

Meeting the Challenges of Improved Post-Secondary Education in the Mathematical Sciences

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on Science and Technology

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NSF-sponsored study of

Characteristics of Successful Programs In College Calculus



Calculus Surveys

(administered both start and end of Fall 2010)

- 213 Colleges and Universities
- 502 Instructors representing
 - 663 Calculus I classes
 - 26,257 Students
- 14,184 Students

Case study visits to 16

“successful” programs
(Fall 2012)

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Co-PIs and Project Leaders:

Linda Braddy (MAA)

Marilyn Carlson (Arizona State)

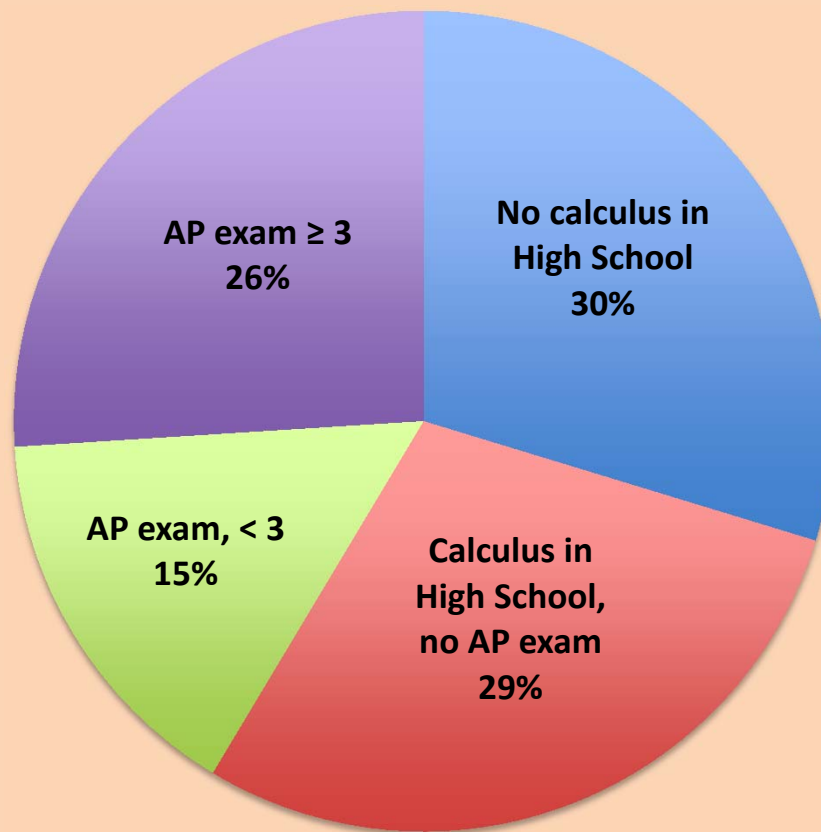
Eric Hsu (San Francisco State)

Sean Larsen (Portland State)

Vilma Mesa (U. Michigan)

