

# Community College Impact Study Summary of Findings

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## Purpose of the Study

To assess the impact of Community College on outcomes of CalWORKs students in comparison to Non-CalWORKs students. Specifically we assess: (1) Educational Outcomes, (2) Employment and Earnings Outcomes, and (3) Financial Aid Utilization and Impact.

## Data & Sample

Sample: CCCCCO Management Information Systems (MIS) student record database. 1,700,743 students total: 82,460 CalWORKs students and 1,618,283 Non-CalWORKs (unaided) students. The sample is limited to those students between the ages of 22-50 during enrollment period to ensure a working age population and head of household on CalWORKs cases. Students who exited in the academic years 1999-2000, 2000-2001, 2001-2002 are pooled together.

Entry & Exit: Entry is defined as not having been enrolled at a community college for two consecutive primary terms (fall or spring) prior to entry term. Exit is defined as not returning to college for at least three consecutive primary terms.

CalWORKs & Non-CalWORKs Students: CalWORKs Students are those with a CDSS CalWORKs cash aid code or those in the CCC CalWORKs program during the last year in school. Non-CalWORKs students are those without any CDSS aid code (CalWORKs or otherwise) assigned the last year in school and not in the CCC CalWORKs program.

Employment and Earnings Data: Employment and earnings data are generated from a EDD UI Quarterly Wage Data match. The study uses wages two years prior to entry, the last year in college prior to exit, and up through four years after college exit. Due to data restrictions, 1999-2000 cohort has earnings up to 4 years out, 2000-2001 has earnings up to 3 years out, 2001-2002 has earnings up to 2 years out. A student is employed in a year if his or her wage is greater than zero in that year. Mean Annual Earnings are adjusted to the 2000-2001 CPI.

4 Year College Data: Data Match with UC, CSU, NSC (National Student Clearinghouse). Contains both public and private, California and out of state schools.

## Key Definitions

Educational Outcomes - Attainment: Any award conferred or the number of credit units or non-credit hours completed between entry and exit. Students might be enrolled or receive an award outside the window of entry/exit, but we do not include these awards or credits as outcomes. Both credit and non-credit awards included in the analysis. Very few non-credit awards were given out during the period of the study.

Educational Outcomes - Field: The program field that an award was given in prior to college exit. Field does not necessarily indicate the industry of subsequent employment. Due to sample size limitations we only study the major field, not subfields/programs. 85% of students fall into these categories.

Definitions of major fields taken from Topcode Taxonomy, 2004, 6th edition:

Engineering and Industrial Technologies: “Instructional programs in the mathematical and natural sciences utilizing the materials and forces of nature for the benefit of human beings. Instructional programs in technology that require the application of scientific and engineering knowledge, methods, and technical skills in support of engineers and other professionals.”

Health: “Instructional programs that study the theories and techniques for the restoration or preservation of mental and physical health through the use of drugs, surgical procedures, manipulations, or other curative or remedial methods.”

Business and Management: “Instructional programs that prepare individuals for a variety of activities in planning, organizing, directing, and managing all business office systems and procedures.”

Family and Consumer Sciences: “Instructional programs that study the relationship between the physical, social, emotional and intellectual environment in and of the home and family and the development of individuals, including programs in child development, family studies, gerontology, fashion, interior design and merchandising, consumer services, foods and nutrition, culinary arts, and hospitality.”

Public and Protective Services: “Instructional programs in the theories and techniques of the formulation, implementation and evaluation of public policies and services, including public safety occupations. Includes developing and improving competencies in the management and operation of government agencies.”

Interdisciplinary Studies: “Instructional programs that include those subject field designations which involve more than one major discipline without primary concentration in any one area. Also, courses in guidance, student success, and other categories that do not fall into any other discipline.”

Educational Outcomes - Transfer: Students that enrolled in a 4-year college or university within two years of exiting community college. Not necessarily official transfer students per-say.

Financial Aid – Rates: We define a student as receiving financial aid if they have received any financial aid at any point during the entire time they were enrolled (entry to exit). There are 5 broad financial aid groupings: BOG waivers, Grants, Loans, Scholarships, Work Study (all Work Study combined - CalWORKs, Federal, State).

Financial Aid - Amount: Being in college longer will typically generate higher total amounts of aid received. Therefore, to compare students we calculate the average aid amount per term, which is the total amount of aid received across all the terms the student was in college divided by the total number of terms the student was enrolled.

## **Methodology**

Throughout the analysis we compare the outcomes of (1) Different groups of students within the CalWORKs student population, (2) CalWORKs and Non-CalWORKs student groups.

