

Middle College Magic
Middle College High School
San Bernardino Valley College

James E. Smith PhD
Director of Research and Planning

Middle College Magic





Presentation Overview

- **What is the Middle College High School (MCHS)**
- **Demographic contrast**
 - Surrounding community
 - MCHS vs. SBVC
 - **Quantitative**
 - Grade comparison with students in the general student population
 - Test score comparison with other high schools in the service area and in the state.
 - Research Challenges
 - **Qualitative**
 - Student surveys
 - Faculty surveys

What is the Middle College?

- Collaborative partnership between community colleges and high school districts
- 10th, 11th, and 12th graders take high school classes and college courses concurrently. This allows them the possibility of completing the requirements for a high school diploma and Associates Degree at the same time
- Concept was initiated in New York in 1970's. It was conceived of as an option for underperforming students with demonstrated potential.

The MCHS Program at SBVC

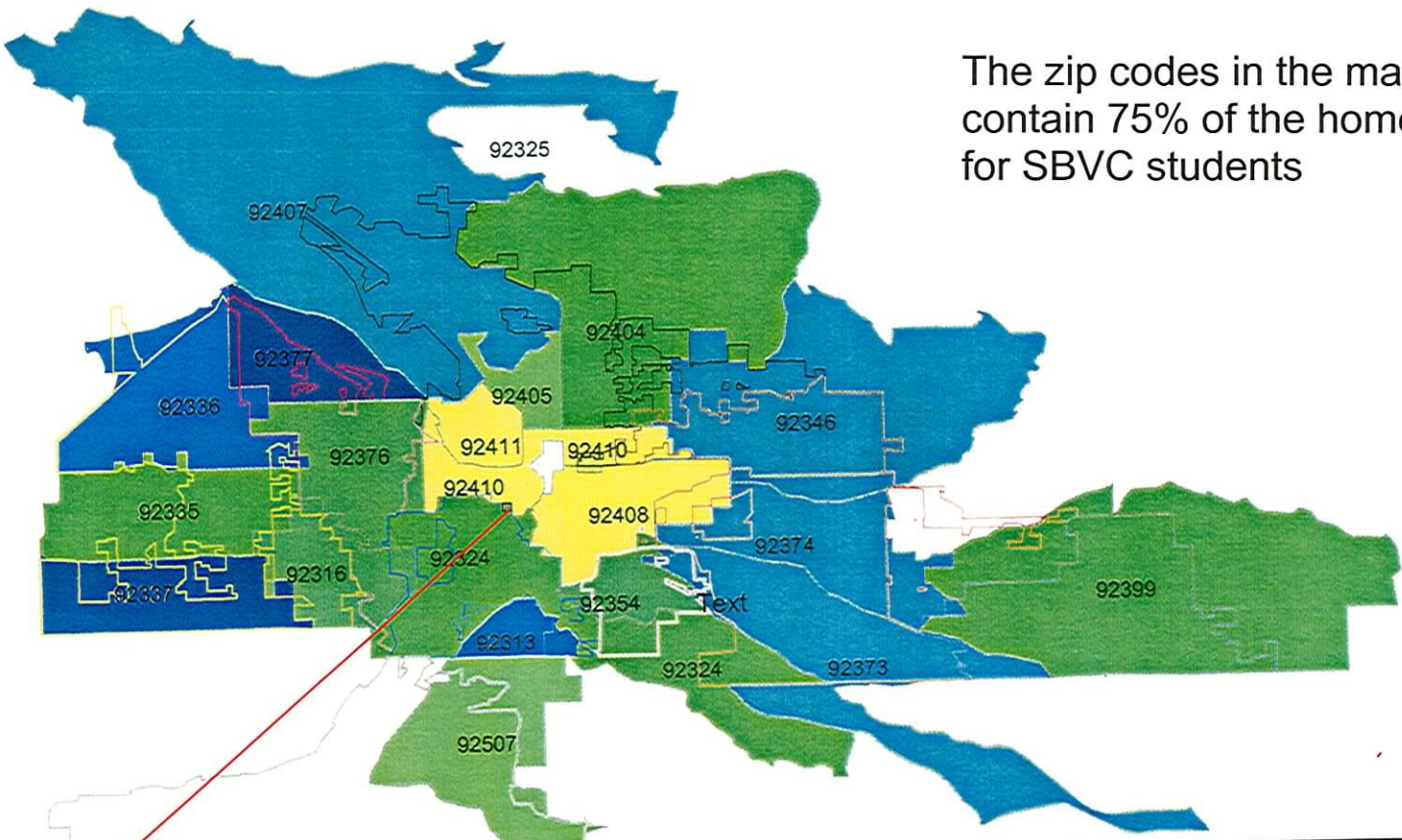
- SBVC MCHS started in Fall 2001 with 75 students and has admitted approximately 75 students every year.
- Approximately 180 students on campus at any given time

