
■ Loyola as a Generator of PhDs

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Loyola as a Generator of PhDs

Introduction

Since 1957, the National Science Foundation (NSF) has been conducting the Survey of Earned Doctorates (SED). As students receive a research doctorate their home institution provides them with the SED, collects the completed SEDs, and submits the surveys to the NSF subcontractor for data entry.

The NSF's analysis of completed surveys compared to the number of doctorates reported to the National Center for Education Statistics each year reveals "little coverage error of institutions."¹ As an example, the response rate in 2005 was 92%.

One element collected on the SED is baccalaureate institution. These data have been used to generate reports on baccalaureate origins of PhDs. Chris Winters at Williams College developed a tool to quickly analyze the baccalaureate origins data and that tool has been used to generate displays of the numbers of Loyola baccalaureate recipients that have gone on to earn PhDs and to compare Loyola's generation of PhDs to that of other top catholic comprehensive institutions. These data—disaggregated by discipline—for the 1966-67 through the 1999 graduating classes are found on the following pages.

Executive Summary

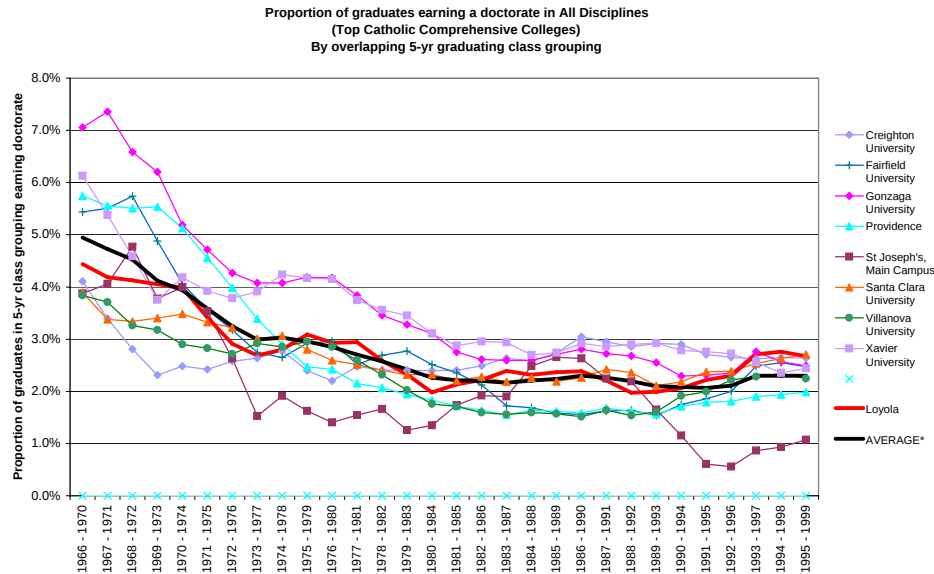
- ◆ There is a downward trend at Loyola and among the peer group in the proportion of undergraduate classes going on to earn PhDs.
 - ◆ With the exception of Saint Joseph's, variability among the peer group institutions in PhDs earned across all disciplines has lessened since the early 1980s.
- ◆ Loyola has hovered around the average of the peer group in terms of the proportion of bachelor degree graduates who have gone on to earn a PhD.
 - ◆ When looking at the numbers of PhDs generated by the peer group's graduates, Loyola's share of doctorates has increased over time.
 - ◆ In the most recent class grouping, Loyola—at 2.7% or 95 of its undergraduates having gone on to receive PhDs—leads the peer group.
- ◆ The leading areas for Loyola bachelor degree graduates who have gone on to earn a PhD are the life sciences followed by education and the humanities.

¹ National Science Foundation, Survey of Earned Doctorates, available online:
<<http://www.nsf.gov/statistics/srvydoctorates/>>

Baccalaureate origins of doctoral recipients over time

Doctoral field = All Disciplines

Comparison group = Top Catholic Comprehensive Colleges



Source for doctorates by institution: NSF Survey of Earned Doctorates
Source for baccalaureate degrees by institution: IPEDS Completions Survey
Assumption: Doctorates received correspond to baccalaureate degrees received 5 years earlier

Proportion of graduates earning a doctorate in All Disciplines
(Top Catholic Comprehensive Colleges)
By overlapping 5-yr graduating class grouping

	1967 - 1971	1969 - 1973	1971 - 1975	1973 - 1977	1975 - 1979	1977 - 1981	1979 - 1983	1981 - 1985	1983 - 1987	1985 - 1989	1987 - 1991	1989 - 1993	1991 - 1995	1993 - 1997	1995 - 1999
Creighton University	3.4%	2.3%	2.4%	2.6%	2.4%	2.5%	2.4%	2.4%	2.6%	2.7%	2.9%	2.9%	2.7%	2.6%	2.6%
Fairfield University	5.5%	4.9%	3.6%	2.7%	2.9%	2.5%	2.8%	2.4%	1.7%	1.6%	1.6%	1.5%	1.9%	2.5%	2.5%
Gonzaga University	7.4%	6.2%	4.7%	4.1%	4.2%	3.8%	3.3%	2.8%	2.6%	2.7%	2.7%	2.5%	2.3%	2.8%	2.5%
Providence	5.6%	5.5%	4.6%	3.4%	2.5%	2.2%	1.9%	1.7%	1.5%	1.6%	1.7%	1.6%	1.8%	1.9%	2.0%
St. Joseph's, Main Campus	4.1%	3.8%	3.5%	1.5%	1.6%	1.5%	1.3%	1.7%	1.9%	2.7%	2.2%	1.6%	0.6%	0.9%	1.1%
Santa Clara University	3.4%	3.4%	3.3%	3.0%	2.8%	2.5%	2.3%	2.2%	2.2%	2.2%	2.4%	2.1%	2.4%	2.5%	2.7%
Villanova University	3.7%	3.2%	2.8%	2.9%	3.0%	2.6%	2.0%	1.7%	1.6%	1.6%	1.6%	1.6%	2.0%	2.3%	2.2%
Xavier University	5.4%	3.7%	3.9%	3.9%	4.2%	3.7%	3.5%	2.9%	2.9%	2.7%	2.9%	2.9%	2.8%	2.6%	2.4%
Loyola	4.2%	4.1%	3.4%	2.7%	3.1%	2.9%	2.3%	2.1%	2.4%	2.4%	2.2%	2.0%	2.2%	2.7%	2.7%
AVERAGE*	4.7%	4.1%	3.6%	3.0%	3.0%	2.7%	2.4%	2.2%	2.2%	2.2%	2.3%	2.1%	2.1%	2.3%	2.3%