CalWORKs students enter college with different basic characteristics than Non-CalWORKs students. CalWORKs students are more likely to be female, non-white, have no high school degree, and have lower pre-college earnings. They also have a slightly different age distribution and educational goal at entry. Therefore it is important to control for these characteristics when comparing outcomes between CalWORKs and Non-CalWORKs students in order to isolate the effect of the CalWORKs experience.

## Matching

In both types of comparisons (between CalWORKs and Non-CalWORKs students and within the CalWORKs student population), comparison groups are matched on 6 demographic characteristics to ensure more similar populations are compared on outcomes. These are:

(1) gender, (2) education at entry, (3) age, (4) race/ethnicity, (5) academic goal at entry, and (6) two years of pre-college wages. For some comparisons we add in other matching variables in addition to these basic 6, such as type of award or field of study.

The matches are not perfect. There are some key variables that we could not include in the match due to data limitations - such as number of children in the household and marital status. The categories within each matching characteristic must be relatively broad in order to find an adequate number of matches.

**\*\*\*All presented results are for matched comparison groups unless otherwise indicated.\*\*\***

## **I. Educational Outcomes**

### **Key Findings:**

#### Awards:

- The vast majority of CalWORKs and Non-CalWORKs students exit college without having completed an award during the enrollment period under observation (over 90%).

#### Credit Coursework:

- CalWORKs and Non-CalWORKs students have similar percentages exiting with more than 12 units (CalWORKs have slight advantage).
- CalWORKs students are more likely to exit without completing any coursework or with only non-credit coursework; Non-CalWORKs are likely to have taken a few credits prior to exit.

#### Non-Credit Coursework:

- CalWORKs students are more likely than Non-CalWORKs students to have taken some non-credit coursework prior to exit.
- Of those with some non-credit, CalWORKs students are more likely than Non-CalWORKs students to have taken over 200 non-credit hours prior to exit.

#### Among Award Holders:

- CalWORKs students are as likely as Non-CalWORKs students to get AS degrees but are less likely to earn an AA and more likely to receive a 30-59 unit certificate.
- CalWORKs students are more likely than Non-CalWORKs students to receive awards in Consumer Education and Business.

#### Transfer:

- CalWORKs students are less likely than Non-CalWORKs students to have an initial goal of transfer and are two times less likely to enroll in a four year college within two years of exit.
- Among students who enroll in a 4 year college, CalWORKs students are more likely than Non-CalWORKs students to have completed an award at exit.

## **Policy Implications**

### Strengthen Individual Courses:

- Students rely on coursework more than an award when entering the labor market.
- Focus on getting students into coursework that will be most attractive to employers.

### Investigate Tracking of CalWORKs Students into Consumer Ed and Business

- Even after matching, CalWORKs students are more likely to enter Consumer Education and Business fields than Non-CalWORKs students.
- Perhaps take steps to encourage non-traditional field choices for CalWORKs students.

### If Transfer is Considered to be a Desirable Outcome:

- After matching, CalWORKs students still lag behind Non-CalWORKs students in percentage desiring transfer and percentage enrolling in a four year school after exit.

### Improve Transfer Rates for CalWORKs Students by:

- Educating students about transfer benefits and requirements.
- Encouraging students to consider transfer as an option at time of entry.

### Evaluate Necessity of Obtaining an Award Prior to Transfer:

- Prior award may delay transfer to a four-year program.
- Do CalWORKs students need award-level coursework to become transfer-ready? Are pre-transfer awards beneficial for other reasons?

## **II. Employment and Earnings**

### **Key Findings: For CalWORKs Students Only**

#### Impact of Non-Credit:

- Students with only non-credit coursework see a limited employment and earnings payoff over students who exited without completing any coursework.

#### Impact of Short Certificate:

- Short certificates provide higher employment rates but similar earnings as credit coursework without an award.

#### Impact of Medium Length Certificate:

- Medium length certificates yield equivalent employment rates as shorter certificates but produce substantially higher earnings.

#### Impact of Associate Level Degree:

- The AS degree brings a substantially higher employment and earnings payoff than a 30-59 unit certificate.

#### Impact of Field:

- The Health field has a substantially higher employment and earnings payoff than all other major fields of study.

## **Policy Implications: For CalWORKs Students Only**

### Non-Credit Coursework is Not Enough:

- Non-Credit does not lead directly to increased employment and earnings.
- But may provide basic skills training and a base for credit coursework.

### Obtain Short Certificates Over Credit-Only:

- Short-term certificates improve likelihood of employment more than credit coursework without award, even after match.
- Awards with at least 30-59 unit requirements significantly increase earnings potential.

### Obtain Associate Level Degrees over 30-59 Certs:

- AS degrees or 60+ unit certificates have higher payoffs.
- Encourage students to stretch for an AS degree or 60+ unit certificate.