Selection Criteria

- First year Criteria
 - High potential students who are underperforming in the traditional High School environment
 - STAR – 50th %ile and lower than average GPA
 - Low income status
 - Ethnic minority (under-represented group)
 - First generation
 - ESL (English Language Learners)
- Second year
 - 5% of the students were high achievers

SBVC Zip Codes by Income

The zip codes in the map below contain 75% of the home addresses for SBVC students



Although SBVC is located in the 92410 zip code, it is very close to the boundries of two other zip codes: 92408 & 92324. The campus is located among the lowest median incomes in San Bernardino

Shape files are from the census website: <http://www.census.gov>

Legend		Zip Codes/Median Income	
	SBVC		28171 - 29231
City Name			29232 - 37181
	Bloomington		37182 - 40287
	Colton		40288 - 45726
	Fontana		45727 - 50294
	Grand Terrace		50295 - 54060
	Highland		54061 - 63007
	Loma Linda		
	Redlands		
	Rialto		
	Riverside		
	San Bernardino		
	Yucaipa		

Educational Demographics of the San Bernardino Area

- Community close to the school has a high drop-out rate.
- High percentage of population who have never attended college
- Low college going rate
- Low-income
- **[**Link to graphs of service area**](#)**

Demographics of General Student Population

- Age = 29
- Ethnicity
 - Latino = 40%
 - Black = 23%
 - White = 24%
 - Asian = 10%
- Gender
 - Male = 41%
 - Female = 59%
- Total enrollment
 - 12,000 per term
- Status
 - Part-time = 70%
 - Full-time = 30%

Middle College Demographics

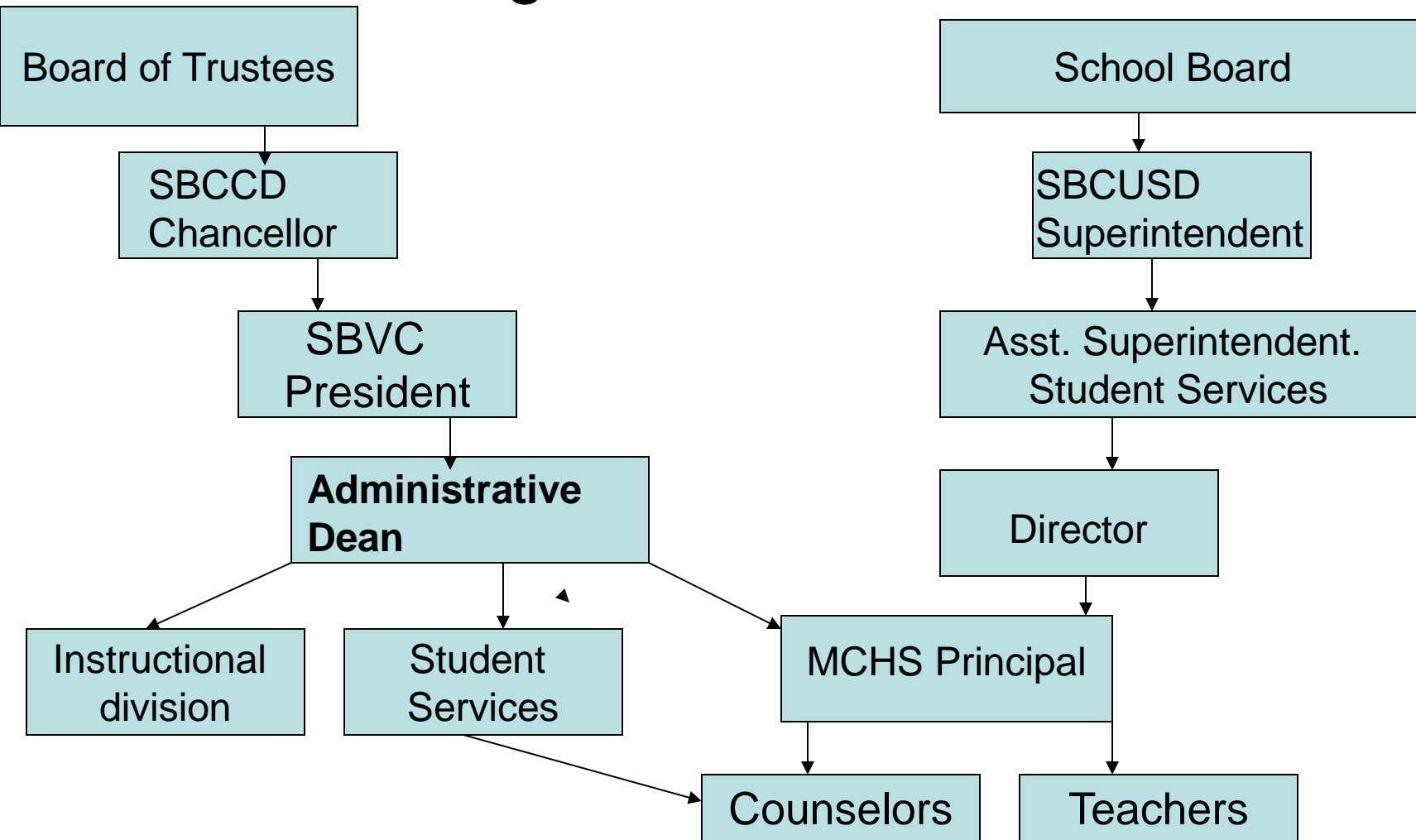
- Average age 16.25 years
- Ethnicity
 - Latino – 48%
 - Black – 23%
 - White – 21%
 - Asian – 8%
- Gender
 - Male – 45%
 - Female – 55%
- Average enrollment
 - 180 students
- All full time (allocated between high school and SBVC)
 - Morning courses with college instructors
 - Afternoon classes with High school teachers

