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# OAKLAND COMMUNITY COLLEGE 1996 OUTCOMES ASSESSMENT COHORT TWO INITIAL STUDY 

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## INTRODUCTION

This cohort study constitutes an essential part of the Student Outcomes Assessment model submitted to the North Central Association by the task force for the Academic Senate of Oakland Community College. It was determined that as part of its Student Outcomes Assessment the college would use a longitudinal model to track a particular cohort of students throughout their experience at OCC. Information gathered by this method allows for a clear picture of a student's progression from admission through departure, transfer, or graduation. Assessment of student opinion and progress will be made on a regular basis to determine if these students have met intended outcomes described by the Student Outcomes Assessment Committee.

This report summarizes data collected at the first assessment point of the second cohort. These students entered the college for the first time in Fall 1996. The report includes information on gender, ethnicity and age, as well as parents' educational background, socioeconomic status and the high school attended by the student. This background information will be used in analysis later in the study in the evaluation of factors influencing student success.

## METHODOLOGY:

Using statistical methods (Van Marte and Gilbreath, 1980; Narins, 1994), we estimated that a final cohort size of 385 would constitute a valid sample. Allowing for expected attrition, we selected a beginning cohort of 800 students.

In September 1996, we mailed a letter to all students in the selected cohort, explaining the project and asking for their cooperation. Over the course of the next two weeks, we attempted to contact all 800 students by phone. After repeated attempts at contact, we were able to obtain 680 completed surveys. This represents a response rate of $85 \%$, which is comparable to the $82 \%$ response rate obtained in the initial survey of the 1994 cohort. As we found in the first cohort study, the majority of those students we could not contact represented the characteristics of a young and transient population: disconnected phone numbers and inaccurate or outdated addresses.

It should be noted that those students who were not contacted as part of the initial survey will remain a part of the cohort, and may be contacted at future measurement points.

## ANALYSIS:

## Demographic Data

## Gender

Slightly over half ( $53 \%$ ) of the respondents were female while $47 \%$ were male. This gender distribution is the same as the one obtained in the initial survey of cohort one. Collegewide, $60 \%$ of Fall 1996 students were female and $40 \%$ were male. (Source: Fall 1996 Enrollment Trends Report)

## Ethnicity

Just over three quarters (77\%) of students responding to the survey reported their ethnicity as white. Thirteen percent classified themselves as African-American, while $4 \%$ reported themselves as Asian. Two percent reported ethnicity as Hispanic, $1 \%$ reported American Indian, and the remaining $3 \%$ reported "other". These figures are comparable to collegewide enrollments as reported in the 1996 Student and Financial Databook.

Table One
Ethnicity

| Ethnicity | 1996 Cohort | Fall 1996 Students |
| :--- | :--- | :--- |
| White | $77 \%$ | $n=?$ |
| African American | $13 \%$ | $80 \%$ |
| Asian | $4 \%$ | $13 \%$ |
| Hispanic | $2 \%$ | $4 \%$ |
| Native American | $1 \%$ | $2 \%$ |

## Age

The mean age of all respondents is 22.4 years, which is slightly younger than the mean age of the first cohort at the initial measurement point. When compared to the mean age of all OCC students in Fall 1996 (27.9), the cohort is substantially younger. In order to analyze survey data by age, we recoded the data into the following four categories.

Table Two
Age Categories

| Age Category | Percent |
| :--- | :--- |
| Traditional (18-21) | $74 \% \quad n=?$ |
| Generation X (22-31) | $13 \%$ |
| Baby Boomers (32-54) | $12 \%$ |
| Seniors (55+) | $1 \%$ |

This breakdown of age by category is comparable to that of the first cohort, suggesting that we are contacting a similar group in this second study. As was noted in the first study, the small size of the seniors group limits its value for analysis. For this reason, the primary focus of the study will be on the first three groups.

## ASSET Scores

ASSET score data was compiled for the cohort group from the reading, writing, numerical skills, elementary and intermediate algebra tests.

Scores on the reading test range from 26 to 53 , with a calculated mean of 40.9 . This is slightly higher than the mean reported for the first cohort. Scores on the writing (language use) test range from 27 to 54 , with a mean of 41.3 , which is also slightly higher than the mean reported for the first cohort.

Scores on the numeric test range from 17 to 54 , with a mean of 37.3 . This figure is slightly lower than the mean numeric score for the first cohort. Scores of students taking the elementary algebra test ranged from 23 to 55 with a mean of 37.2 , while those taking the intermediate algebra test had scores ranging from 23 to 52 with a mean of 36.9 .

