

# What We Know About AP® Students

**AP Annual Conference** 

Las Vegas, Nevada

July 13, 2007

Ellen A. Sawtell, Philip Handwerk, and Jacqueline M. Gillie

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# A more in-depth look at AP test takers in the Nation and Florida

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### **Main Objective**

 Are students who self-report that they take more years of study in a particular subject area more likely to take AP?



### **Desired Session Outcomes**

- Participants will gain a clearer understanding of the characteristics of AP Students by examining variables such as their college interests.
- Participants will learn how this population has changed between 2001 and 2005.
- Participants will be better able to help identify students not currently being served by AP.



### The Numbers – Nation

- In 2005, nearly 1.5 million students graduated having taken the SAT®
- When students register to take the SAT, they are asked to fill out a 42-item questionnaire
- 73 76% of students who took AP also filled out the SAT questionnaire

### The Population & The Instrument

- The SAT is primarily taken by juniors and seniors in high school
- The SAT is a test that measures critical reading, math, and writing
- The SAT questionnaire includes questions about:
  - demographic information
  - high school coursework and activities, and
  - college preferences and aspirations



### The Matched Cohort we built

- SAT Summary reports (i.e., College-Bound Seniors) are produced based on the graduating class of seniors
  - If you last took the SAT as a junior (in January 2004) your scores will be part of a summary report on all seniors graduating in 2005
- AP Summary reports are produced based on the academic year

### The Matched Cohort we built

 Therefore, results presented are for the graduating class of seniors.

- Issue-Time lag for results
  - Impact of questionnaire modification in 2003 has impact on about 75% students

### **Test-Takers – Nation**

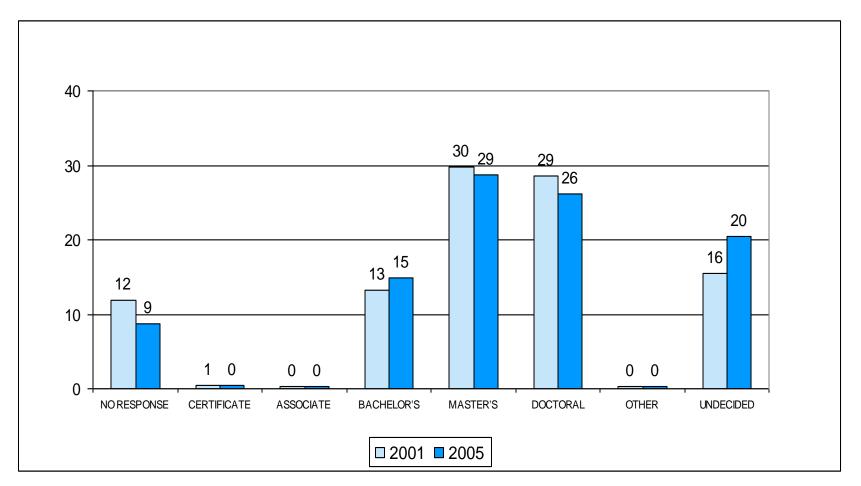
- In the 2001 graduating class of seniors:
  - 1,276,320 took the SAT Reasoning Test
  - 516,645 took an AP exam
  - 394,717 of those students who took an AP exam filled out the SAT Questionnaire
- In the 2005 graduating class of seniors:
  - 1,475,623 took the SAT Reasoning Test
  - 710,966 took an AP exam
  - 515,814 of those students who took an AP exam filled out the SAT Questionnaire