Structure of Program

- **Morning**
 - Classes with college faculty

- **Afternoon / Evening**
 - Classes with high school teachers

Collaborative Organizational Structure



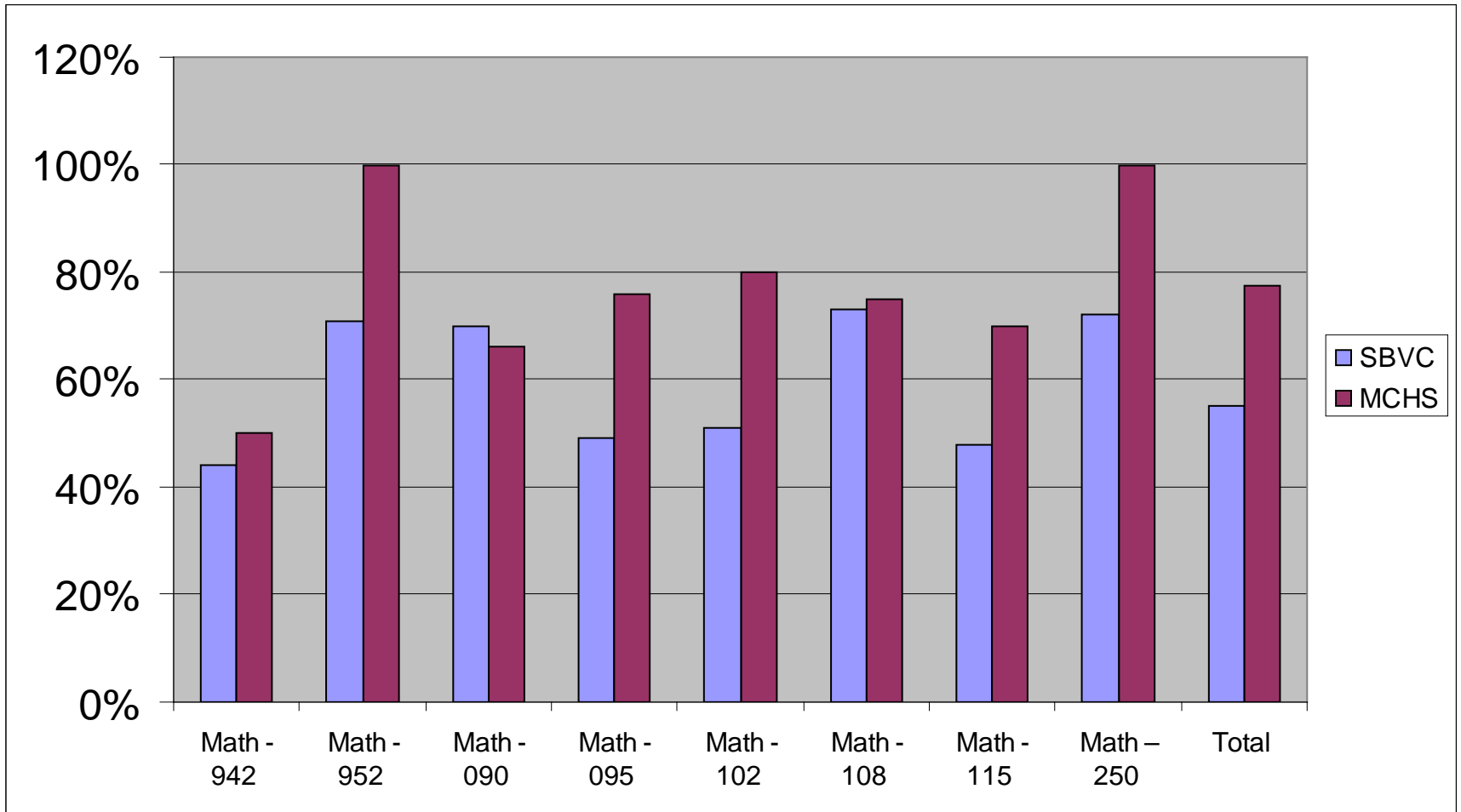
Math Pass Rates for MCHS Students

Course	Pass	Not-Pass	Number of Sections
Math -942 Arithmetic	50%	50%	2
Math -952 Pre-Algebra	100%	0	4
Math - 090 Elementary Algebra	66%	34%	12
Math - 095 Intermediate Algebra	76%	24%	33
Math -102 College Algebra	80%	20%	41
Math -108 Statistics	75%	25%	4
Math -115 Logic and Probability	70%	30%	3
Math – 250 Calculus	100%	0	3
Total (weighted)	77.35%		102

Math Pass Rates for SBVC Students

Course	Pass		
Math -942 Arithmetic	44%		
Math -952 Pre-Algebra	71%		
Math - 090 Elementary Algebra	70%		
Math - 095 Intermediate Algebra	49%		
Math -102 College Algebra	51%		
Math -108 Statistics	73%		
Math -115 Logic and Probability	48%		
Math – 250 Calculus	72%		
Total (weighted)	55%		

