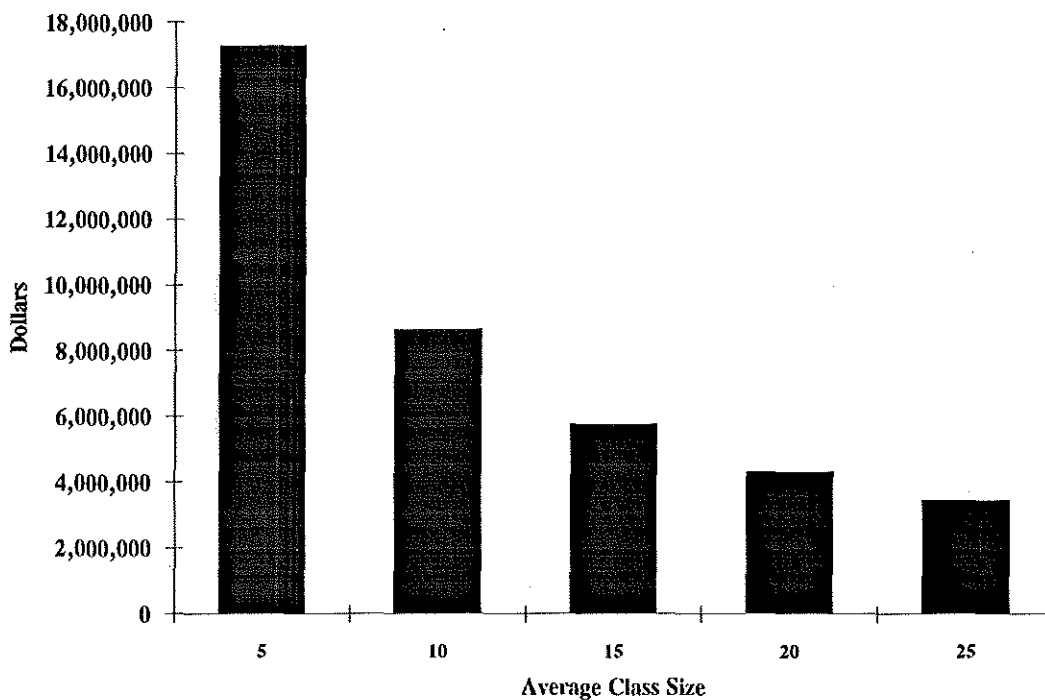
**Projected Annual Costs of Serving 6,105 Students
Enrolled in Developmental English Courses
by Class Size
(Duplicated Headcount)**



**Projected Annual Costs of Serving 6,633 Students
Enrolled in Developmental Math Courses
by Class Size
(Duplicated Headcount)**



**Projected Annual Costs of Serving 15,724 Students
Taking Developmental Courses
by Class Size
(Duplicated Headcount)**



The additional instructional cost depends on the number of students in each class; when the enrollment cap for all twenty developmental courses is 20, there will be an additional cost to the College of:

\$487,215 *annual employee compensation*

When all these various additional costs are added together the sum is equal to the amount needed to adequately serve the underprepared students who will enter the College in Academic Year 1993-94:

<u>Description</u>	<u>Cost</u>
Employee Salaries: Computer Advising	\$186,250
Computer Costs: Computer Advising	25,000
Employee Salaries: Counseling	480,417
Employee Salaries: Orientation Courses	1,283,800
Employee Salaries/Equipment: PASS	3,209,290
Employee Salaries: IIC Computing	51,000
Computer Costs: IIC Computing	56,000
Employee Salaries: Peer Writing	81,750
Employee Compensation: Mentoring	50,000
Tracking System Development	25,000
Employee Salaries: Developmental Instr.	487,215