Table Three
ASSET Scores

| Test | Mean | Minimum | Maximum | $N$ |
| :--- | :--- | :--- | :--- | :--- |
| Reading | 40.9 | 26 | 53 | 452 |
| Writing | 41.3 | 27 | 54 | 452 |
| Numeric skills | 37.3 | 17 | 54 | 290 |
| Elem. algebra | 37.2 | 23 | 55 | 84 |
| Int. algebra | 36.9 | 23 | 52 | 79 |

Currently, placement into reading and writing courses utilizes a combined score. If we calculate a combined score, the mean is 82.2 , which is considered below college level. Table Four details the distribution of combined scores by level. As the table indicates, slightly more than one third ( $37 \%$ ) of respondents place at college level, while almost two thirds ( $63 \%$ ) place below college level. These findings are consistent with the those of the Literacy Committee, which reported that $40 \%$ of Fall 1996 first time students who took ASSET placed at the college level.

Table Four
Placement Levels

| Level | Score range | Percent |
| :--- | :--- | :--- |
| Below I | Below 51 | $0 \%$ |
| I | $52-74$ | $23 \%$ |
| II | $75-85$ | $40 \%$ |
| III (College level) | $86-107$ | $37 \%$ |

Crosstabulation of combined ASSET scores and demographic variables suggests no significant differences based on gender. However, we found that minority students are significantly less likely to score at college level. Just one fifth ( $20 \%$ ) of minority students placed at college level, while $41 \%$ of white students received combined scores which placed them into college level courses. At the lowest end of the range, the percentages reversed, with $19 \%$ of white students and $40 \%$ of minority students placing into Level I.

## Educational Attainment of Parents

Nearly one-third (32\%) of respondents reported the highest level of education achieved by their father as a high school diploma. Slightly more (38\%) reported a high school diploma as the highest level achieved by their mother. Twenty-seven percent indicated that their father had a bachelor's degree or higher, while $22 \%$ reported their mother had earned at least a bachelor's degree.

Table Five
Parental Educational Attainment

| Highest Level Achieved | Mother | Father |
| :--- | :--- | :--- |
| Did not complete high school | $9 \%$ | $8 \%$ |
| High school diploma | $38 \%$ | $32 \%$ |
| Some college (no degree) | $15 \%$ | $14 \%$ |
| Two-year college degree | $10 \%$ | $9 \%$ |
| Bachelor's degree | $14 \%$ | $17 \%$ |
| Master's/professional degree | $8 \%$ | $10 \%$ |
| Uncertain | $5 \%$ | $9 \%$ |

## Household Income

Respondents were also asked to state their total household income. As was found in the initial survey of the 1994 cohort, the largest group of respondents ( $31 \%$ ) did not know the answer to this question. Of those who provided a response, $21 \%$ reported total household income of below $\$ 30,000$ per year. A smaller number ( $12 \%$ ) reported total income of more than $\$ 90,000$.

Table Six
Total Household Income

| Total Income | Percent |
| :--- | :--- |
| Less than 15,000 | $9 \%$ |
| $15-29,999$ | $12 \%$ |
| $30-44,999$ | $10 \%$ |
| $45-59,999$ | $11 \%$ |
| $60-74,999$ | $8 \%$ |
| $75-89,999$ | $7 \%$ |
| 90,000 or higher | $12 \%$ |
| Uncertain | $31 \%$ |

## SURVEY FINDINGS

## Reason for Attending OCC:

When asked about the most important reason for their attendance at OCC, the majority of respondents ( $52 \%$ ) indicated that they are at the college to gain transfer credits. This was also the most commonly noted reason among Cohort One respondents at the initial measurement point. After gaining transfer credits, the second most common response among both cohorts was to gain an associate degree. Responses from both groups are displayed below.

