APS: EDUCATION AND DIVERSITY

Andrew Phipps

APS: PROGRAMS GOALS



Creating

Creating better opportunities for minorities by working together with institutions as well as developing new programs through APS.



Helping

Helping individual institutions understand their graduation reports and locating areas that could use improvement or areas that deserve recognition.



Supporting

Supporting individual institutions develop their programs for helping different demographics throughout their careers in and out of academia.



Navigation of the Integrated Postsecondary Education Data System (IPEDS) federal database.

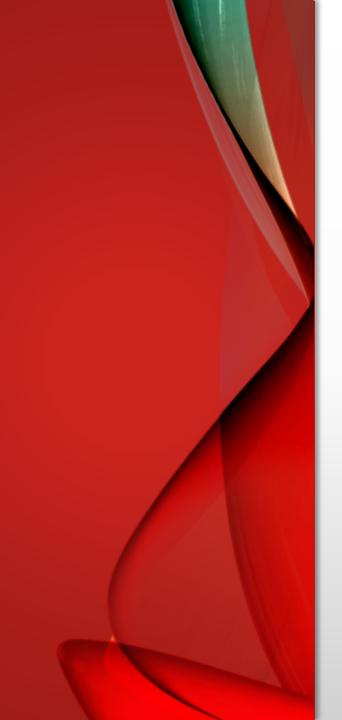
MY PART: GATHERING AND ORGANIZING THE DATA



Isolating the data of completed degrees for different demographics per year from individual institutions throughout the United States. (Years, Demographics, Degrees, Major).



Interpreting and organizing the data found for all institutions (Institution Type).



APS' PHYSICS DEFINITION

- Definition differences: APS and AIP
 - 4% difference
 - Departmental vs Federal reports
- Not included: Biophysics, Astronomy, Planetary Astronomy and Science, Acoustics
 - Minimize overlap and double counting
 - Data integrity
- Institution classification
- Minimum of a physics minor required

WHERE THE DATA GOES



To department faculty that can present APS' ideas and developed programs to the government for funding and support.

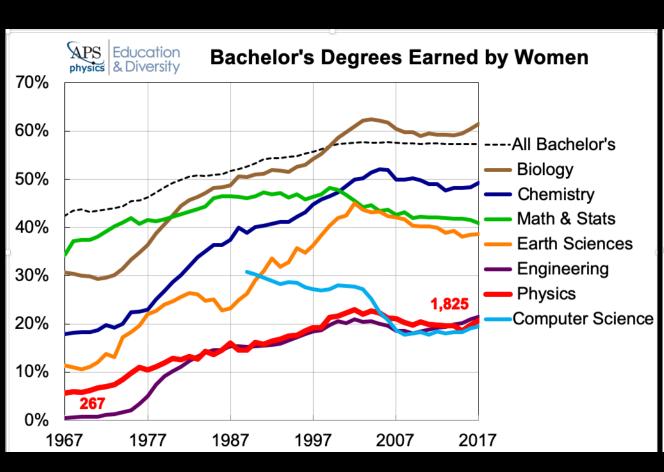


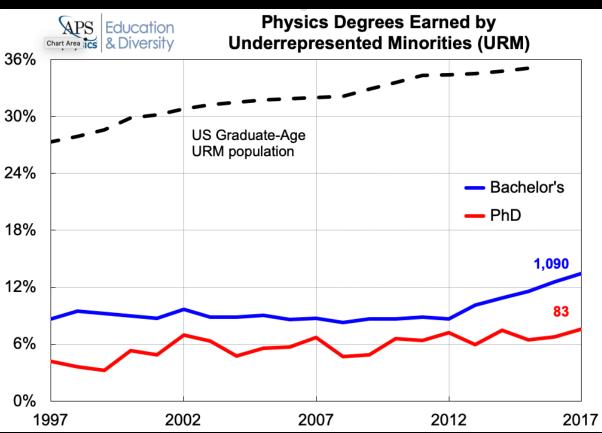
To the Programs: Education and Diversity statistics website for the public to use or view.



To individual institutions so they can compare themselves to national averages, bests, or other institutions.

Examples:





FUTURE WORK MADE EASIER



Data Collection

Code created for future employees to shorten the time it takes to add a new years data. Weeks of work now shortened to hours.



Potential Projects

Future analysis and projects can now be completed by future interns and employees now that the process of updating the data has been streamlined.



Spreadsheets

An updated spreadsheet of physics data for easy access and edits. This can (and has been) taken to institutions to help APS understand the institutions individual standing in the Nation.

SPS TAKEAWAYS



Learning how communities differ in their definitions of Physics.



Applications of using data to help others and to support your own ideas.



Appreciating of a fantastic work environment.



Friends and Networking opportunities.



An amazing Washington DC experience with APS: Programs.



BONUS SLIDE

CIP codes:

13.1329 Physics Teacher Education

14.1201 Engineering Physics/Applied Physics

40.0202 Astrophysics

40.0299 Astronomy and Astrophysics, Other

40.0801 Physics, General

40.0802 Atomic/Molecular Physics

40.0804 Elementary Particle Physics

40.0805 Plasma and High-Temperature Physics

40.0806 Nuclear Physics

40.0807 Optics/Optical Sciences

40.0808 Condensed Matter and Materials Physics

40.0810 Theoretical and Mathematical Physics

40.0899 Physics, Other