The Power of Peer Groups & Posses in College Success
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contributing writer, *Education Week*

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The Power of Peer Groups and Posses in College Success

Expert Presenters:

Deborah Bial, founder and president, The Posse Foundation

Irving Epstein, Henry F. Fischbach professor of chemistry and senior research advisor to the provost, Brandeis University
An on-demand archive of this webinar will be available at www.edweek.org/go/webinar in less than 24 hrs.
THE POSSE FOUNDATION

Ed Week Webinar

June 4, 2014
Posse started when one student said…

“I never would have dropped out of college if I’d had my posse with me.”
Since 1989
5,560 Scholars
$700,000,000
90%
POSSE OPERATES CHAPTERS IN NINE CITIES
51 Partner colleges and universities.
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<th>Posse Partner Colleges and Universities</th>
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Posse’s 3 Major Goals

- Expand the pool of candidates from which top colleges select their student bodies
- Build stronger more interactive campus communities
- Graduate Scholars so they can become leaders in the workforce
Program Components
(high school through college programming):

* The Dynamic Assessment Process (DAP)
  Posse's unique college recruitment and selection process

* 8-Month Pre-Collegiate Training Program

* 4-Year Campus Program

* Career and Alumni Program
Special Initiatives

- Science Technology Engineering and Math Posses (STEM Posses)
- Veterans Posses
Posse’s Success Factors

- Alternative Recruitment and Selection Model
- Cohort Model
- Preparation
- Campus support (and mentor piece)
- Career support
- Scholarships
- Strength Based
2013 Scholars by Race

- African-American/Black (including African and Caribbean), 41.1%
- Hispanic (non-white)/Latino, 32.9%
- Asian (including Indian subcontinent and Philippines), 10.6%
- White (including Middle Eastern), 7.6%
- Native Hawaiian or Pacific Islander (Original Peoples), 0.0%
- Bi/Multiracial, 7.0%
- American Indian or Alaska Native (including all Original Peoples of the Americas), 0.3%
- Other, 0.5%
2013 Scholars by Sex

Female, 54.8%

Male, 45.2%
61% of Posse Alumni are First Generation College Graduates
The Ultimate Goal:

New National Leadership Network in the United States that better represents the diversity of the country.
United States Senators

White: 94%
Latino: 3%
Black: 2%
Asian: 1%

20% are Women
Fortune 500 CEOs

SIX ARE BLACK
NINE ARE ASIAN
EIGHT ARE LATINO
23 ARE WOMEN
Fortune 500 Senior Executives

91% are White
2% are Black
3% are Latino
4% are Asian

17% are Women
Of note...

Since 2001: 175 Prestigious National Awards and Fellowships to Posse Scholars and Alumni

(including Soros, Marshall, Gates, Truman, Watson, Davis, Fulbright, and more)

2014 alone: Nine Fulbright winners.

2006: Endowment is Established (now valued at $50,000,000)

2007: Deborah Bial is awarded the MacArthur “Genius” Fellowship

2010: President Obama shares Nobel Peace Prize money with The Posse Foundation
Science Posse at Brandeis University: An Overview

IRVING R. EPSTEIN
A Brief Chronology

- 1987 – Deborah Bial graduates from Brandeis
- 1989 – First Posse starts at Vanderbilt
- 1997 – Brandeis becomes third Posse school
- 2006 – HHMI awards Epstein $1M Professorship to start Science Posse
- 2008 – First Science Posse Scholars matriculate
- 2011 – Wisconsin STEM Posse 1 matriculates
- 2012 – First Brandeis cohort graduates
- 2012 – Franklin & Marshall STEM Posse 1 matriculates
- 2013 – Bryn Mawr and Texas A&M join program
- 2014 – White House Summit, 5 more schools join
Although white males make up over two-thirds of the scientific workforce, they represent just over one-third of the population, a figure that is expected to shrink to one-fourth by 2050.

A typical science course at one of this country’s elite universities consists of a sea of white faces that tends to whiten even more as the semester progresses and as one moves up the ladder of courses.

The brain drain is plugging up (or maybe backing up).
Who Succeeds in STEM

- 46% of Whites and Asian-Americans vs. 27% of Blacks and Latinos
- Students from families in which at least one parent has a bachelors degree
- Students from families in the top 33% income percentile
- SAT Math scores of 650 or higher
- Students who earn high first year and second year science grades

The Graduation Gap
(Anthony P. Carnevale and Jeff Strohl, “Rewarding Strivers.”)

High-scoring college students are more likely to graduate if they’re from well-off families — and the gap is even greater for lower-scoring students.

Brandeis STEM Posse
An Analysis and a Lesson

- Uri Treisman – studied groups of 20 African-American and Asian-American calculus students at Berkeley.
- Difference was not poor motivation, inadequate preparation, lack of family support, or low income levels.
- “The Black students typically worked alone” while “the Chinese students learned from each other.”
- Developed “anti-remedial”, program that emphasized group learning and community life. Results improved dramatically.
What does the Posse program consist of?

- Publicity and recruitment
- Selection – the DAP
- Pre-college training
- Boot camp
- Mentoring
- Lab research
- Posse Plus retreat
Is it working?