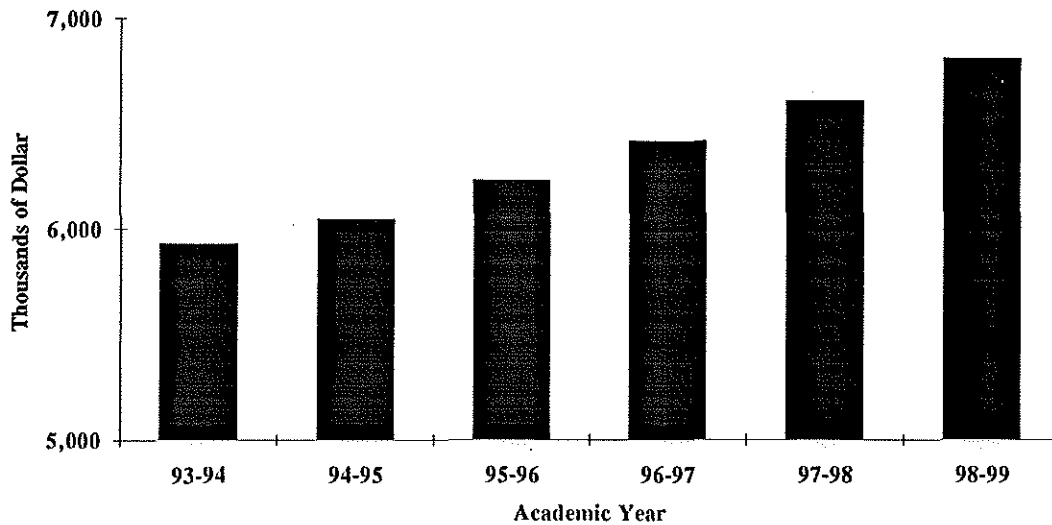
TOTAL COST FOR ACADEMIC YEAR 1993-94: \$5,935,722

Cost Projections

Cost projections are based on union contracts, projected enrollment, historical trends of ASSET test scores, and equipment maintenance costs.

<u>Academic Year</u>	<u>Cost</u>	<u>Total</u>
93-94	\$5,927,730	\$5,927,730
94-95	\$118,555	\$6,046,285
95-96	\$181,389	\$6,227,674
96-97	\$186,830	\$6,414,504
97-98	\$192,435	\$6,606,939
98-99	\$198,208	\$6,805,147

Cost Projections



Between Academic Year 1993-94 and 1994-95, the increase in cost is only 2% since there are some fixed costs which are eliminated. From that point on, the cost increases by approximately 3% each year in line with inflation.

For Further Research

Based on several research studies, the most successful developmental programs are often defined as multidimensional or holistic in the sense that they help students develop attitudes, skills, and values. Thus, the most successful programs are often described as those concerned with the education of the "whole student," that is, they emphasize development of attitudes, beliefs and goals, as well as cognitive aspects. The programs cited in this report are aimed to accomplish this, but there are many more ideas and programs used throughout the country to educate the "whole student." One example of a more holistic program involves a faculty member as prescribing various experiences for underprepared students. In this scenario, each faculty member could be assigned a few students who need extra attention. The faculty member would be involved in their assessment, and then make recommendations as to what types of "treatment" (both social and academic) would work best for each student.

Whether the College implements new programs or expands the programs now offered, more staff development for OCC's instructors and counselors is needed. For example, faculty development could focus on such methods of instruction as: applied learning, interactive learning, interdisciplinary approaches, experiential learning, and cooperative learning. Counselor development could focus on student assessment techniques; further diagnostic testing may be better able to pinpoint individual learning

styles and the methods which could fit their learning processes. Other issues which may be of interest to counselors include group counseling sessions, peer counseling, and parental involvement.

Research has also shown that early recruitment and targeted scholarships are beneficial in helping underprepared students. Early recruitment is often enhanced by the use of summer programs. The College is involved in one summer program targeted for underprepared students, and it only reaches a limited number of Pontiac high school students. This program is funded by Detroit Edison, and the College would need to find additional funding if other summer programs for underprepared students are to be established.