Table Seven
Reasons for Attendance

| Reason | 1994 Cohort | 1996 Cohort | 97 |
| :--- | :--- | :--- | :---: |
| Gain transfer credits | $46 \%$ | $52 \%$ | 54 |
| Gain an associate degree | $25 \%$ | $20 \%$ | 31 |
| Gain skills for new career | $10 \%$ | $10 \%$ | 6 |
| Personal enrichment | $7 \%$ | $7 \%$ | 4 |
| To gain a certificate | $4 \%$ | $0 \%$ | 3 |
| Upgrade existing job skills | $6 \%$ | $6 \%$ | 0,4 |
| Other | $3 \%$ | $4 \%$ |  |

Analysis by age group reveals some differences, most of them similar to those noted in the analysis of cohort one data. While traditional aged and Generation X students (respondents 1831) are most likely to attend the college to gain transfer credits or an associate degree, Baby Boomers are more likely to report they are attending for work-related reasons or for personal enrichment. Because our cohort included only 5 seniors, we are limited in our ability to draw conclusions from this data, although it appears that personal enrichment, rather than gaining college credits, is more important to this small group.

## Table Eight

Reasons for Attendance by Age Group

| Reason | Traditional | Generation X | Baby Boomers | Seniors |
| :--- | :--- | :--- | :--- | :--- |
| Certificate | $1 \%$ | $2 \%$ | $2 \%$ | $0 \%$ |
| Transfer | $62 \%$ | $31 \%$ | $13 \%$ | $0 \%$ |
| Associate degree | $20 \%$ | $24 \%$ | $16 \%$ | $20 \%$ |
| Job skills for <br> new career | $7 \%$ | $12 \%$ | $24 \%$ | $0 \%$ |
| Upgrade <br> existing job skill | $3 \%$ | $14 \%$ | $18 \%$ | $0 \%$ |
| Personal <br> enrichment | $4 \%$ | $12 \%$ | $21 \%$ | $40 \%$ |
| Other | $3 \%$ | $3 \%$ | $50 \%$ |  |

Analysis of crosstabulated data suggests that female respondents are significantly more likely than males to report that they are attending OCC to obtain an associate degree ( $56 \%$ vs. $48 \%$ ), while males are significantly more likely than females to report that they intend to gain credits for transfer ( $23 \%$ vs. $17 \%$ ). There are no significant differences between minority and nonminority students on this variable.


In analyzing the educational levels of respondents' parents, we found that students whose parents--either mother or father--had at least some college experience were more likely to report an intention to gain transfer credits, while students whose parents had achieved a high school diploma or less were more likely to report an intention to gain an associate degree.

## Length of Stay

Nearly one third ( $30 \%$ ) of respondents indicated that they intend to stay at the college for six terms, suggesting a stay of at least two calendar years. Crosstab analysis suggest that while there $\quad$ ) are no significant differences in length of stay by gender, minority students are more likely to report an intention to stay four terms or less ( $52 \% \mathrm{vs} 38 \%$ ) while nonminority students are more likely to report an intention to stay longer. In addition, traditional and generation X students are more likely to report an intention to stay six terms, which is consistent with the intention to earn an associate degree or transfer credits.

Table Nine
Expected Length of Stay by Age

| Length | Traditional | Generation $X$ | Baby Boomers | Seniors |
| :--- | :--- | :--- | :--- | :--- |
| One term | $6 \%$ | $16 \%$ | $7 \%$ | $20 \%$ |
| Two terms | $14 \%$ | $9 \%$ | $18 \%$ | $20 \%$ |
| Three terms | $13 \%$ | $10 \%$ | $5 \%$ | $0 \%$ |
| Four terms | $10 \%$ | $10 \%$ | $6 \%$ | $0 \%$ |
| Five terms | $3 \%$ | $2 \%$ | $1 \%$ | $20 \%$ |
| Six terms | $34 \%$ | $21 \%$ | $16 \%$ | $0 \%$ |
| More than six | $14 \%$ | $20 \%$ | $28 \%$ | $0 \%$ |
| Other | $8 \%$ | $12 \%$ | $18 \%$ | $40 \%$ |

Of those planning to stay at OCC longer than one semester, the majority (84\%) intend to enroll continuously, taking no breaks between semesters. Crosstab analysis indicates that there are no significant gender or race differences in intention to enroll continuously or to take a break between semesters.

## Credits Intended

One quarter ( $25 \%$ ) of respondents intend to take 62 credits at OCC, which is consistent with the intention to earn an associate degree or to obtain transfer credits. An additional $7 \%$ of respondents intend to earn 30 credits. The remaining responses range from 1 to over 100.

## Longterm Educational Plans

As was also the true of the 1994 cohort, more than three quarters ( $84 \%$ ) of respondents indicated that they plan to continue their education after leaving OCC. More than half ( $52 \%$ ) of these respondents plan to earn a bachelor's degree, while an additional one-third ( $35 \%$ ) intend to earn a professional or master's degree. Crosstab analysis indicates that there are no significant race or gender differences in longterm educational goals.