• With mean SATs of 1147 (vs Brandeis mean of 1350) Posse Scholars maintain a mean GPA of 3.07
• 97% graduation rate (SATs and income predict 20% - *New York Times Magazine 5/18/14*)
• 75% majoring in “hard sciences,” (Bio, Neuro, Chem, Phys), most of the rest in Psych and Science Policy
• 40% have been on the Dean’s List (GPA >3.5)
• Similar statistics at Franklin & Marshall
• Grants from HHMI, Carnegie, Arthur Vining Davis, Petrie ... bring nearly $3 million
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<td>10.25</td>
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<td>% URM</td>
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**Table 1 – Brandeis STEM Graduates 2007-2013**

Annual average
- 2007-11 (pre-Posse)
- 2012-13 (with Posse)
Science Posse Program Components

- A graduate student or post doc mentor in the sciences
- 6 month pre-collegiate training in NYC
- A two-week intensive summer preparation program before matriculation at Brandeis
- Assistance finding laboratory jobs on campus
- Summer internship funding for science-based pursuits
- A faculty and staff support network
The SciPosse Bootcamp

- **Academic Components**
  - Book Report
  - Laboratory Egg drop
  - Lecture/classroom series
  - Introductory Science Class/Laboratory Series
  - Poster Session

- **Team-building Components**
  - Posse Workshops
  - Living together

- **Get to know campus and Boston**
  - Meet faculty
  - Social Outings
Book Report

- Select a nonfiction science-related book during pre-collegiate training
- Write a summary and scientific analysis of book
- Present book and analysis to Posse at beginning of bootcamp
Lecture Course Series
Protein Structure Function

- Components
  - 50 minute lecture
  - 50 minute problem-based recitation
  - 50 minute exam

- Learning Objectives
  - Learning from multiple teaching styles
  - Time management
  - Grades and scaling
Poster Session

- **Components**
  - Research on scientific problem
  - Creation of poster
  - Presentation

- **Learning Goals**
  - Scientific research tools
  - Plagiarism
  - Oral communication
  - Departmental support
Posse Workshops

- Team building
- Resource identification
- Mentor-team bonding
- Professor-student bonding
Who are the Mentors?

- Graduate students or postdocs in the sciences
- Meet with students as a group once a week
- Meet individually with students biweekly
Kirby: I guess it kind of came up.... just coming into campus how different it is for you or how your parents trained you into being ready for the sciences in general. I was having a conversation with students and other friends and just seeing [their] status on Facebook. Some of my friends, their parents are PI’S or something in the scientific community. Their parenting, I don’t want to say it’s not the same, but it’s different. Don’t get me wrong, I don’t blame my parents at all for what they put me through. I think they did the best they can. At the same time they can only do so much.

Zara: Not to be narrow minded, but in seeing all the people that are in chemistry, or in the sciences, it’s mainly Asians and Caucasians and Indians. And there’s not that many Latinas there. There’s not many Hispanics there. There’s not many people from urban cities that are there. So, it’s definitely hard, especially when you’re talking to your friends, and they’re like, “Yeah, my mom used to make me study all night long.” And I’m like, “Well, my mom used to make me clean the house all the time. That’s what my mom cared about most, you know?” My mom used to make me do chores, and like it’s – it’s hard.
Jess: It was hard. I did not expect so much work, but it was — I feel that it was really helpful. Like, just knowing how, like, labs are so much different than the lab that I was accustomed to back in high school and, like, seeing all this technology was also amazing. But, I mean, all the work that we got that whole — those two weeks, it was just — it was hell. It was just that — it was so different from high school, ... it was just, like, all right now you have a lot of work to do, here it is. And it was just hard. But I managed, so that was, like okay now I think I know what college is going to be like if this is boot camp.

Monica: I think after boot camp is when it really hit me that, “Okay, we’re in this together, no matter — whether we like it or not, we’re the only ten that know what it feels like to be,” at that point, “a Science Posse.” ... I didn’t understand the full concept of what Posse meant until we got to boot camp, and we had to take those classes, and how we could each help each other, and how sometimes it could get a little, you know, frustrating to be in a group of ten very individual people. I think that’s the perfect way to put it.
RJ: [My mentor] is kind of like my mom away from home. She’s that person. I always look forward to our one-on-ones. The fact that she was going for her PhD was a huge inspiration. She’s just always - she offered tough love so to speak. Like, I know that I could talk to her about anything. But she’d always be open and honest with me in terms of what she thought about whatever it is that I was going through....I love her to pieces.

Naitas: [I] talked with my Posse mentor about how to approach professors... Probably my second test in organic chemistry, first semester. I got a low grade and [my mentor] was telling me, “You know, just go to the professor and ask him how you can improve,” and I was just really nervous, one, because I couldn’t stand that I got a dissatisfactory grade, and two, because I was just really nervous about approaching a professor who I knew was – might have been doing research on his own time and had a lot of students that he had to care about, and I didn’t know that he would be really interested in talking with me...[My mentor’s] push helped me to ask for help from the professor. The professor’s words helped me in my studying and also realizing that professors, as many students as they may have, that they are attentive to individuals.
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The Power of Peer Groups and Posses in College Success

Required Reading from Education Week:

Spotlight on College Readiness and Access
The path to college comes with many unique challenges for students. In this Spotlight examine the digital divide in the college admissions process, see how districts instill higher education ambitions with early outreach and early-college models, and discover how schools are preparing students for the academic and financial demands of college.