One of the College's goals is to be more globally focused and to increase participation in global education. Part of this includes serving foreign students with special needs. According to the office of Oakland County Planning, there are a total of 32,485 people living in Oakland County who are not United States citizens (4,230 of whom are under 18 years old). Some of these people are employees of foreign firms; there are more than 400 foreign firms representing over 20 countries currently operating in Oakland County.

Not only do foreign companies bring foreign nationals, but many children come to Oakland County from war-torn areas. For example, there is currently an influx of Chaldean immigrants coming from Jordan. In total, there are 75 different language backgrounds represented in the Oakland Schools. The ELI at OCC could be further studied to judge how well it meets the needs of these students. According to Jacqueline Moase-Burke, Consultant, Foreign Language, English as a Second Language and Bilingual Education, Oakland Schools; on average, it takes 5-7 years to learn a second *academic* language. Not only do some foreign students need the time to do this, but many are underprepared in their own language; they may have experienced interrupted schooling due to time in a refugee camp or perhaps their schools were closed. Whatever the case, it only takes six months to three years to learn to speak in a social context, but 5-7 years to learn language well enough to succeed in academics.

Moase-Burke suggests offering a comprehensive language program for foreign students. The program should be more holistic than remedial with less focus on grammar and more integrated writing. According to Moase-Burke, "Foreign students need to learn English for academic purposes and not for getting around on a day to day basis; most of them can already do this." In addition, those students who can survive day to day, believe that they also can adequately pass their classes. These students not only need to be assessed, but they need to understand their assessment so they can better know their strengths and weaknesses. Students need to be assessed based on their reading, writing, speaking and listening skills; this is more holistic than what is now covered by the ASSET test. In other words, the strengths of the students are often neither assessed, nor taken into consideration when developing programs to help them learn. In order to help these students, the College needs to both hire staff who are

trained in dealing with these students and offer staff development college-wide as well, so that all instructors will understand the needs of these students.

In addition to foreign students, the College could benefit by studying its disabled students. How well does the College meet their needs? What more could be done? Are services available to everyone in the county who seeks them?

Conclusion

The "revolving door" philosophy of the 1950s and 60s under which students were admitted and then routinely flunked out if they could not meet the academic standards is no longer acceptable in the 1990s. If this country is to maintain a strong educated citizenry, support for developmental programs both within and external from the institution should be nurtured. The national need for a well-educated labor pool is so great that if our country is to remain economically viable and competitive, every effort is needed to insure that the intellectual resources of our youth are developed. Academic development activities are necessary in order to assist students to meet the necessarily rigorous graduation standards of our institutions. The strength of the nation depends on our ability to equip the broadest spectrum of the population with the knowledge and skills that are required to face the increasing demands of global competition and the increasing demands of our immediate environments.

Not only does the strength of our nation depend on an educated citizenry, but the strength of individuals can be influenced by the College. As OCC is committed to access for all, it must be committed to helping all. The College has many good ideas and some experience with successful programs. However, OCC currently lacks the funding to adequately sustain the programs and to transform the good ideas into actual services. Approximately one-half to one-third of all students' needs are not being met. The College is experiencing a time of fiscal uncertainty and constraint; however, there is no uncertainty about the numbers and needs of the underprepared students who are coming to the College.

Appendix A

Methodology

Information for this report was obtained by an extensive literature search from sources including: Oakland County demographic literature; handbooks, monographs and books on developmental students at the postsecondary level; and national statistics garnered from newspapers and journals. Personal and phone interviews were conducted with college staff, and phone interviews were also conducted with area experts who work with underprepared students and Oakland County demographers and planners. Sources of data include: ASSET reports, Activity Classification Structure Reports, Master Schedules, Office of Institutional Planning & Analysis Staff and Instructional Staff Surveys, Oakland Community College 1993-94 Environmental Scan, reports written by other college staff, and minutes of the Student Academic Success Plan (SASP) Committee meetings.