### **Analyses – Nation**

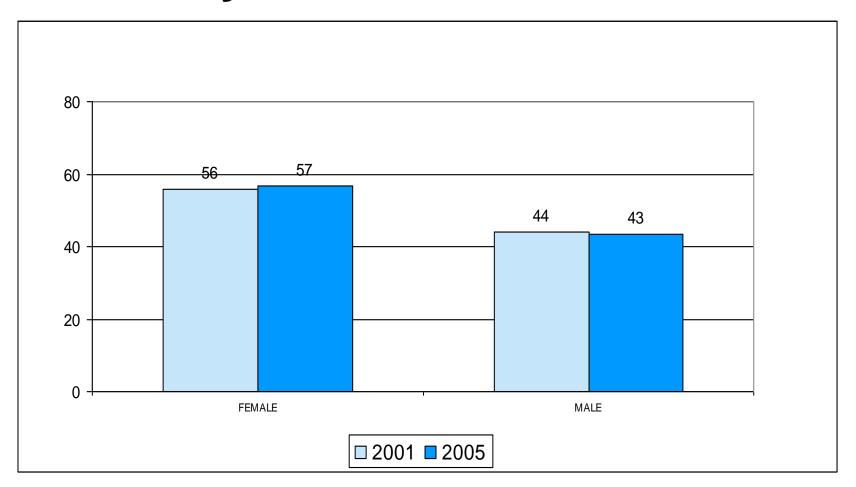


### **Percent by Degree Goal**



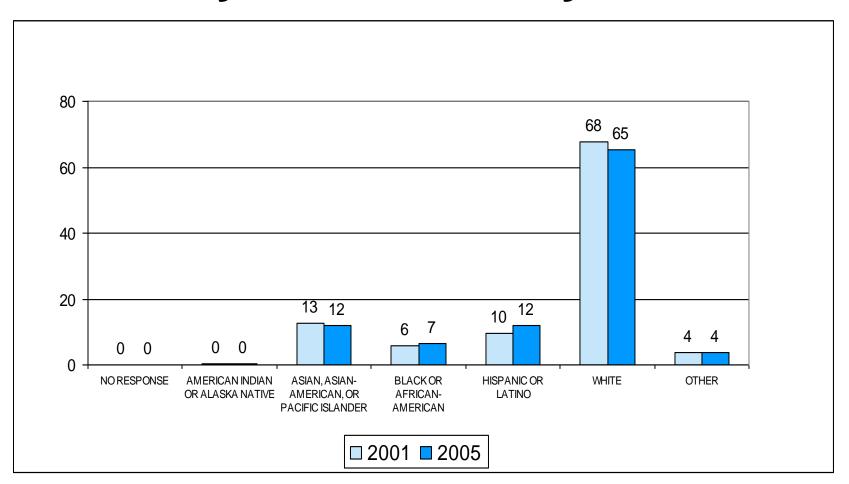


### Percent by Gender



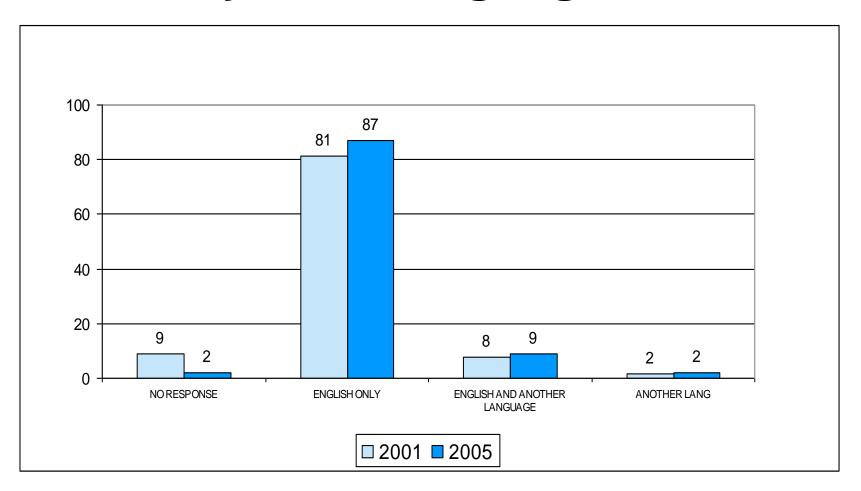


### Percent by Race/Ethnicity



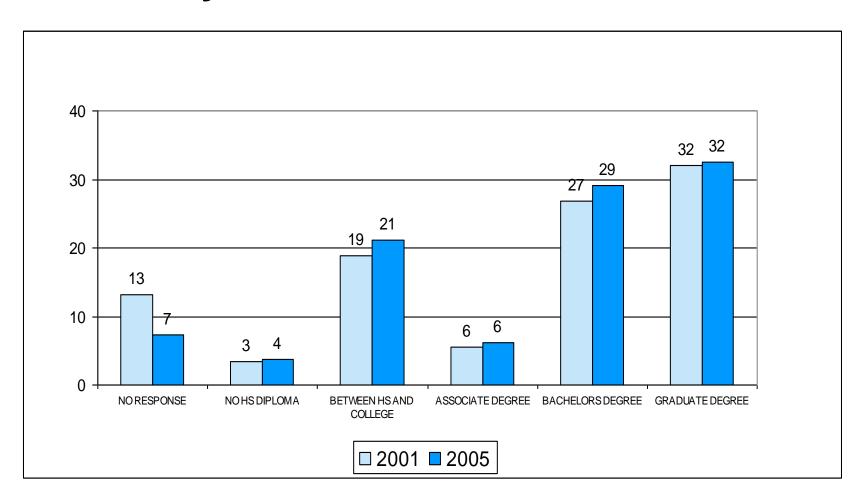


### Percent by Best Language



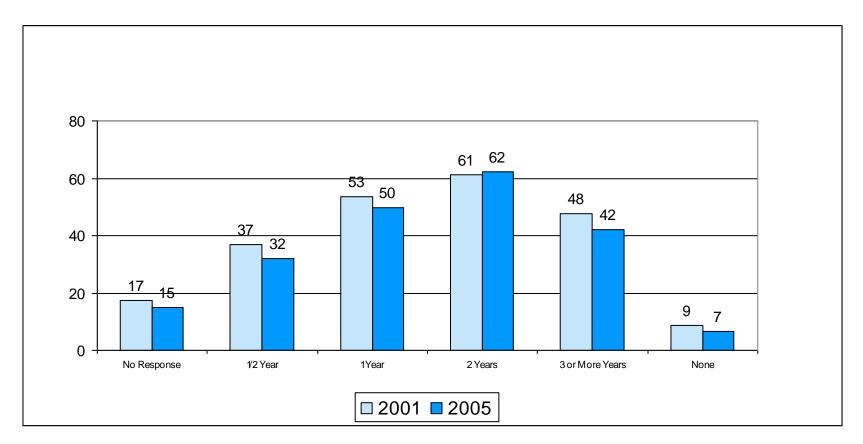


### Percent by Parental Level of Education



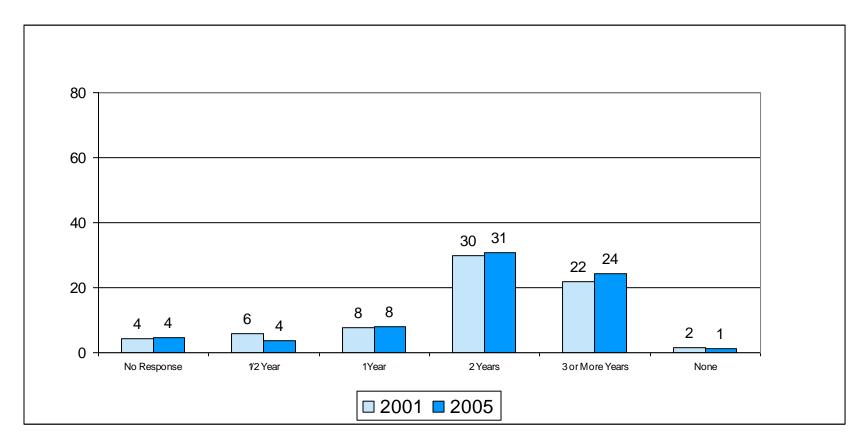


# Percent of Students who took AP Calculus AB by Years of Calculus



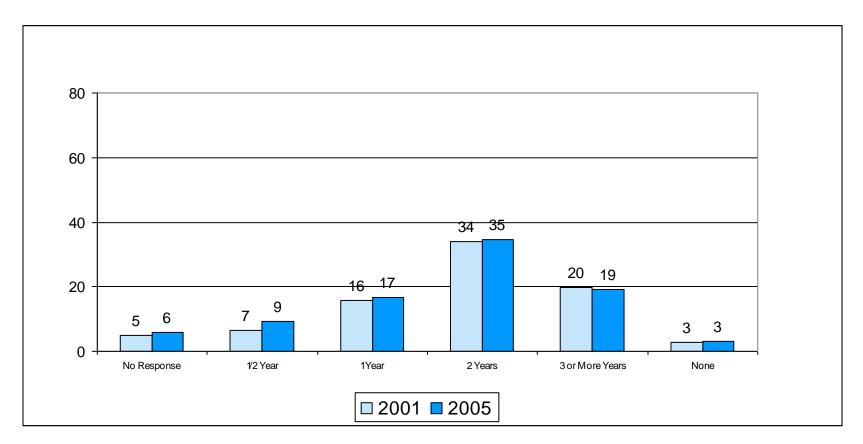


# Percent of Students who took AP Physics B by Years of Physics



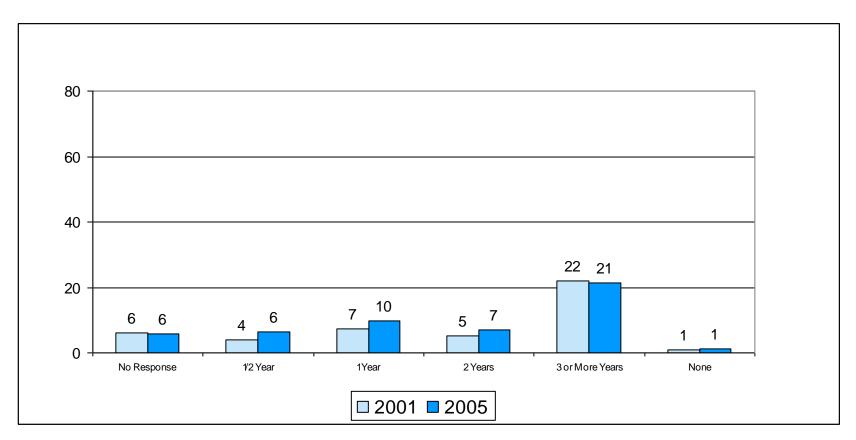