Over two-thirds ( $67 \%$ ) of respondents are "very sure" about their longterm educational goals. While there are no significant gender differences, crosstabs suggest that minority students are more likely than nonminority students ( $76 \%$ vs $61 \%$ ) to say they are "very sure" about their goals. This finding is consistent with those from the 1994 cohort.

Additional analysis indicates that age and the intention to continue education are negatively correlated ( -.36 ), suggesting that the older the respondent, the less likely that he or she will report an intention to pursue education beyond OCC. This is consistent with other findings which suggest that older respondents are less likely to report intentions to earn an OCC degree or to obtain transfer credits. The following table displays intention to continue education by age group:

Table Ten
Intention to Continue Education by Age Group

| Plan | Traditional | Generation $X$ | Baby Boomers | Seniors |
| :--- | :--- | :--- | :--- | :--- |
| None beyond <br> OCC | $10 \%$ | $21 \%$ | $49 \%$ | $60 \%$ |
| Further plans <br> beyond OCC | $90 \%$ | $79 \%$ | $51 \%$ | $40 \%$ |

## Transfer Intentions

The majority ( $93 \%$ ) of respondents intending to further their education report that they intend to transfer to another college or university after leaving OCC. Of those intending to transfer, most ( $89 \%$ ) report they plan to attend a four-year college or university. It is interesting to note that this is a larger number of students than those who reported that their primary reason for attending OCC was to gain transfer credits. This may suggest that short-term reasons for attending the college may differ from longterm goals to transfer to another institution. Further analysis finds no significant race or gender differences in intention to transfer. However, we found that younger students are the most likely to state an intention to transfer, a finding consistent with other information obtained about traditional and Generation X students. Please note that there are only two senior respondents represented in this data; percentages are therefore not meaningful.

Table Eleven
Intent to Transfer

| Intent | Traditional | Generation $X$ | Baby Boomers | Seniors |
| :--- | :--- | :--- | :--- | :--- |
| Yes | $94 \%$ | $86 \%$ | $76 \%$ | $50 \%$ |
| No | $4 \%$ | $14 \%$ | $24 \%$ | $50 \%$ |

## Longterm Career Goals

Just under two-thirds ( $62 \%$ ) of respondents indicated that their attendance at OCC was related to longterm career goals. In the initial survey of the 1994 cohort, more respondents (72\%) reported a relationship between attending the college and career goals. When asked to specify how their attendance at the college and their career goals were related, over half (55\%) of 1996 respondents stated that they intended to gain skills for entry into a first career, while an additional $19 \%$ stated that they planned to gain skills to enter a different career field.

Table Twelve
OCC Attendance and Longterm Career Goals

| Career-related reason for attending OCC | Percent |
| :--- | :--- |
| Gain skills to enter first career position | $55 \%$ |
| Gain skills to enter a different career | $19 \%$ |
| Gain new skills for use in current career | $10 \%$ |
| Gain new skills for a promotion in career | $8 \%$ |
| Satisfy employer's training requirements | $2 \%$ |
| Other reason | $6 \%$ |

Additional analysis suggests that the youngest respondents (traditional age and Generation X Students) are most likely to report they are attending to gain skills for a first career position, older students (Baby Boomers) are more likely to report they want skills for a career change or need new skills for their current career.

Table Thirteen
Career-related Attendance and Age

| Career-related reason | Traditional | Generation <br> $X$ | Baby <br> Boomers | Seniors |
| :--- | :--- | :--- | :--- | :--- |
| Gain skills to enter first <br> career position | $68 \%$ | $31 \%$ | $19 \%$ | $0 \%$ |
| Gain skills to enter a <br> different career | $13 \%$ | $23 \%$ | $38 \%$ | $0 \%$ |
| Gain new skills for use in <br> current career | $6 \%$ | $21 \%$ | $19 \%$ | $0 \%$ |
| Gain new skills for a <br> promotion in career | $6 \%$ | $16 \%$ | $14 \%$ | $0 \%$ |
| Satisfy employer's <br> training requirements | $1 \%$ | $4 \%$ | $2 \%$ | $0 \%$ |
| Other reason | $6 \%$ | $4 \%$ | $8 \%$ | $0 \%$ |

When asked about the career field they plan to enter after leaving OCC, largest group (15\%) is undecided. This was also the case in the initial survey of the 1994 cohort, and, as was noted in that year's report, may represent students who intend to transfer to a four-year college after leaving OCC, but are as yet undecided about longterm career goals.