Math Comparison

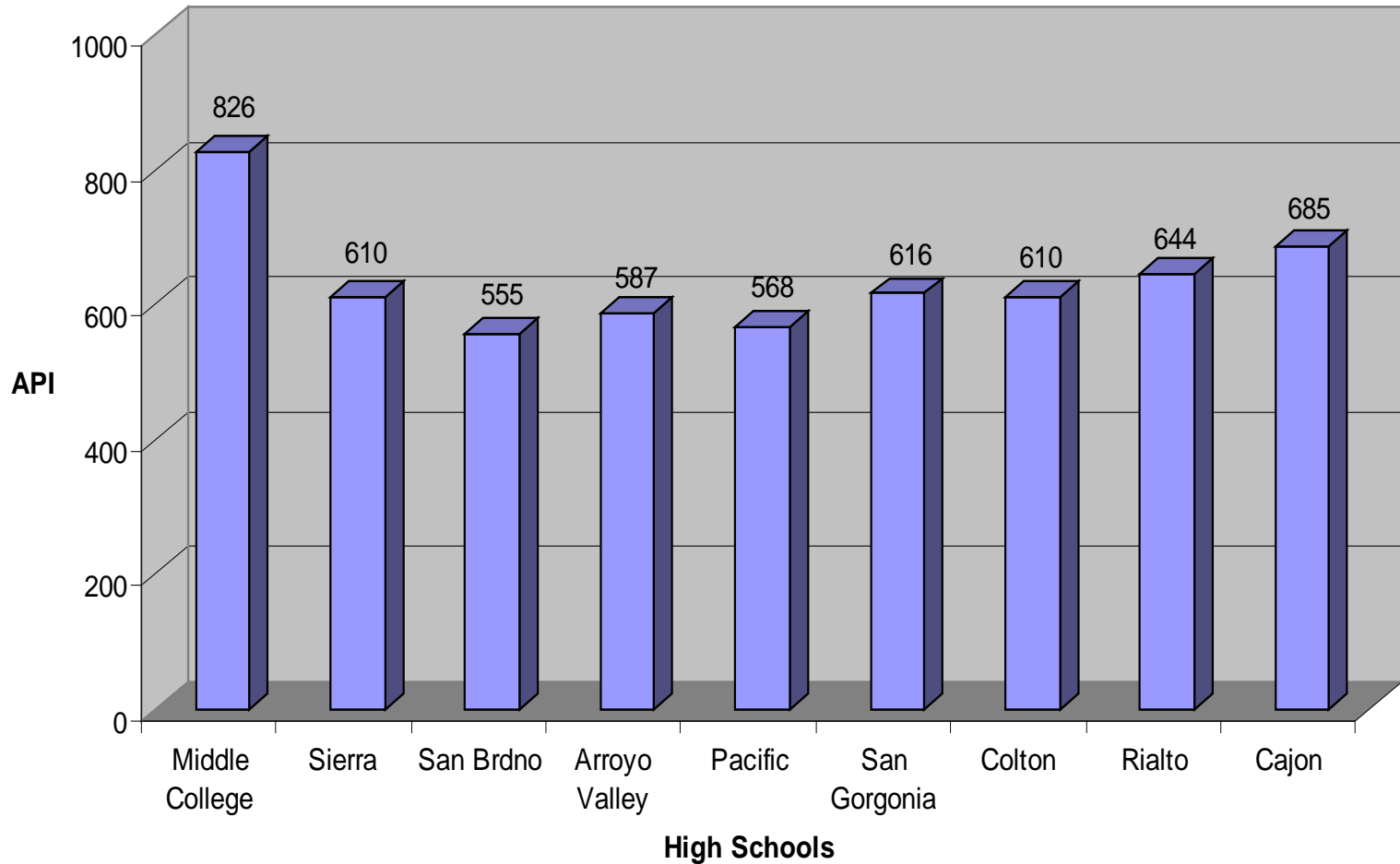


SBVC Middle College Students Compared to other HS Students