# Percent of Students who took AP Macroeconomics by Years of Economics



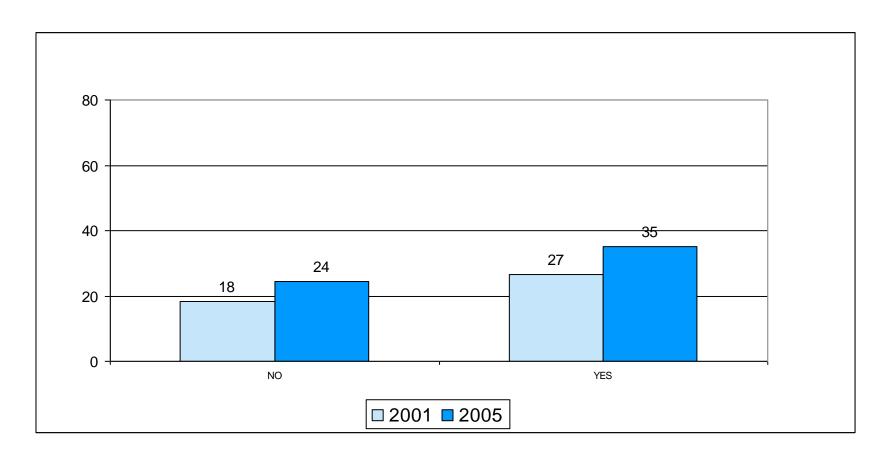


# Percent of Students who took AP Spanish by Years of Spanish



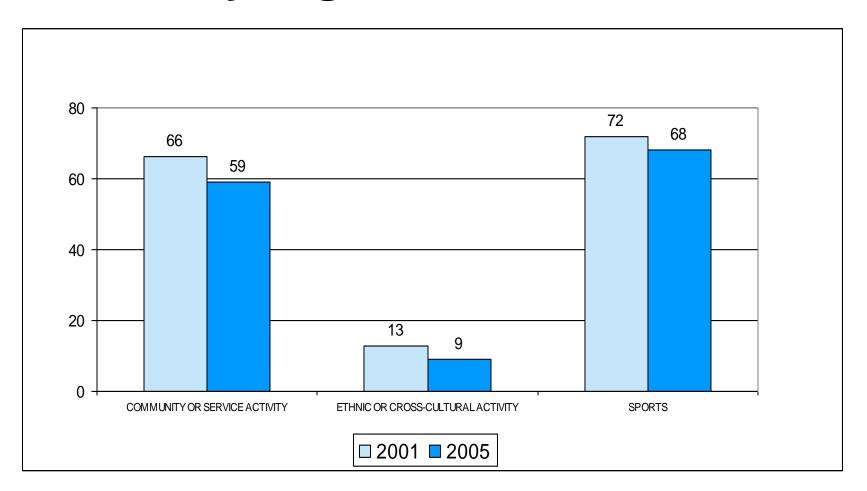


### Percent of Students who took AP English Language by Composition Indicator



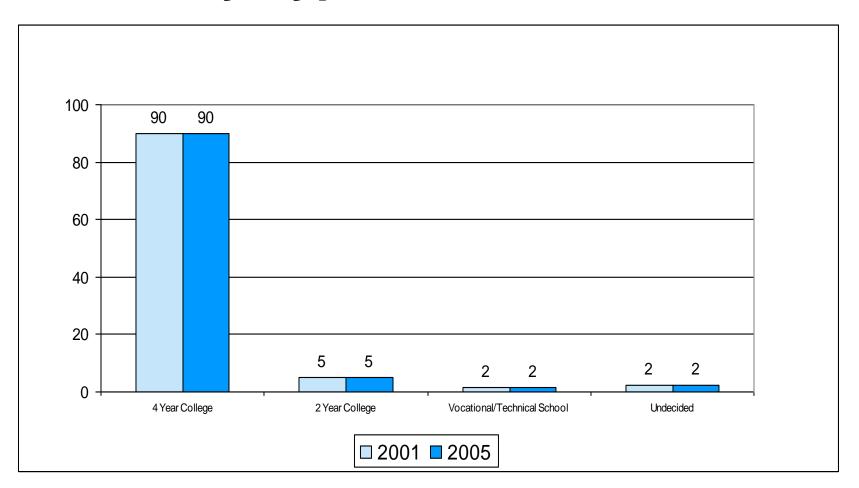


### Percent by High School Activities



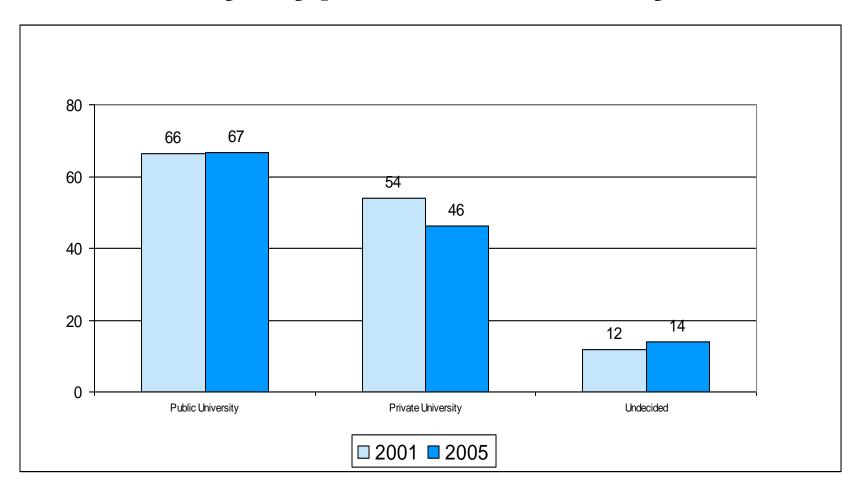


### Percent by Type of Institution



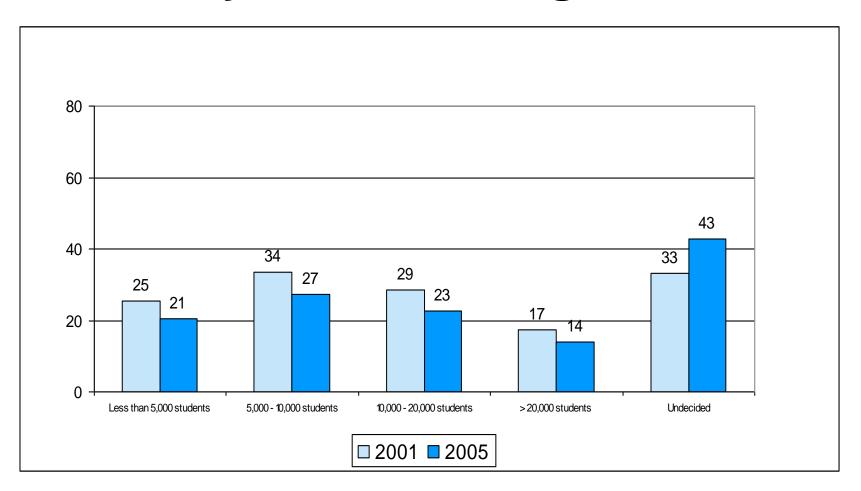


### Percent by Type of University



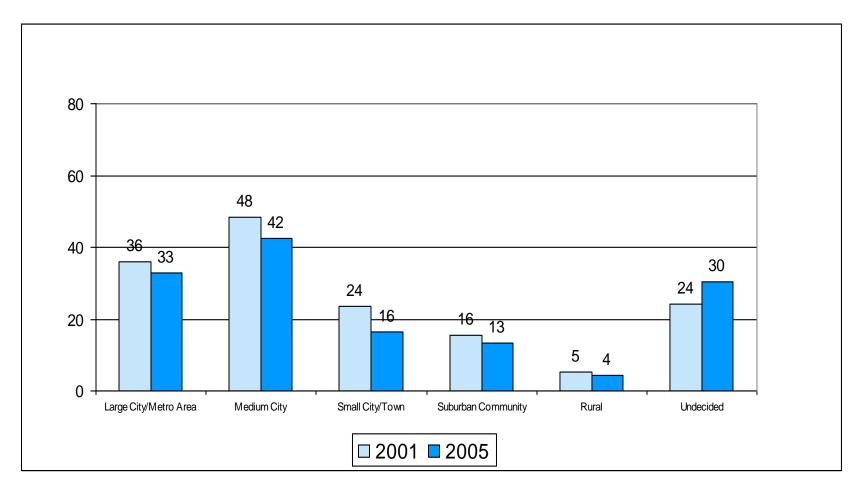


### Percent by Size of College



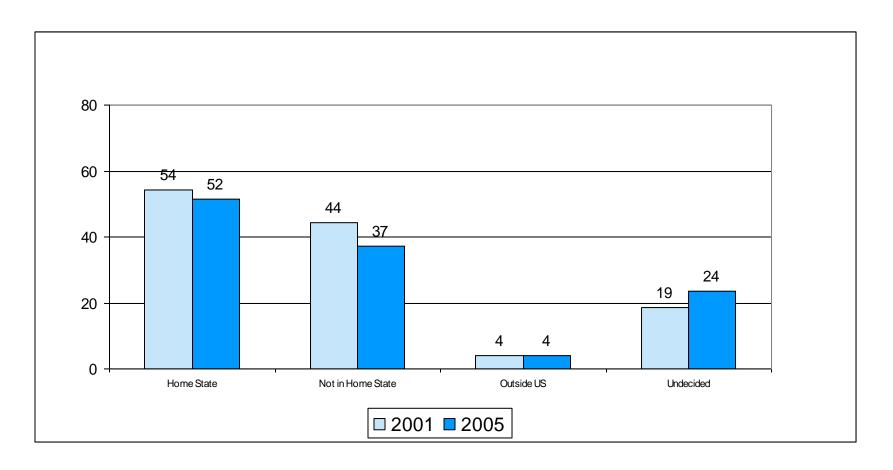