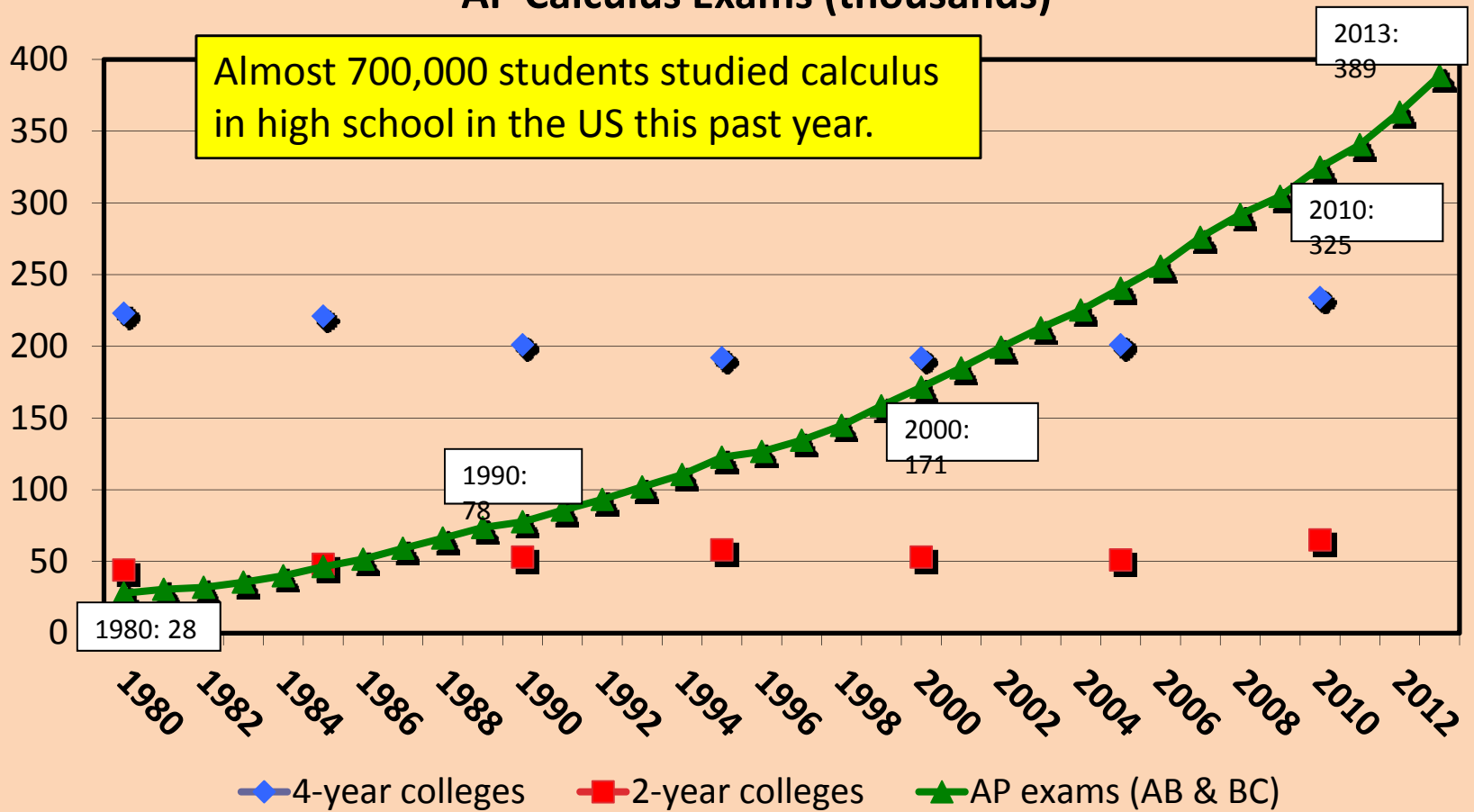
Chris Rasmussen (San Diego State)

