

# **Noncredit** Education in Community Colleges:

## **Students, Enrollment Patterns, and Academic Outcomes**

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# Noncredit Education: Why Do We Care ?

- **Great Demand:**

- More rapid increase for noncredit courses than credit courses
- Mostly associated with vocational and workforce training.
  - Rapid increase in “middle-skill” jobs and strong call for more skilled workforce
  - Advantages of noncredit education in addressing this need

- **Equity Agenda:**

- Provides flexibility to adult learners
- Disproportionately enroll many of the lowest performing and low-income students

# Noncredit Education: What Do We Know?

- **Limited information:**

- Noncredit courses are not included in most state and national postsecondary datasets

- **Previous literature:**

- Mostly anecdotal
- Two-year institutions viewed noncredit education as an important mission
- Noncredit students tend to be older and low SES background
- More likely to be offered in areas that are closely tied to an occupation
- The potential of noncredit education as a pathway to credit programs

# Research Questions

- What is the volume of noncredit course enrollments and how do they vary across different fields of programs?
- What are the characteristics of noncredit students in community colleges and how do these students differ from those enrolled in credit-bearing programs?
- What student-level, course-level, and institution-level characteristics predict successful student completion of noncredit courses?
- To what extent do degree-seeking noncredit students transfer to credit-bearing programs? What student-level and institution-level characteristics predict successful transfer to credit-bearing programs? What are the degree attainment outcomes for degree-seeking noncredit students?

