

13. Social Sciences and Post-War Support for Science

Early organization of knowledge

- liberal arts
 - *grammar, rhetoric, and logic*
 - *astronomy, music, arithmetic, geometry*
- advanced studies
 - *medicine*
 - *law*
 - *theology*

Place of the social sciences

- psychology (theology or natural philosophy)
- sociology (ethics, theology)
- political science (history)
- anthropology (theology, history, nat. phil.)

Changes during the industrial revolution

- emergence of scientific method
- increased urbanization of society
- social reform movements
- increasing knowledge of the world

Conclusion: there is a need to develop a science of society

- one science or many?
- what should it study?
- what methods should be used?

Mid-nineteenth century, emergence of social science

- Comte, Bentham, Marx, Spencer
- British Social Science Association (1830s)
- 1865, American Social Science Association
- broad, open to all

1880s-1920s, individual social sciences emerged

- economic - economic systems
- political science - political systems
- psychology - mind, behavior, personality
- anthropology - cultural groupings
- sociology - social systems

late 19th C. ff. institutionalize

- 1892, American Psychological Association
- 1903, American Political Science Association

Method

- usually divided between links to hard sciences and link the humanities
- more recently add division between clinical and experimental

Through WW II, were small and under-developed in comparison to the “hard” sciences

- Vannevar Bush did not want to fund as part of the NSF
- were not included in NSF in early years

Post WW II growth in the social sciences

...charts and figures (below); quotes....

Today, a university may be defined, for some purposes, as a large body of talent surrounded by people who want to give it money. Government agencies have devised so-called “developmental conferences” to stimulate proposals for available funds in neglected field. Foundations have been known to beat the academic bushes for talented people to accept grants in special areas of interest. The absentee professor is a familiar stereotype on the campus today, as academic talent is jet-hauled from here to there to attend meetings, serve on advisory committees, and otherwise lubricate the gigantic gears of the research establishment. *Sponsored Research in American Universities and Colleges (1967)*

The [research] scholar has everything--the departments, the powerful committees, the learned societies, the Federal funds, the deanships, and the presidencies--and if he chooses to say that he finds teaching distasteful and unworthy of his abilities, who will say him nay? Who speaks for teaching here? Clearly nobody, expect perhaps students. If teaching is to survive within the modern university on terms of something like parity with research, it must somehow acquire institutional power. William Arrowsmith in “The Future of Teaching” (1966)

Change ~ typical state university

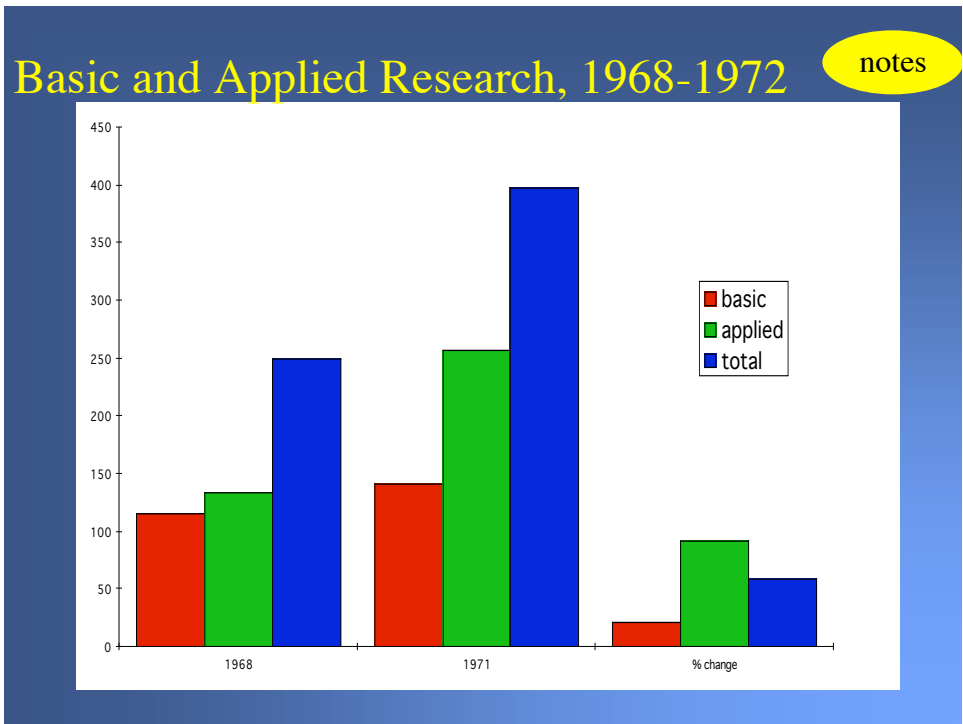
notes

Area	1955	1965	Change
Grad stud	716	2,140	298%
PhDs	8	90	1125%
Faculty	813	1371	168%
Res. Fac.	61	302	495%
Research	\$3M	\$15M	479%

Growth in research fields

notes

Field	1950	1955	1960	1965	
All degrees	6,535	8,905	9,998	17,110	261.82
Science and engineering	4,344	5,847	6,500	11,108	255.71
Natural sciences	2,975	3,719	4,131	6,282	211.16
Physical sciences	1,474	1,524	1,681	2,545	172.66
Earth sciences	130	180	251	395	303.85
Life & agricultural science	1,371	2,015	2,199	3,342	243.76
Mathematical sciences	176	243	289	734	417.05
Social & behavioral sciences	978	1,604	1,684	2,473	252.86
Psychology	360	734	752	1,072	297.78
Social sciences	618	870	932	1,401	226.70
Engineering	469	649	825	2,186	466.10



- ### Social sciences catching up, 1972
- notes
- chemists 110,000
 - biologists 60,000
 - psychologists 35,000
 - economists 20,000
 - anthro & pol sci 15,000