### Percent by College Setting





### Percent by Proximity to Home





### **Analyses – Florida**



### The Numbers – Florida

- In 2005, more than 93,000 students graduated having taken the SAT®
- 85 86% of students who took AP also filled out the SAT questionnaire

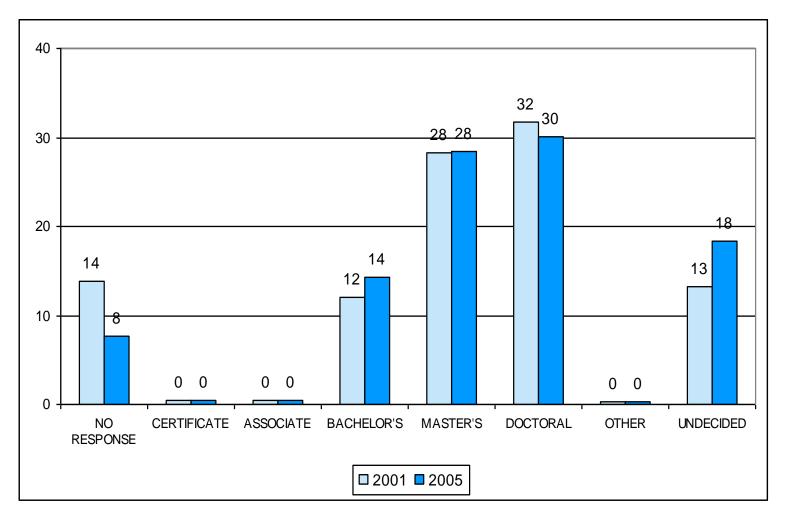


### Test-Takers – Florida

- In the 2001 graduating class of seniors:
  - 69,363 took the SAT Reasoning Test
  - 28,195 took an AP exam
  - 24,315 of those students who took an AP exam filled out the SAT Questionnaire
- In the 2005 graduating class of seniors:
  - 93,505 took the SAT Reasoning Test
  - 45,900 took an AP exam
  - 39,141 of those students who took an AP exam filled out the SAT Questionnaire