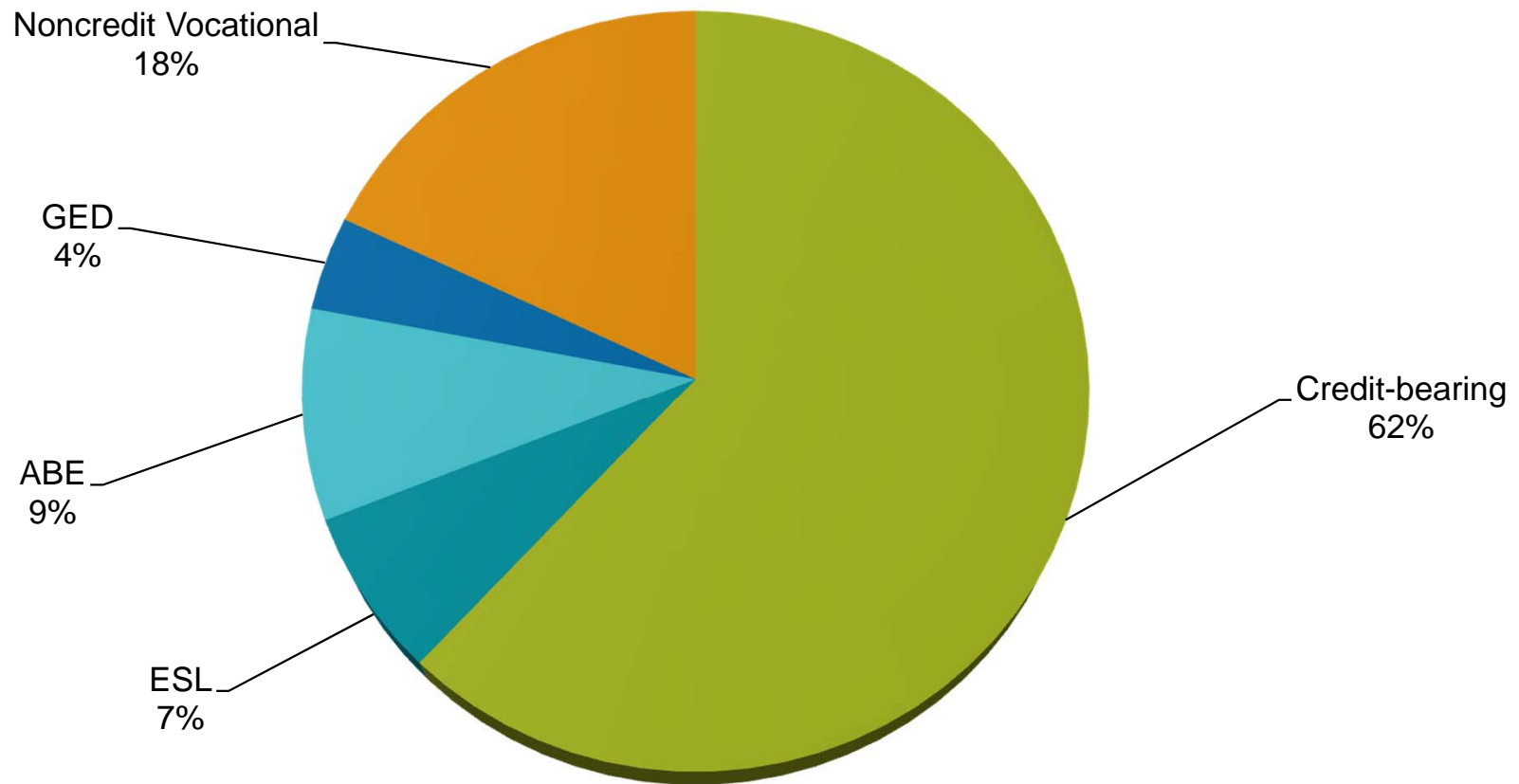
# Data Description

- Data from 9 community colleges in 1 state: student profile, transcript, and degree attainment
  - Demographic attributes including SES
  - Rich information on academic attributes
  - Educational objective
- 60,846 students who first enrolled in 2007
  - Track students progress and outcomes from 2007-08 AY to 2012-13 AY (6 years).
- 397,314 courses, including both credit and noncredit courses
- Merged with IPEDS to retrieve key institution-level characteristics

**Q1:**

# **Volume and Field Distribution of Noncredit Courses**

# Distribution of Course Enrollment



# Course Enrollment by Fields of Study

Fields of Study	Credit-bearing Courses	Noncredit Vocational Courses
Humanities and Social Sciences	33.9%	3.5%
Math and Science	13.4%	0.5%
Information science and communication	7.9%	7.9%
Engineering sciences	2.9%	4.8%
Allied Health	13.5%	11.0%
Nursing	4.4%	2.4%
Mechanics, repair and welding	3.6%	3.2%
Protective Services	3.4%	24.1%
Construction	0.9%	1.7%
Business and marketing	6.3%	11.3%
Education and Childcare	2.2%	1.7%
Transportation	0.2%	0.1%
Cosmetology, culinary, and admin service	0.9%	0.3%
Remedial/General workforce training	6.5%	27.3%
Observation	246,956	71,656



# **Q2:**

# **Characteristics of Noncredit Students**

# Define “Noncredit Students”

- **Assumptions:**

- Distinguish between students who started in noncredit education and credit students mixing course spectrum with noncredit course
- Bureaucratic hurdles for noncredit students to enroll in credit-bearing courses
- Using enrollment patterns during their initial semester in college

- **Definition:**

- Students who exclusively took noncredit courses in their first term of enrollment.
- 70.2% of the students are “noncredit students”

# Who Are “Noncredit Students”?

	Noncredit students overall	Credit students
Age	34.3	22.1
Race		
White	49.5%	65.6%
Black	25.5%	22.4%
Hispanic	15.5%	3.8%
Asian	4.6%	2.1%
Other/Unknown	4.9%	6.1%
Median household income	49,756.8	57,096.6
Earned high school diploma	23.1%	93.0%
Received pell grant	< 0.1%	13.5%
Full time enrolled in first term	0.4%	34.5%
Observation	43,032	17,814

- In general, noncredit students looked less like traditional college students.
- They were older, less academically prepared, and came from lower socioeconomic background
- No financial aid and enrolled part-time

# Enrollment Patterns of Noncredit Students

Most frequent enrollment patterns			
Noncredit Students		Credit Students	
03000000000000000000	22.0%	10000000000000000000	11.8%
30000000000000000000	18.8%	11000000000000000000	9.1%
00300000000000000000	13.0%	01000000000000000000	9.0%
33000000000000000000	4.3%	00100000000000000000	4.3%
03300000000000000000	3.1%	11011000000000000000	2.6%
00330000000000000000	2.7%	11010000000000000000	2.0%