### Encourage Health Fields, Higher Wage Job Placement:

- Students with awards in Health fields see higher payoffs in post-college employment than students exiting with awards in other fields of study.
- Improve job placement efforts in other fields to support higher wages rather than easy job placement (e.g. Business has high employment but low wages).

## **Key Findings: CalWORKs vs. Non-CalWORKs**

### Employment:

- CalWORKs students have higher employment rates than matched Non-CalWORKs students across all fields of study.

### Earnings Among Employed:

- Employed CalWORKs students have substantially lower earnings than employed Non-CalWORKs students across all fields of study, even after matching background.

### Earnings Among All:

- Among all students (employed and unemployed) earnings of CalWORKs converge with or surpass Non-CalWORKs in all fields with exception of Public Service.

### Impact of Any Award:

- CalWORKs students see a higher employment and earnings payoff to receiving any award than Non-CalWORKs students.

### Impact of Associate:

- CalWORKs students see a higher employment and earnings payoff to receiving an Associate level degree than Non-CalWORKs students.

## **Policy Implications: CalWORKs vs. Non-CalWORKs**

### Encourage Associate over Certificate:

- CalWORKs students benefit more from Associate-level awards than the general population attending college.
- Encourage longer term programs for CalWORKs recipients over shorter programs.

#### Evaluate CalWORKs Job Placement Rates in Non-Traditional Fields:

- CalWORKs grads may be employed at lower rates in non-traditional fields.
- Investigate how to achieve job placement parity with Non-CalWORKs students.

#### Evaluate CalWORKs Job Placement to Improve Earnings:

- Employed CalWORKs students have lower earnings than employed Non-CalWORKs peers.
- Investigate the earnings disparity in Health, Engineering and Public Service in particular.
- Examine how job placement programs might help achieve parity.

### **III. Financial Aid Utilization and Impact**

#### **Key Findings: Financial Aid Utilization**

##### Overall Rates and Amounts:

- CalWORKs students are more likely to receive financial aid and higher amounts of aid than Non-CalWORKs students, even after matching on background (including earnings prior to entry).

##### Demographic Differences:

- Among the CalWORKs population, men and Hispanics may have lower uptake than women and non-Hispanic Whites.

##### Amount of Credit:

- Higher credit students are more likely to receive financial aid than lower credit students, even after matching on background characteristics and time in school.

##### Credit Status:

- Non-credit students are less likely to receive financial aid than students who take at least some credit coursework.
- Students who earn a mix of credit and non-credit coursework receive higher financial aid awards than credit-only students.

#### **Policy Implications: Financial Aid Utilization**

##### Financial Aid Programs Reach Many CalWORKs Students:

- CalWORKs students receive more financial aid than matched Non-CalWORKs students.

##### Pay Closer Attention to CalWORKs Men & Hispanics:

- Men receive awards less frequently, and Hispanics receive fewer aid dollars overall.
- Investigate how to better achieve financial aid parity for these two groups.

##### Increase Financial Aid Eligibility & Outreach for Part-Time Students:

- CalWORKs students exiting with fewer credits receive less financial aid.
- Investigate whether this is related to part-time status.
- Examine how to increase eligibility and award amounts for part-time students.
- Increase financial aid outreach to part-time students.

#### Increase Financial Aid Eligibility for Non-Credit Students:

- Non-credit students have lower financial aid uptake and amounts.
- Investigate and eliminate possible eligibility biases against students who take non-credit coursework.

#### **Key Findings: Financial Aid Impact**

##### Financial Aid and Academic Award Completion:

- Students with financial aid are more likely to complete awards. The higher the average financial aid award, the more likely an award is completed.
- Among award holders, students with any financial aid are more likely to complete an Associate over a Certificate. Among award holders, students with higher average financial aid awards are more likely to complete an Associate over Certificate.

##### Work Study and Economic Outcomes:

- Working while in school in general pays off: With educational attainment held constant, CalWORKs students who work while in school have higher employment rates and earnings outcomes than CalWORKs students who do not work while in school.
- Among CalWORKs students who work while in school, there is no clear association between receiving work study and obtaining higher post-college employment rates and earnings.

##### Work Study and Educational Attainment:

- Work Study students have higher educational attainment than students who work while in school but do not receive work study.

#### **Policy Implications: Financial Aid Impact**

##### Encourage Financial Aid Application:

- Students who receive aid are more likely to get longer awards.
- Educate CalWORKs students about benefits of financial aid.
- Support CalWORKs students through the application process.
- Look at interaction between financial aid and CalWORKs grant – make sure financial aid won't impact eligibility for CalWORKs.
- Aim for 100% participation.

##### Increase Work Study Funding and Participation:

- Work Study is associated with greater coursework and award completion.
- Provide more Work Study opportunities to CalWORKs students!