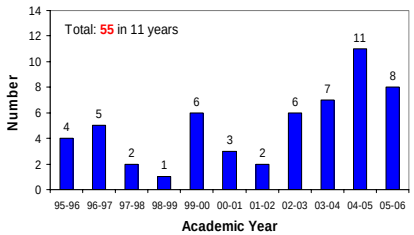
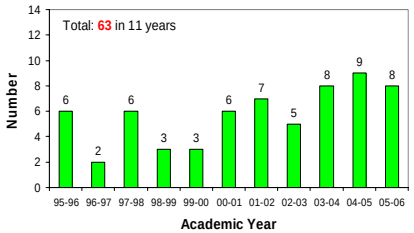
Recruitment of Physics Majors and Physics Teaching Majors: A Multi-layered Approach at Ball State University

David Grosnick, Elaine Gwinn, David Ober, and Neil Anthony





Ball State University ranked in the top 30 colleges and universities in US for percentage increase in number of degrees awarded for three-year average from 2002 – 2004

Recruitment for Physics Majors and Minors

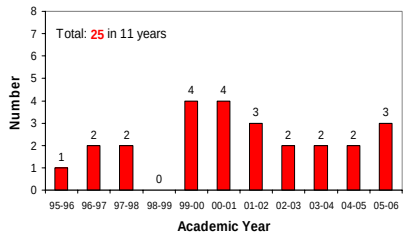
- Faculty supplied with career information and recruitment materials
- Recruitment efforts made in all physics classes
  (introductory, intermediate courses)
- Instructor encourages students in class to consider programs
  non-majors → majors, minors
  minors → majors
- Instructor offers to talk with interested students outside class or meet with chairperson to discuss department offerings
- Also recruit in larger General Education courses:
  Introductory Astronomy (~1800 students/year)
  Conceptual Physics (~250 students/year)
  Introductory Physics (Algebra-based) (~300 students/year)
  Introductory Physics (Calculus-based) (~100 students/year)
- Teacher-in-Residence visited each class to give special emphasis on opportunities in becoming a physics teacher

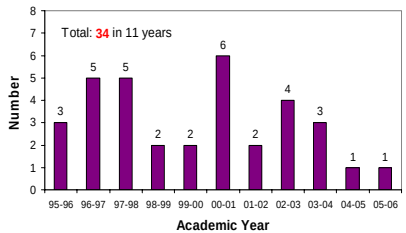
SPS Outreach at local middle schools

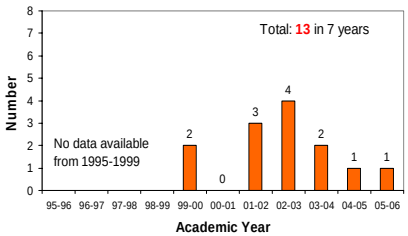
Summer Teacher Workshops

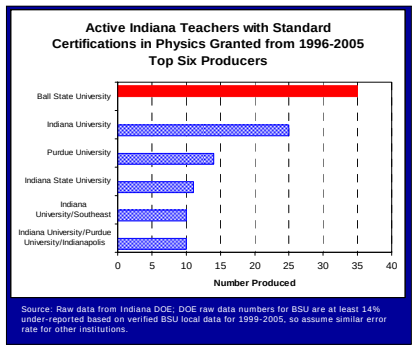
TiR at Secondary Education Fair

SPS Outreach at Indiana State Fair









Recruitment for Physics Teaching Majors

- Students pursuing Secondary Mathematics Teaching degree are contacted via e-mail about option of adding Physics Certification to license
- Also provide web links to career information from AAPT and AIP Statistical Research Center
- Teacher-in-Residence visited introductory/gateway course for Math Teaching majors to give special emphasis on increased employment opportunities when adding physics certification to license

Studio Format for Laboratories

PET Curriculum

Department Revitalization Plan: (1998)

- Review curriculum – examine intro and upper-level courses to make changes
- Improve department climate and retention – undergrad study room; social events
- Expand internship opportunities – REU opportunities; writing resume activities
- Intensify recruitment and outreach – Open House; SPS activities
- Improve facilities – Studio physics labs; improve grad student offices; research clusters

Undergrad Physics Study Room

Student Research Opportunities