- More than half of noncredit students only enrolled in the community college for 1 semester and never came back
- Uncommon for a student to enroll in both for-credit and noncredit courses simultaneously in one semester

- 0 – Not enrolled in any course
- 1 – enrolled exclusively in credit courses
- 2 – enrolled in both credit and noncredit courses
- 3 – enrolled exclusively in noncredit courses

# Q3: Course Completion

# Completion Rate by Types of Courses

Course Type	Pass Rate
College-Level	77.6%
Dev Ed	65.0%
ESL	59.3%
ABE	53.2%
GED	56.0%
Non Credit Vocational	75.7%

- Low completion rate in ESL, ABE, GED
- Comparable completion rate between college-level and noncredit vocational courses

# Completion Rate by Fields of Study

Program Fields	Credit-Bearing	Noncredit Vocational
Humanities and Social Sciences	75.9%	74.7%
Math and Science	75.1%	85.6%
Information science, communication and	74.2%	72.1%
Engineering sciences	81.9%	85.9%
Allied Health	88.1%	68.9%
Nursing	94.2%	69.5%
Mechanics, repair and welding	85.2%	80.3%
Protective Services	82.0%	91.6%
Construction	80.8%	77.3%
Business and marketing	78.2%	76.3%
Education and Childcare	79.6%	66.7%
Transportation	73.0%	64.4%
Cosmetology, culinary, and admin service	85.6%	88.2%
Other/General workforce training	77.8%	63.7%

- Comparable completion rate in most of the fields
- Lower completion rate in allied health, nursing, education and child care, transportation
- Higher completion rate in math and science, engineering sciences, protective services

# What Predicts Successful Course Completion in **Noncredit** Courses?

- **Method:** Multilevel modeling (students clustered in colleges)
- **Positive student-level predictors:**
  - Socioeconomic background
  - Academic preparation
  - Enrolled full-time in initial semester
- **Positive College-level predictors:**
  - Higher academic FTE expenses
  - More traditional student composition
- **Variation by Fields of Study persisted**



**Q4:**

# **Noncredit Education as a Pathway to Credit Programs**

# Degree Intent Upon Initial Enrollment

	Noncredit students overall	Credit students
Degree or transfer	0.6%	32.2%
Certificate	7.5%	42.9%
Noncredit vocational	49.1%	
Other noncredit	40.9%	
Improve skills or personal enrichment	0.0%	
Unknown	1.9%	24.8%
Observation	43,032	17,814

- The majority of noncredit students enrolled for vocational or basic skill training
- 8% of noncredit students had a degree intent, mostly for a vocational certificate

# Defining “Transfer to Credit Programs”

- No information on the program of enrollment
- Defined based on student course enrolment patterns
- “**Transfer**”: where a noncredit student took at least one credit-bearing course
- “**Successful transfer**”: where a noncredit student took the majority (i.e. more than half) of his courses that count toward a degree by the end of the sixth year since his initial enrollment
- 31.6% transferred and 23.5% successfully transferred

# What Predicts **Transfer**?

- **Method:** Multilevel modeling (students clustered in colleges)
- **Significant institutional-level predictors:**
  - percentage of students aged 18 – 24 (+)
  - percentage of students receiving federal aid (-)
  - cities and suburb vs. rural (+)
  - institutional expenses: institutional support (+), academic support (-)
- **Significant student-level predictors:**
  - Female (+)
  - Age (-)
  - High school diploma (+)
  - Enrolled full-time in the initial term (+): 28 percentage higher

# Degree Outcomes for Degree-seeking Noncredit Students

Highest Award Obtained	Percentage
No degree/certificate	94.9%
Certificate	1.1%
Associate Degree	2.0%
Bachelor	1.8%
Observations	3,492

- The majority did not receive any degree or certificate
- Inability to “transfer” from noncredit to credit program seems to be the major hurdle

# Summary

- Noncredit courses are most popular in fields that are closely tied to an occupation
- Confirmed anecdotal evidence that noncredit students tend to be low-income and lower-performing adult learners
- The majority of students enrolled in noncredit courses are for personal enrichment without any degree intent
- Very few degree-seeking noncredit students ever transferred to a degree program
- The role of institutional support in improving the effectiveness of noncredit education as a pathway to credit programs

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