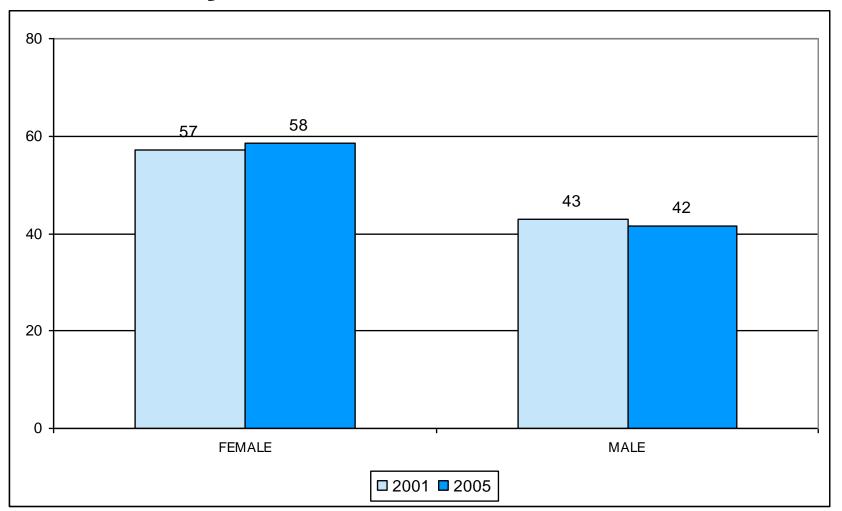


### **Percent by Degree Goal**



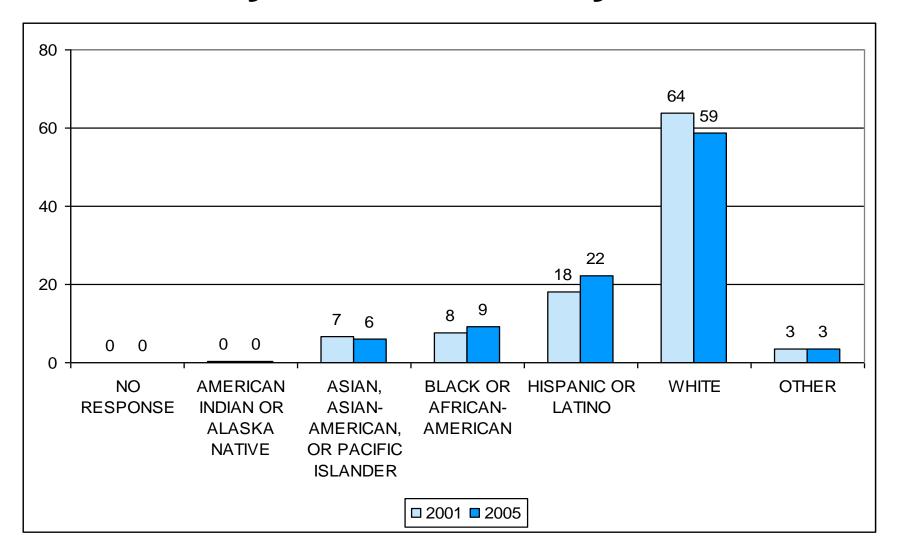


### Percent by Gender



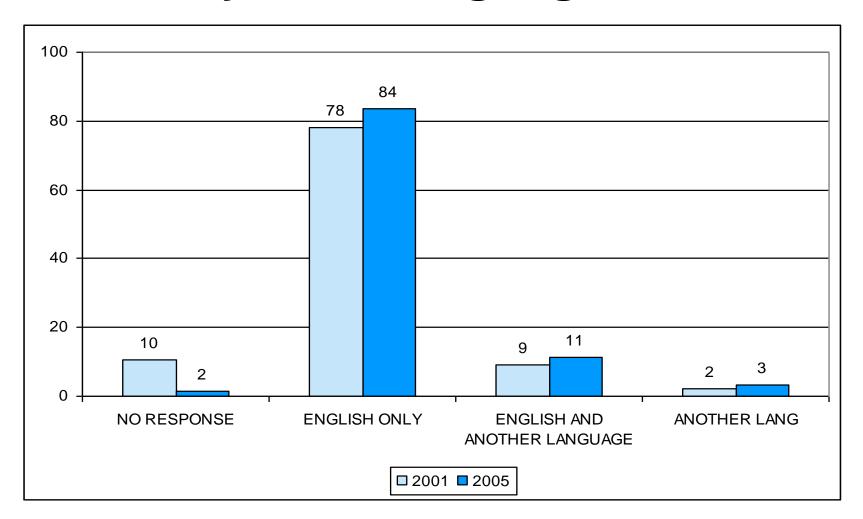


### Percent by Race/Ethnicity



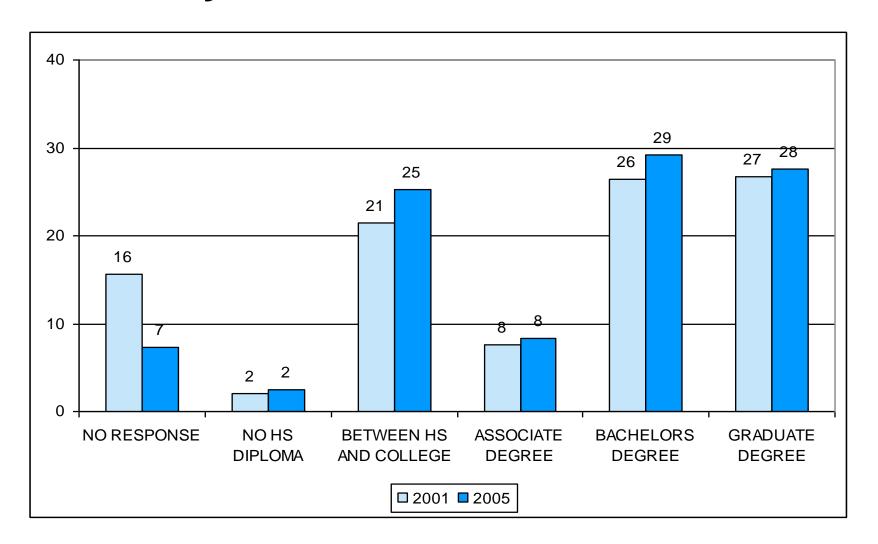


### Percent by Best Language



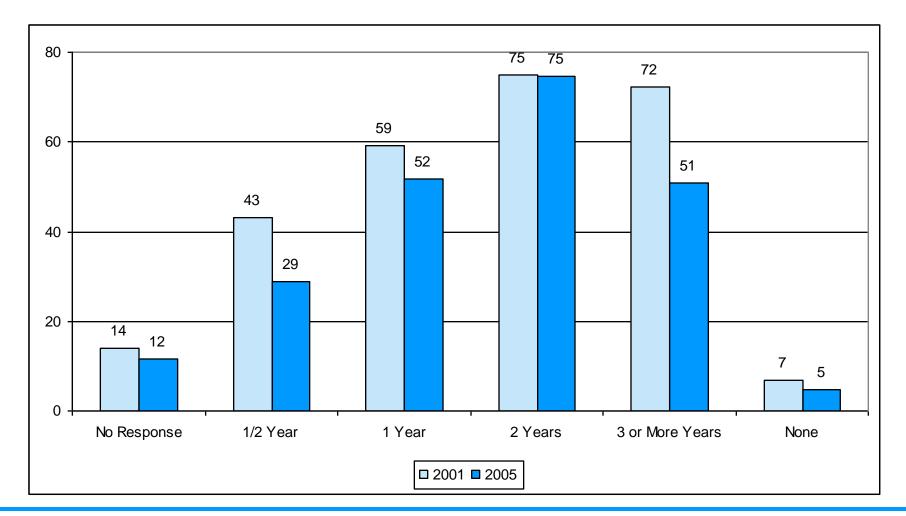


### Percent by Parental Level of Education



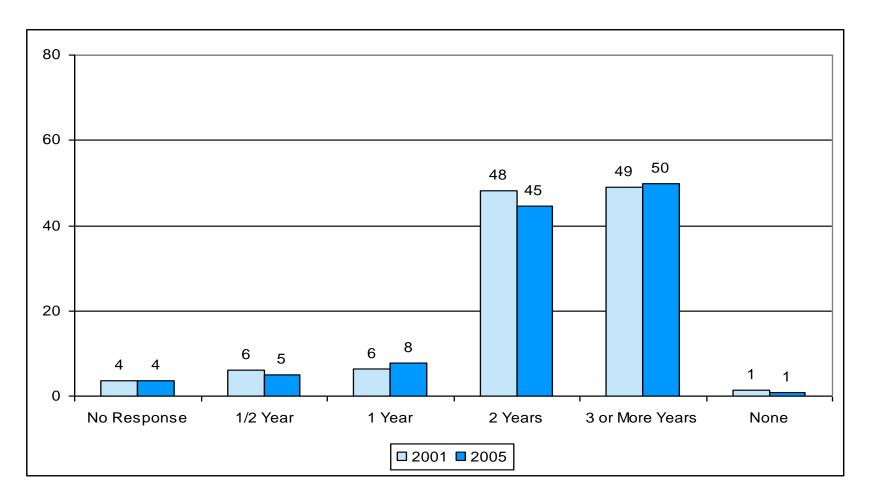


# Percent of Students who took AP Calculus AB by Years of Calculus



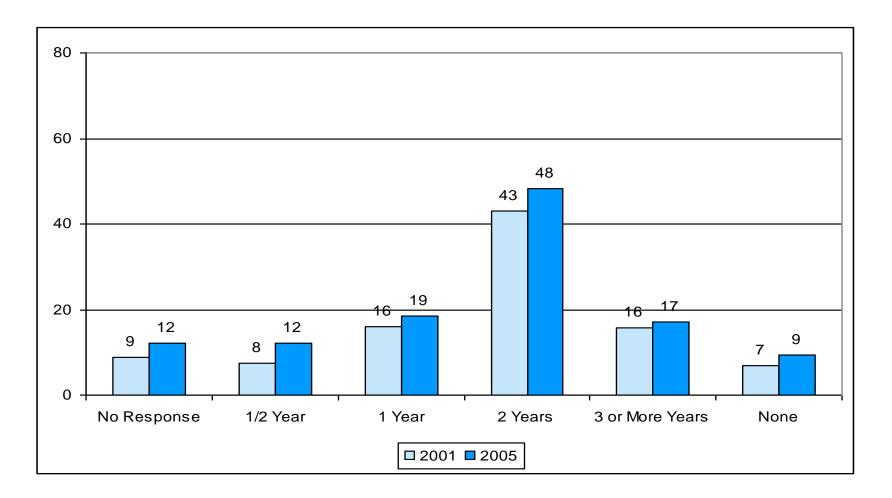


# Percent of Students who took AP Physics B by Years of Physics



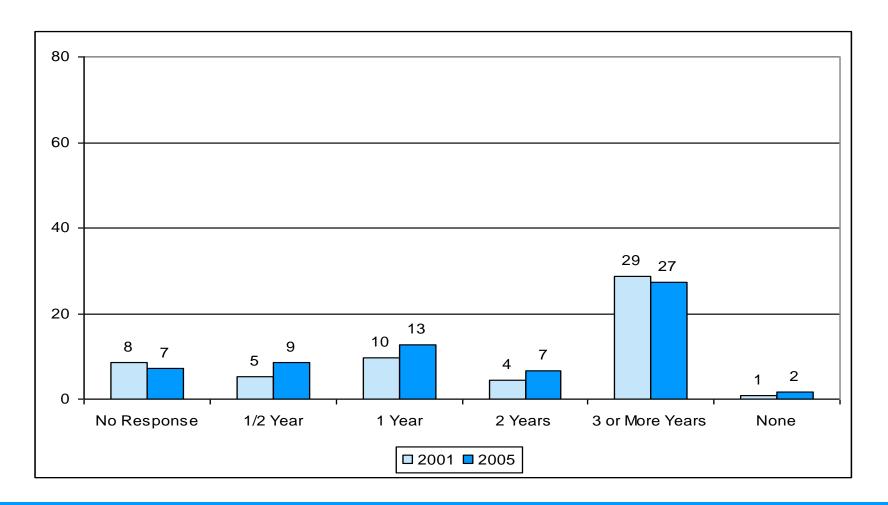


## Percent of Students who took AP Macroeconomics by Years of Economics



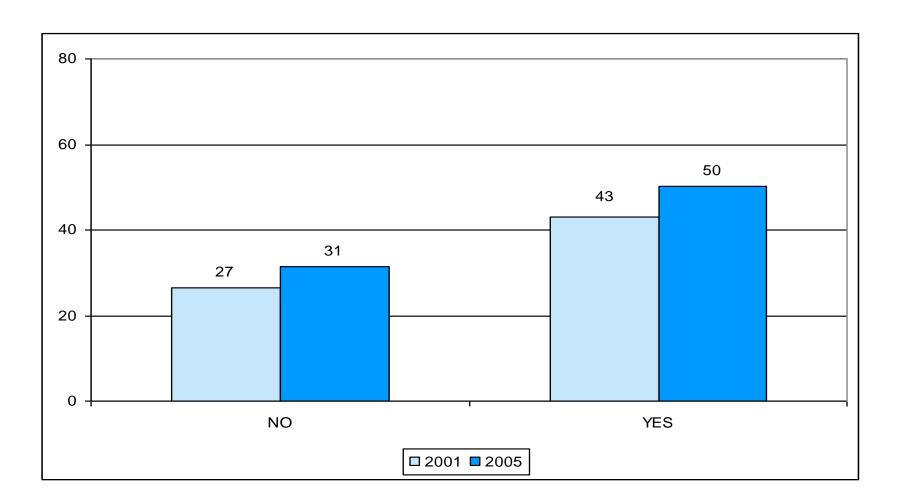


## Percent of Students who took AP Spanish by Years of Spanish



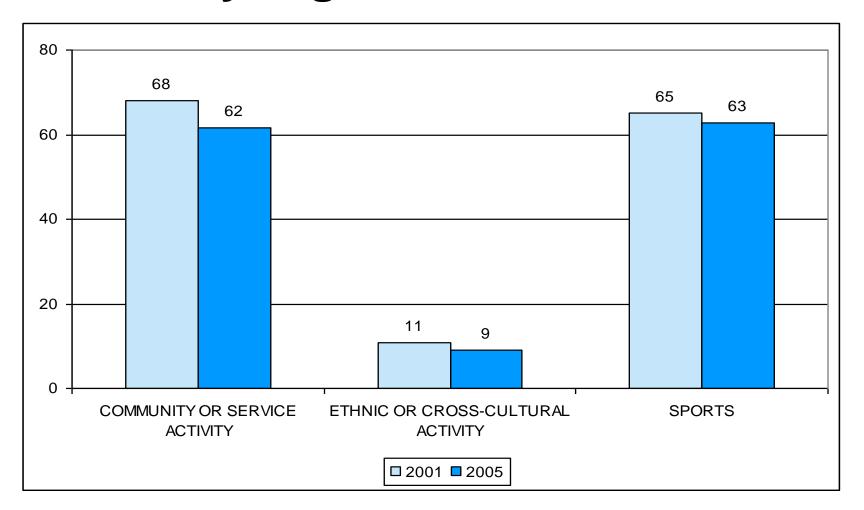


## Percent of Students who took AP English Language by Composition Indicator



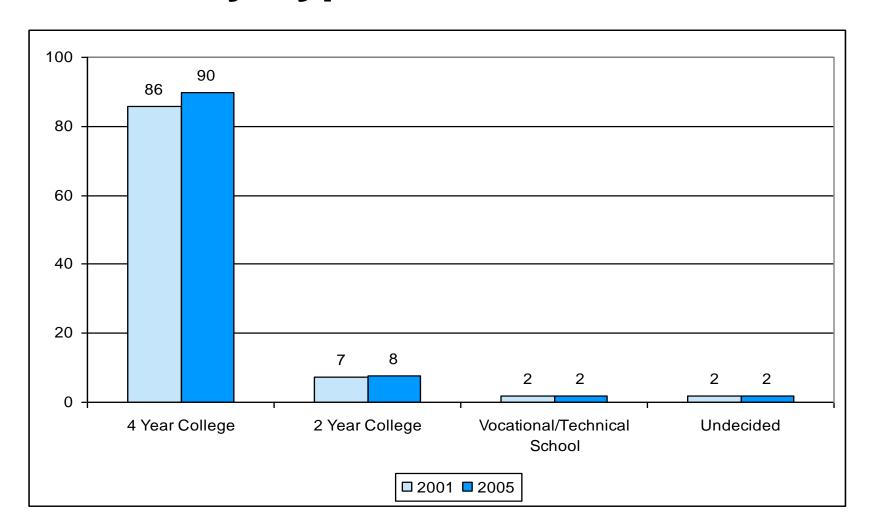


### Percent by High School Activities



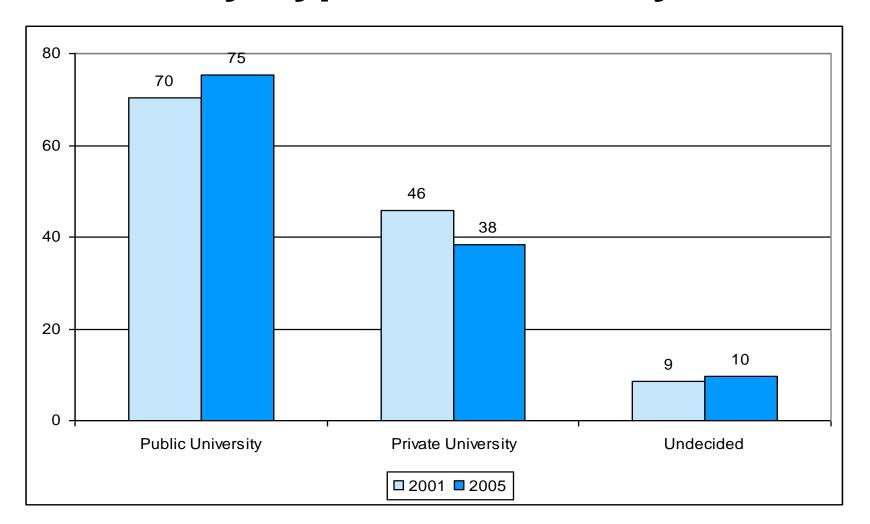


### Percent by Type of Institution



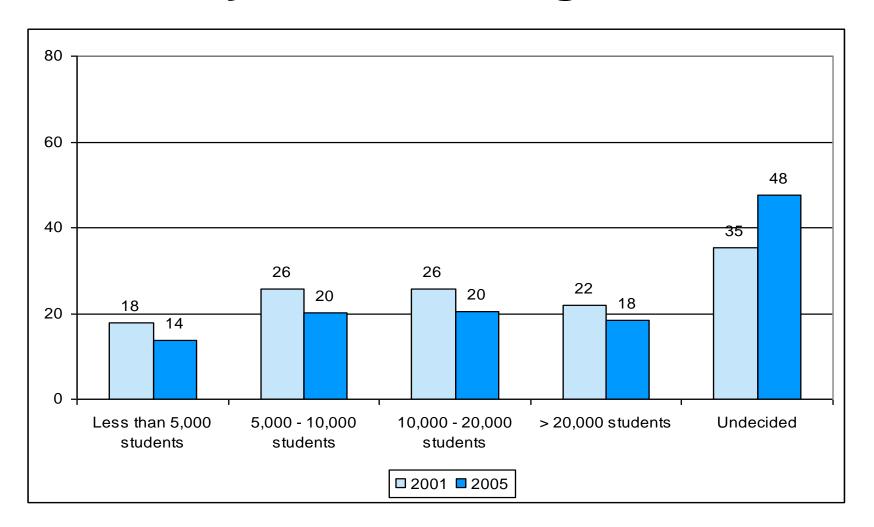


## **Percent by Type of University**



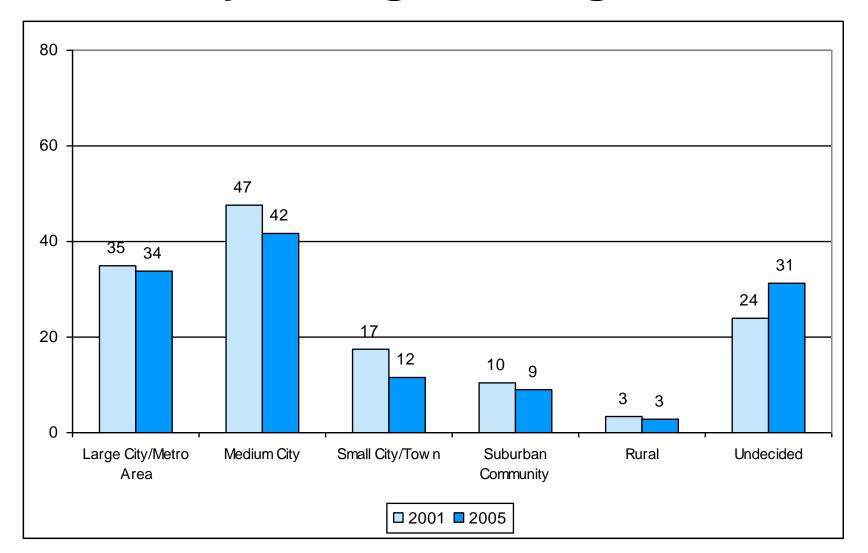


