## **Moving into Town—and Beyond**

A different take on community college students

Clifford Adelman, Institute for Higher Education Policy, January 2011

## Settlements, settlement behaviors, environ. design--the institution as "town"

- The literature for this scaffolding comes from Kevin Lynch (Growing Up in Cities, Managing the Sense of a Region),
- Lawrence Halprin (The RSVP Cycles, design for the FDR Memorial),
- J.B. Jackson (The Stranger's Path),
- David Ward (Cities and Immigrants), Jane Jacobs, and others

## Town economy, academic processes, and settlement behaviors

- Community college as a complex infrastructure with a core commerce—delivery of knowledge
- Every element and dynamic of the infrastructure has an analogue in an academic or academic service process
- Students come as immigrants along different paths, establish residence of different intensities, and engage in a series of accommodations—some of which are successful

#### **Human activity reshapes community**

If they watch what students do in town, the governing authorities would be advised, for example:

Where to strengthen public utilities

Where street signs need clarification

How to change the traffic patterns

What students do tells us where the institutional environment is functioning as intended.

#### We get at this through 3 overlapping portraits

- First Institution—an event portrait. Who starts out in community colleges? "Moving Into Town."
- Residence history—a chronicle. Who continues in substantial ways—and how?
- Attainment—for those who earn credentials from the community colleges, what happens next—principally in the labor market? "Moving On."

### Two types of data sources

Grade-cohort studies (HS Class of 1992)
deal with traditional-age students only
are based in transcript records
open the doors on secondary/postsec
transitions

Event-cohort studies (Beginning Postsec)
deal with students of all ages
no transcript records, little pre-college
history
superior financial aid data (if that's your topic)

# The juxtaposition of these sources makes it clear

- There is no way that traditional-age and older students behave in a similar manner
- No matter how you slice the age distribution of beginning students, those who start <24 and those who start later come from different planets
- Even more so with 350k active duty military and another 1 million recent veterans now enrolled somewhere in higher education.

## For example...

Of community college	<24	24& UP
beginners in 2003/04		
Principally employee	17%	37%
Had children	7	65
3-Yr retention/attainment	64	51
Transferred by 2006	28	11
Always part-time	23	45
Minority	37	33

### Our subjects are traditional-age. Why?

- They are 42% of community college enrollments, up from 32% a decade ago
- They are 74% of beginning community college students
- The median age of CC students has dropped from 26.5 to 23.5 in a decade. This trend is dependent on both the economic environment and demographics, particularly of recent immigrant populations.

## Why? Part 2

- Because we are closer to the point of their precollege preparation, and can do something about it
- Their patterns of attendance and course-taking dominate enrollment management in community colleges
- The metrics of their attainment are those of standard accountability judgments

# 40% of traditional-age students start in CCs

So who is above/below 40%??

Men, but not women

Latinos, but not African-Americans

Both 1<sup>st</sup> generation and parents with "some" postsecondary ed

Lowest 60% of SES scale

NNSEs but not English-dominant

# 40% of traditional-age students start in CCs (continued)

#### From where is it above/below?

Pacific and West South Central Census divisions are high

New England, Mid-Atlantic, West North Central and East North Central are low

Students from rural high schools above; from urban schools, below

### **Temporary and reverse transfers**

26% of traditional age community college students started somewhere else. Of this group:

42% were 4-year drop-ins

28% were in alternating patterns

25% were true undergraduate reverse transfers

### Why mention them?

- Each of those groups presents a different challenge to enrollment management
- E.g. the 4-year drop-ins are summer term folks—and you have to know what they study in the summer
- E.g. half the 'swirlers' (nomads) earn 30+ credits from community colleges—any pattern or sequence?

## Why mention them, II?

They lead, by contrast, to consideration of those who start in and establish long-term residence in community colleges. These are the most stable reference groups for enrollment management, as well as for understanding what community colleges really do.

# Residence in town: Homeowners and Tenants, I

- Homeowners: earned 30+ credits from community colleges and 60+% of their credits from community colls
- Tenants: earned 30+ credits from community colleges but less than 60% of their credits came from community colleges

### **Homeowners and Tenants, II**

More than half of traditional-age students who start in CCs will write a substantial history in community colleges:

Homeowners: ave. 65 credits

Tenants: ave. 57 credits

The content of their time bears close attention.

## Homeowners, Tenants, and Visitors Compared

	Homeowners	Tenants	Visitors
HS Math >Alg 2	17%	35%	11%
Consist Expect BA	39	54	32
No delayed entry	79	92	64
No remed in 1st Yr	54	56	46
C-level Math 1st Yr	23	43	7
STEM creds 1st Yr	1.97	3.65	0.81
Mean GPA 1st Yr	2.62	2.76	2.21

## The keys to differential histories lie in the 1<sup>st</sup> calendar year at the community college

- Timing of entry from high school
- Additive credits
- Number of non-penalty withdrawals and nocredit repeats
- Credits in truly college-level math, but
- The fact of any remediation and
- 1st year GPA are NOT part of the differential

## The other key differentiating engine lies in the course-taking, which reflects...

- the knowledge-delivery infrastructure of the town, including
  - Instructional staff
  - Academic management staff
  - Classroom & laboratory space
  - Location and calendar scheduling
  - On-line resources