Formulas used to estimate costs are based on: current faculty and staff salaries (including benefits); prevailing computer and other equipment costs; present workloads and other contract agreements; enrollment data; credit hours/courses; current budgets; and the numbers of students scoring below "College Level" on the ASSET test. "Developmental Courses" are those designated as such by the Michigan Department of Education. This study was undertaken within a generally conservative framework. Where alternative choices were available, the most conservative figures were used. For example, although between 5,642 and 8,237 students each year have scored lower than College Level on at least one section of the ASSET test, estimates are based on 5,000 students.

The costs presented in this study are over and above any money the College is now spending on programs and services for underprepared students.

Bibliography

- Bloom, B. S. (1956). Taxonomy of educational objectives: The classification of educational goals. New York: Holt, Rinehart & Winston.
- Bloom, B. S. (1971). Master learning. In Master Learning: Theory and Practice, edited by J.H. Block. New York: Holt, Rinehart & Winston.
- Congressional Record. (May, 7, 1992). p. 6412-13. Daily Edition.
- Education Week. (May 22, 1991) p. 11.
- Hashway, Robert, M. (Ed.). (1990). Handbook of developmental education. New York: Praeger.
- Mayer, Lynita D. (1990). A comprehensive developmental education program for the underprepared college freshman. An unpublished Doctoral Dissertation, Loma Linda University.
- National Center for Education Statistics. (May 1991). College-level remedial education in the Fall of 1989. (Office of Educational Research and Improvement; Data Series FRSS-38). U. S. Department of Education.
- Oakland Community College (June, 1993). Oakland Community College 1993-94 Environmental scan. Key trends affecting community college education.
- Office of Institutional Planning & Analysis. (March, 1993). Oakland Community College 1992 instructional staff survey.
- Office of Institutional Planning & Analysis (July, 1993). Oakland Community College 1993 adjunct instructional staff survey.
- Rose, Mike. (1989). Lives on the boundary: The struggles and achievements of America's underprepared. New York: The Free Press, A Division of Macmillan, Inc.
- Smith, Mary Ann. (1990). Teacher Excellence. Report given at the Recruitment & Training Hearing. Washington D.C.
- Speilberger, C. D. & Weitz, H. (1964). Improving the academic performance of anxious college freshmen. Psychological monographs. 78. Number 14.
- Tomlinson, Louise, M. (1989). Postsecondary developmental programs: A traditional agenda with new imperatives. ASHE-ERIC Higher Education Reports, no. 3.
- Wright, D. A. & Cahalan, M. W. (1985). Remedial/Developmental Studies in institutions of higher education: Policies and practices. Rockville, Md: Westat Research.

Supplemental References

Boose, Kim. Faculty, Individualized Instruction Center, Auburn Hills Campus. Phone Interview.

Green-Smith, Paula. Associate Dean, Student Support Office, Auburn Hills Campus. Phone Interview.

Habib, Helen. ELI Specialist, English Language Institute. Orchard Ridge Campus. Phone Interview.

Hara, Ed. Faculty, English Department, Orchard Ridge Campus. Personal Interview.

Harrison, Carolyn. Associate Dean of Academic and Student Services, Royal Oak Campus. Phone Interview.

Haye, Dave. Oakland County Planning. Phone Interview.

Mason, Jamie. Associate Dean of Academic and Student Services, Orchard Ridge Campus. Phone Interview.

McGee, Mary Ann. Dean of Academic and Student Services, Orchard Ridge Campus. Personal Interview.

Moase-Burke, Jacqueline. Consultant, Foreign Language, English as a Second Language, and Bilingual Education, Oakland Schools. Phone Interview.

Monteith, Mary, K. Faculty, Individualized Instruction Center, Orchard Ridge Campus. Phone Interview.

Murdock, Susan. Dean of Academic and Student Services, Instructional Services, Highland Lakes Campus. Phone Interview.

Sam, David. Enrollment Services Coordinator, Auburn Hills. Phone Interview.

Schechter, Rhonda. Michigan Department of Education, Office of Higher Education. Phone Interview.

Shawver, Dave. ASSET Research Analyst. Phone Interview.

Zapinski, Roger. Counselor, Orchard Ridge Campus. Phone Interview.