## Percent by Size of College



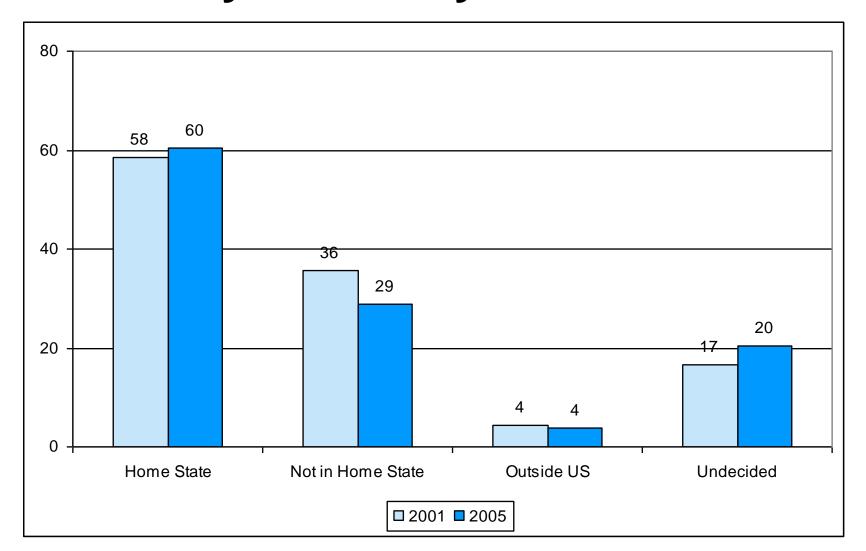


## Percent by College Setting





## Percent by Proximity to Home





#### **Conclusions**

- Demographics
  - Most AP Exam takers are aspiring to obtain a Master's or a Doctoral degree
  - Female AP Exam takers continue to outnumber males
  - A higher percentage of minority students are taking at least one AP Exam
  - Most AP Exam takers indicate English only as their best language
  - A majority of the parents had at least a Bachelor's degree



#### **Conclusions**

- Coursework
  - Calculus Students who have two years of coursework are more likely to sit for the AP Exam
  - Physics Nationally, students who have two years of coursework are more likely to sit for the AP Exam; in Florida, students with three or more years are more likely to sit for the AP Exam, followed closely by students with two years of coursework
  - Economics Students with two years of coursework are more likely to take the AP Exam than other students
  - Spanish Students with three or more years of coursework are more likely to take the AP Exam than other students
  - English Students who have coursework and/or experience in Composition are more likely to sit for the AP Exam