If we seek to clarify strategic paths to transfer or to AAS completion, we cannot ignore any of this

#### **Attainment of Homeowners and Tenants**

	Home	Ten
Transferred to 4-year	23%	96%
Associate from CC	42	36
Associate was highest	37	4
Earned Bachelor's	7	77
At end, still going for BA	6	11
At end, still going for AA	9	1

## No story is complete with a logistic—and even then we're not done

- No demographic variable makes a difference in either transfer or (for those who did not transfer) associate degree attainment logistics
- This is both good—and challenging—news: for the variables that do make a difference are largely within the control of community colleges

### The logistic model for transfer

	p	Odds ratio	Delta-p
Crds college-level math	.01	2.45	0.227
Summer term credits	.01	2.40	0.191
>20% Ws and NCRs	.02	0.17	-0.387
Continuously Enrolled	.05	2.80	0.224
Attended in >1 state	.05	3.53	0.275
No delay of entry	.10	3.50	0.273
Educ expectations	.10	1.61	0.104

# The logistic model for associate degree completion

	р	Odds ratio	Delta-p
Continuously enrolled	.01	4.93	0.205
Occup credit ratio	.01	1.68	0.066
Crds college-level math	.01	2.44	0.115
>20% Ws and NCRs	.01	0.17	-0.227
Campus job in 1st 2 yrs	.05	3.65	0.166
No delay of entry	.05	2.60	0.123
Summer term credits	.05	1.56	0.057

# So what does this mean for practice?

- Grading policy: limits on Ws and NCRs
- Summer offerings
- Real-time student tracking, frequent contact, reduced credit loads but continuous enrollment
- Creative cooperative math acceleration with high schools

# And what else for associate degree completion?

- When the occupational credits ratio exceeds 65%, degree completion plummets, so. . .
- Through monitoring 1<sup>st</sup> year course work, advisement and program requirements, add 9 or more credits of arts & sciences

### What happens next?—Moving On...

- The labor market requires a different shuffling of the population
- So, we take the highest credential earned at a community college or (if no degree) curricular concentration, and characterize it as

Academic 43%

Occupational 22

Unclassifiable 35

P.S. Threshold for inclusion is >10 credits

### Some markers for these 3 groups

	Academic	Occupational	Unclassi- fiable
Mean credits from CCs	59	66	14
>2 remedial courses	20%	24%	32%
Occup creds ratio <10%	42%	6%	78%

### The content of credentials

	Percent Transfer	Earned bachelor	% of assoc
General studies	72	54	42
Business support	35	3	10
Health occupats.	15	14	8
Technology	17	13	8
Business	41	32	7
Protective servs	56	39	6

### Why raise this issue?

- To connect education histories to labor market histories you need content, not years of schooling
- For community college "graduates" that means identifying fields and whether transfer was part of the story-line
- It also means analysis of discrete course work by proximate occupation

# Example: CC "grads" in computer-related & technical occupations at age 25/26

Percent of credits:	
Written/oral comm.	19%
College-level math	14
CS & engineering	9
Chemistry & biology	9
Drawing/drafting/film	8
Psychology	6

# And what do mid-level technicians do?

- "...work at the empirical interface between a world of physical objects and a world of symbolic representations..." and
- "transform aspects of the material world into symbolic representations which can be used for other purposes."

Whalley & Barley, Between Craft and Science: Technical Work in U.S. Settings.1997.

### **Evaluating labor market outcomes**

- You can't use earnings at age 25/26, so we use:
- Continuity of employment—and credentials count !!!
- Congruence between occupation and course of study

#### And what do we see?

Percent employed full-time in at least 2 yrs of 1997-1999

Academic AA 71%

Occupational AAS 79%

No degree, but 60+ creds 58%

## And as for congruence...

	Congru- ent	Not Cong	N.A.
Occupational AAS	61%	28%	11%
Occupational Cert	35	57	8
Occupat >30 cred	31	44	26
Academic AA/AS	29	28	43
Academic >30 creds	23	27	50

# So what do we learn about 'moving on' from the town?

- CCs need alumni surveys from which to build empirical profiles of congruent curricula, then
- Rearrange the pathways, signs (advisement), transport (course scheduling in place & time), and utility systems of the town, and
- Find the program dissonances.

### Messages, I

- Accountability: focus on what you can control—environmental design and communication
- Disaggregate reporting by age: at entry, at transfer, at exit
- Secondary-to-postsec paths are the most malleable, so work on them!

### Messages, II

- Treat the year as a *calendar year* not an academic year. Successful students do that, so rearrange your temporal furniture!
- Higher transfer rates mean more care to credit-transfer issues.

# Messages, III: Attention to Academic Processes

- Prematriculation boot camps
- Flexible scheduling of gateways
- Monitoring of credit loads
- Ensuring sufficient A&S portions of occupational progams
- Tracking 1st yr additive credits

### Communication lines follow radarscreens

- Environmental scanning—high schools and regional labor markets
- The phone lines to 4-year schools are 2-way
- Website design has to be a clear scenic highway
- Listen to your IR people!
- Without these connections you are isolated from the work that makes a difference!