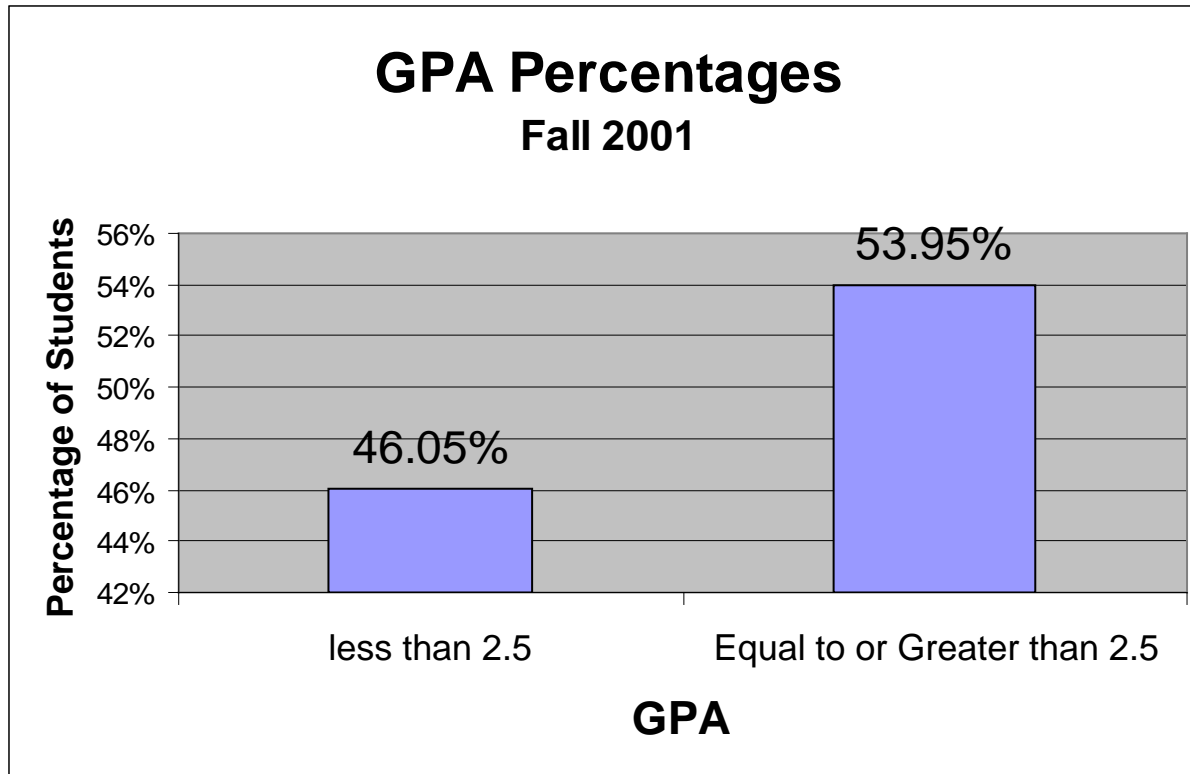
- CAHSEE
- Annual Performance Index (API)
 - English composition
 - English language
 - Math
- [Link to profiles](#)