High School Calculus Experience of Research University Students in Calculus I



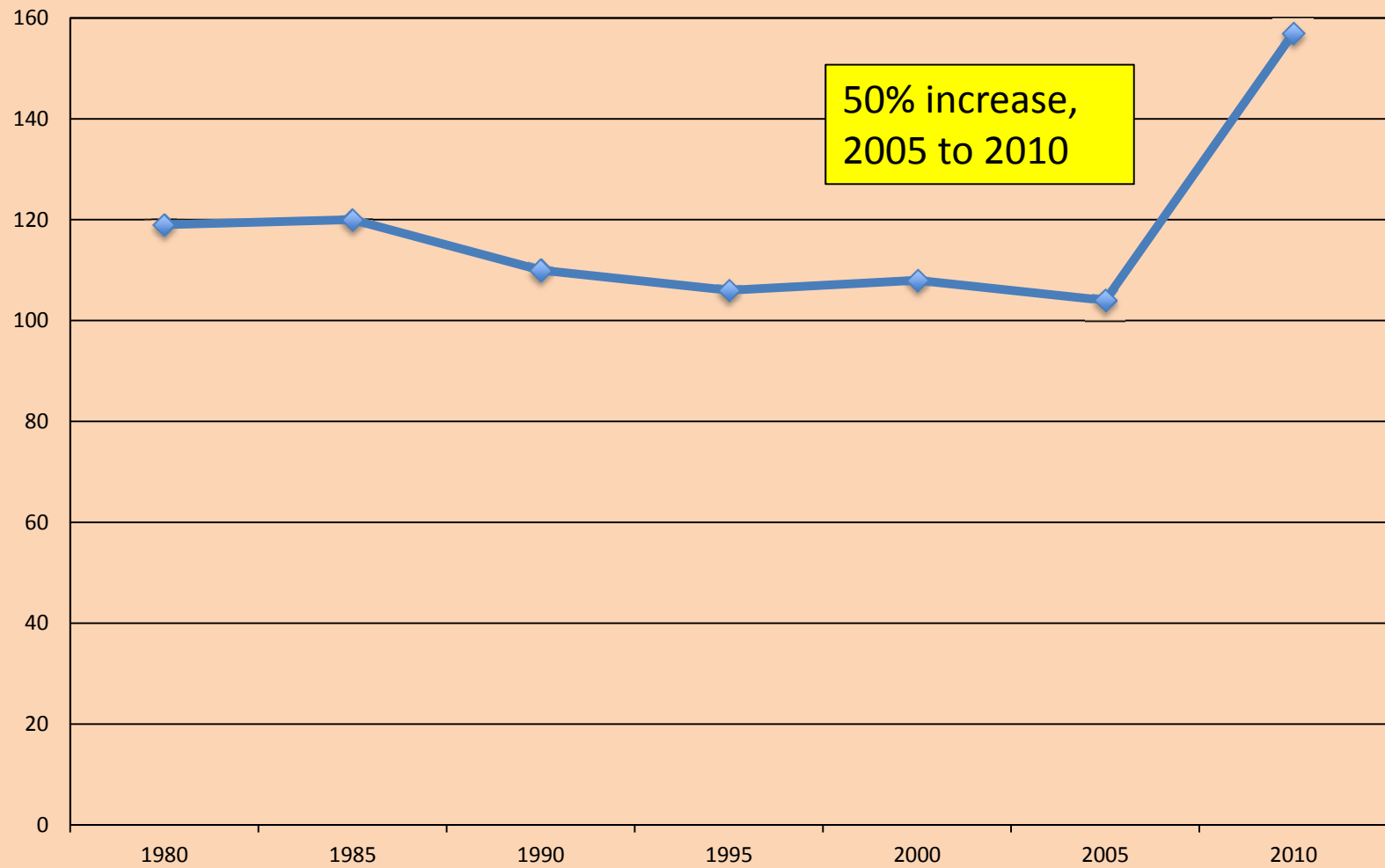
Data from CSPCC Study

Fall Enrollments in Calculus I versus AP Calculus Exams (thousands)