#### **Conclusions**

- Aspirations
  - Sports appears to be the most popular extracurricular activity followed closely by community service; however, participation seems to be declining
  - Most AP Exam takers plan to attend a four-year, public institution
  - College size does not appear to be a major concern for students as indicated by the high percentage of undecided
  - Most AP Exam takers plan to attend a college in a medium-sized city
  - Most AP Exam takers plan to attend a college in their home state



# What's an Administrator, AP Coordinator, Counselor To Do?

- Review current and trend characteristics of AP students, such as college interests, enabling school personnel to better serve students and facilitate the process of connecting them to college success.
- Understanding the characteristics of AP students can be a tool to identify potential students not currently taking advantage of AP.



#### Limitations of our research include...

- Students who are not offered AP at their schools
- Students who do not take the SAT
- Research limited to five AP Exams

#### **Future Research**

- Explore ways to match students as they come to the website to answer the questionnaire a little at a time
- Look at performance data in addition to participation
- Look at those students with two or more years of coursework that are not taking the corresponding AP Exam

#### Questions, Comments, Suggestions

- Researchers are encouraged to freely express their professional judgment. Therefore, points of view or opinions stated in College Board presentations do not necessarily represent official College Board position or policy.
- Please forward any questions, comments, and suggestions to:
  - esawtell@collegeboard.org and/or
  - jgillie@collegeboard.org



### **Appendix**

Copy of SAT Questionnaire



## **Changes Applied to Questionnaire**

- Noted 'for research only' on parental questions
- Removed option for students to 'Reset' or respond 'I don't know'
- Added "I do not wish to respond" option
- Removed 'Cancel' option to exit
- Required all first-time web registrants to go to questionnaire
- If respondent left 'key questions' blank, question reloads



#### Web increase → Non-response increase

- Key questions in which non-response caused the most concern:
  - Ethnicity
  - Mother's Education
  - Father's Education
  - Parental Income
  - High School GPA
  - First Language Spoken
  - Best Language Spoken