API Comparison

Annual Improvement Index Comparison



GPA Comparison



2006 MCHS Statistics

- Number of MCHS graduates 34 only
- Number with AA degrees + HS 10
- SBVC Honors Program 1
- Number within 1 or 2 terms of AA 20
- Number who could finish in 3 terms 4
- -----
- **100% passed the CAHSEE**

Graduation with AA and HS



This year nearly a third of the seniors graduating received their Associate of Arts degree while also obtaining their high school diplomas. Four out of those ten students, Maribel Alba Robert Bailey, Tony Diaz, and Fabian Villalobos graduated with the Honor's Program at San Bernardino Valley College.



Transfer Enrollment

- 2001 -- N/A
- 2002 -- N/A
- 2003 -- 70%
- 2004 -- 82%
- 2005 -- 88%
- 2006 -- 90%

Student Survey Findings

- Strong Aspects of the MCHS program
 - Tutorial help is available –
 - The presence of adults in class (traditional college classes)
 - The presence of classes with only other high school students (learning community style HS classes)

Student Survey Findings

- Weak Aspects of the MCHS Program
 - Prom
 - Dances
 - Student clubs
 - Sports teams
 - Yearbook

Prom Night



Faculty Resistance

- Initial resistance from the faculty took 3 forms
 - SBVC is located in a low income area with a student population with a high need for basic skills. Admitting high school student (especially underperforming students) is taking us in the wrong direction...the goal is to be less like a high school not more like a high school.
 - High school aged girls are vulnerable to older boys
 - Discomfort with the prospect of parental involvement

Answer

- **No parental contact with college faculty**
 - All parental interaction is limited to MCHS teachers and administrators
 - Parents participate in an orientation with district and SBVC administrators

Faculty Survey Findings

- MCHS students seem willing to express themselves -- 66%
- MCHS students have attendance records that are equal to or better than other students --77%.
- quality of homework is equal to or better than other students -- 62%
- Classroom behavior of MCHS students is equal to or better than other students --78%
- Level of motivation of SBVC students is equal to or greater than other students – 71%

Research Challenges

- Collaborating with School District researchers
 - Each MCHS student has two ID numbers
 - Critical need for (data sharing)
 - Working together on CalPass (P-16) data sharing consortium

Research Challenges

- In general, tracking cohorts is a problem for our system
- Current procedures are not well suited for handling cohorts of HS students
 - High-performing high school students have always been permitted to take college courses
 - Concurrently enrolled non-MCHS are routinely miscoded as MCHS
 - MCHS students who leave and return as non-MCHS students are a coding problem

Research Challenges

- Student Learning Outcomes (SLOs) that are aligned with both curriculums

The Dean

- Dr Gloria Fisher, Administrative Dean for MCHS
 - (San Bernardino Unified School's vote of confidence)

Is this Magic?



No!

- We stumbled into a partnership that rescued the futures of over 300 students. It's not magic! We discovered a successful formula.
- What about the other ones??
- SBCCD and SBVC are involved in other collaborative efforts to save students through helping them find their fit
 - Machine technology offers concurrent enrollment and internships.

Conclusion

- The future of educational research at the high school and college level is to assist with collaborative efforts that offer new ‘fits’ for students who are not fitting in.
 - P-16
 - Avoid the trap of the past—tracking
 - It’s an iterative process