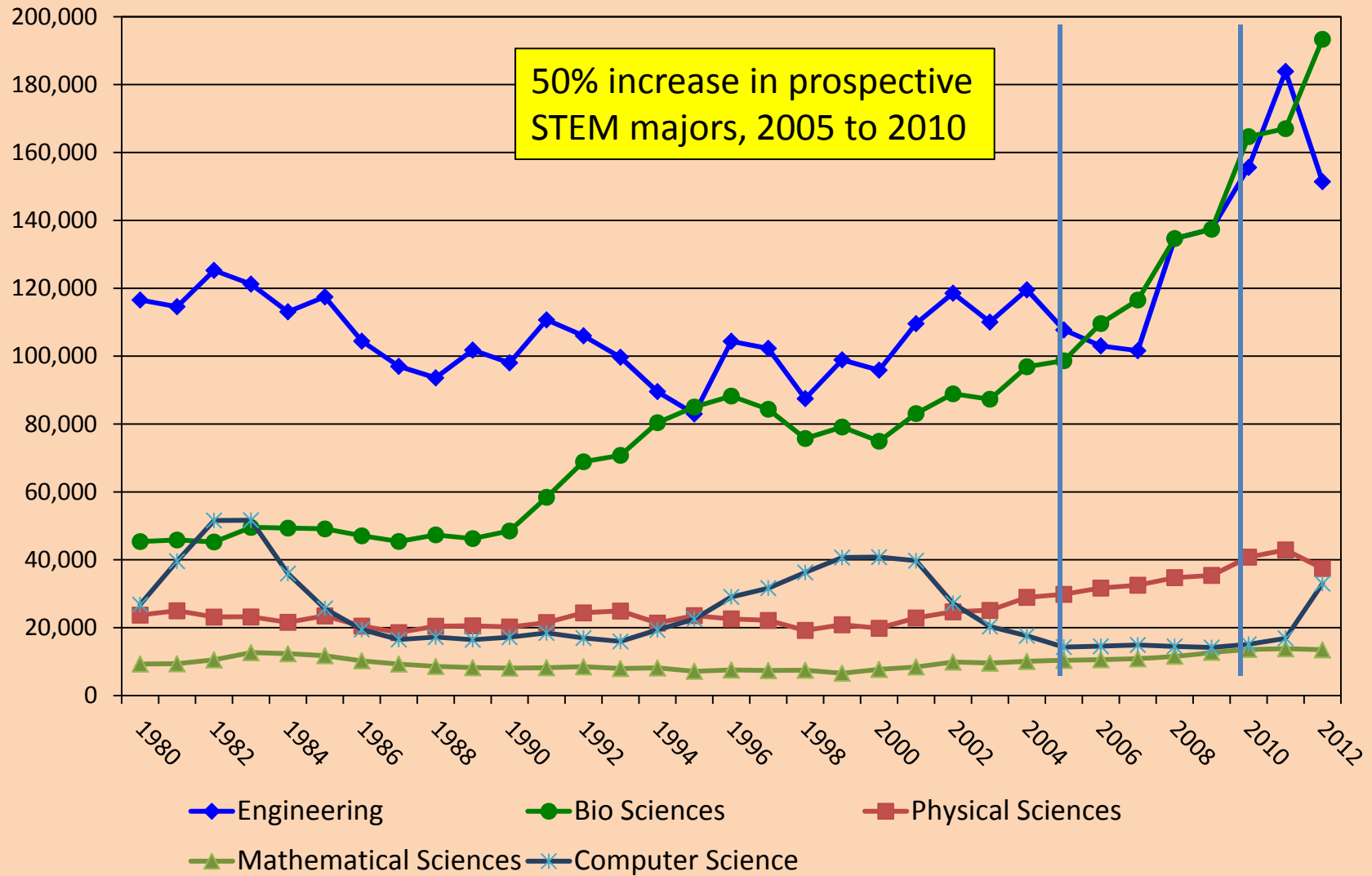
Data from CBMS and College Board

Fall term enrollment in Mainstream Calculus II all post-secondary institutions (thousands)



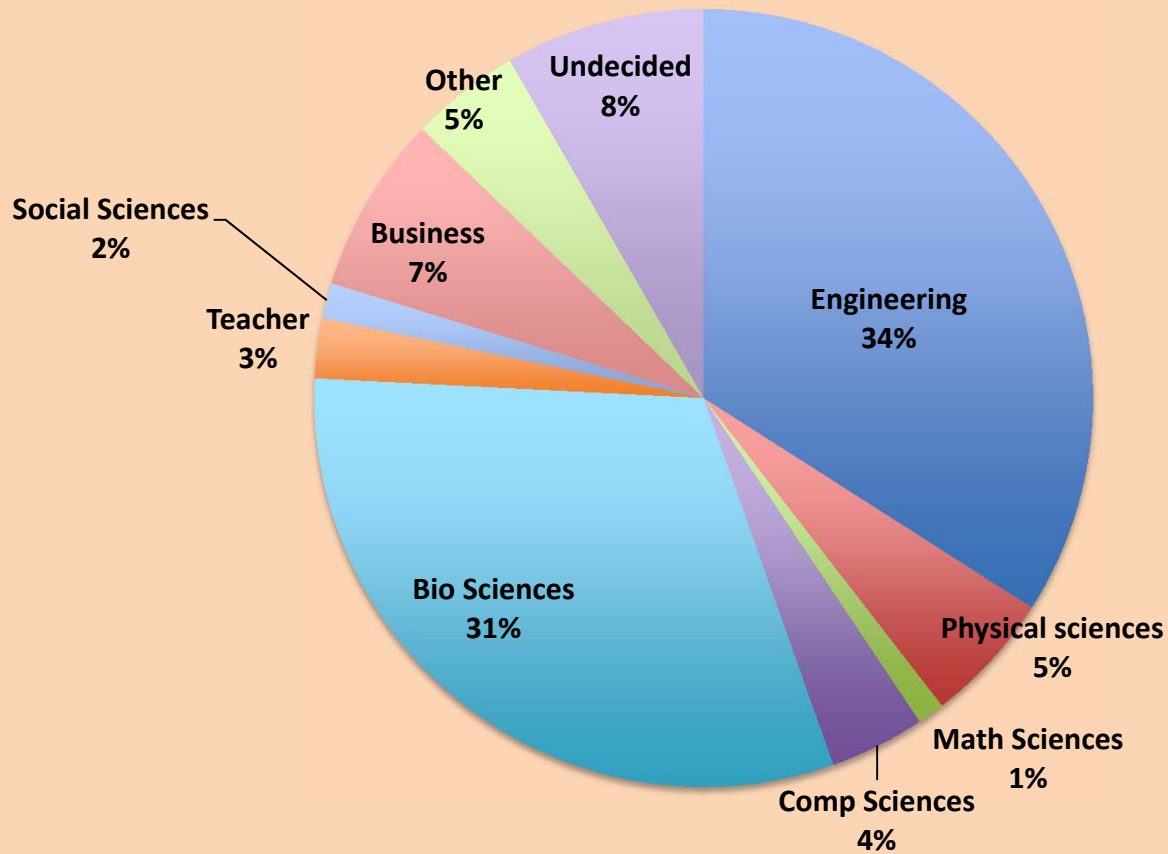
Data from CBMS

Intended STEM Majors of Incoming Students



Data from HERI

Intended Career of Calculus I Students at Research Universities



Data from CSPCC Study