Table Fourteen
Career Goals

| Goal | Number | Goal | Number |
| :--- | :--- | :--- | :--- |
| Accountant | 20 | Human resources | 1 |
| Entertainer | 7 | Interior decorator | 1 |
| Architect | 9 | Lab technician | 18 |
| Artist | 4 | Law enforcement | 30 |
| Clerical | 4 | Lawyer | 5 |
| Business executive | 60 | Military | 1 |
| Business owner | 8 | Nurse | 27 |
| Salesperson | 2 | Pharmacist | 3 |
| Child care provider | 4 | Physician | 12 |
| Communications | 13 | Retail | 3 |
| Computer <br> programmer | 46 | Researcher | 2 |
| Counselor | 12 | Skilled trades | 18 |
| Dentist | 2 | Therapist | 22 |
| Educator | 59 | Veterinarian | 7 |
| Engineer | 40 | Writer | 6 |
| Computer aided <br> design | 12 | Other | 91 |
| Food service | 3 | Undecided | 102 |
| Homemaker | 1 | 22 |  |

## Licensure Examinations

Nearly one-third ( $29 \%$ ) of respondents reported that they are uncertain whether they will take any state licensing or professional examinations related to their OCC coursework, while almost one-half ( $44 \%$ ) do not have plans take such exams. This may reflect a lack of knowledge of licensing requirements, or an uncertainty about future plans at this early stage.

## Self-assessment of Academic Ability

Respondents were asked to state their level of agreement with a series of statements regarding current academic ability. This information will be used as a benchmark to measure selfassessment of progress later in the cohort study. Respondents were most likely to agree with the statements "I am able to learn independently", "I am able to attain my personal goals" and "I am able to communicate effectively". They were least likely to agree that "I am aware of world issues and problems", "I am able to understand and apply mathematical concepts", and "I can understand and apply scientific method."

| Table Fifteen |
| :--- |
| Assessment of Academic Ability |
| Academic Area Strongly Agree/Agree Strongly Disagree/Disagree  <br> Learn independently $94 \%$ $2 \%$  <br> Communicate effectively $92 \%$ $3 \%$  <br> Solve complex problems $76 \%$ $8 \%$  <br> Attain personal goals $95 \%$ $14 \%$  <br> Understand/apply <br> mathematical concepts $67 \%$ $2 \%$  <br> Effective interpersonal skills $91 \%$ $10 \%$  <br> Aware of world issues and <br> problems $73 \%$ $8 \%$  <br> Use technology effectively $76 \%$ $13 \%$  <br> Understand/apply scientific <br> method $65 \%$   |

Further analysis suggests several differences between male and female respondents. Males are significantly more likely to strongly agree with statements related to understanding mathematical concepts and the scientific method as well as those related to use of technology and understanding of world issues and problems. Crosstabs indicated that there are no significant racial differences in response patterns.

## CONCLUSION

This initial study of the second cohort indicates a great deal of similarity with the first cohort. On both demographic and survey variables, the two groups are comparable. Additionally, the self-assessment of academic ability data collected from the second cohort is remarkably like the data collected from the first cohort at the second measurement point, suggesting that both groups may have started with similar opinions regarding their academic ability in specific areas.

The second cohort study is limited by many of the same factors as was the first cohort study. Difficulty reaching students by phone resulted in an $85 \%$ response rate when ideally, all students selected for the cohort would have been surveyed. Additionally, analysis by subgroup-particularly the seniors--was limited by the small sample size.

Many of the same age, gender and ethnicity differences reported in the first cohort were also found in the second. Younger students (categorized as Traditional and Generation X) are more likely to report that they are attending the college in order to earn an associate degree or transfer credits, while older students are likely to say that their attendance is career-related. In addition, younger students are more likely to report an intention to continue their education beyond OCC.

Women are more likely to say they are attending the college to earn an associate degree, while men are more likely to report an intention to earn transfer credits. Other gender differences appeared in the self assessment of academic ability data. Men were more likely to strongly agree that they understand mathematical concepts and the scientific method. They are also more likely to strongly agree that they understand world issues and problems and can use technology effectively.

Finally, minority students are more likely to score below college level on ASSET tests, and are more likely to report an intention to stay at the college four terms or less. While there are no significant differences between minority and nonminority students with regard to longterm educational goals, minority students are more likely to be "very sure" about their educational goals.