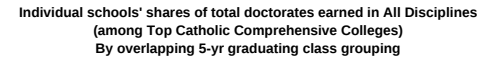
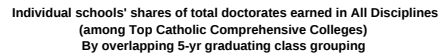
*simple average of 9 schools above, unweighted

Top Ten Schools THEN & NOW
by percentage of graduates earning a doctorate in All Disciplines

	THEN (cohort = 1967 - 1971)	NOW (cohort = 1995 - 1999)
1 California Institute of Technology	42.2%	33.0%
2 Harvey Mudd College	29.6%	22.1%
3 Massachusetts Institute of Technology	29.0%	20.9%
4 University of Chicago	28.7%	19.6%
5 Swarthmore College	27.5%	16.7%
6 Bryn Mawr College	23.4%	16.4%
7 Reed College	22.6%	16.0%
8 Haverford College	22.4%	15.3%
9 Oberlin College	21.0%	15.1%
10 Pomona College	20.4%	14.8%

The Baccalaureate Origins of Doctoral Recipients Peer Comparison Tool
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cwinters@williams.edu, 413-597-4475
for use in conjunction with raw HEDS "Baccalaureate Origins" datafile

Comparison group = Top Catholic Comprehensive Colleges



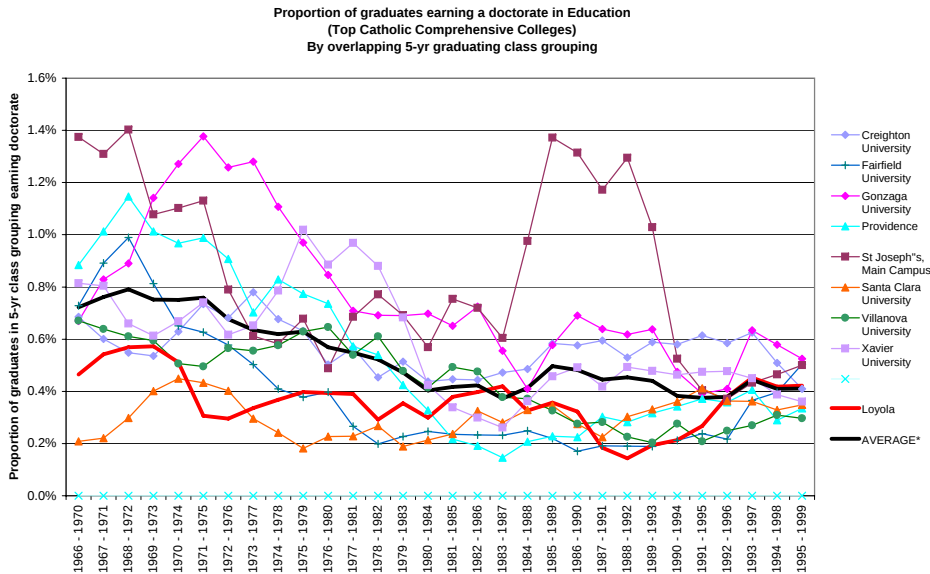
Top Ten Schools THEN & NOW			
by number of graduates earning a doctorate in All Disciplines			
THEN (cohort = 1967 - 1971)		NOW (cohort = 1995 - 1999)	
1	University of California-Berkeley	2,212	University of California-Berkeley
2	University of Michigan at Ann Arbor	1,685	University of Michigan at Ann Arbor
3	University of Illinois at Urbana-Champaign	1,634	University of Illinois at Urbana-Champaign
4	University of California-Los Angeles	1,504	University of California-Los Angeles
5	Harvard University	1,446	University of Texas at Austin
6	University of Wisconsin-Madison	1,421	Harvard University
7	CUNY City College	1,381	Pennsylvania State U, Main Campus
8	Massachusetts Institute of Technology	1,246	University of Wisconsin-Madison
9	University of Texas at Austin	1,221	Brigham Young University, Main Campus
10	Michigan State University	1,186	Massachusetts Institute of Technology

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Baccalaureate origins of doctoral recipients over time

Doctoral field = Education

Comparison group = Top Catholic Comprehensive Colleges



Proportion of graduates earning a doctorate in Education
(Top Catholic Comprehensive Colleges)
By overlapping 5-yr graduating class grouping

	1967 - 1971	1969 - 1973	1971 - 1975	1973 - 1977	1975 - 1979	1977 - 1981	1979 - 1983	1981 - 1985	1983 - 1987	1985 - 1989	1987 - 1991	1989 - 1993	1991 - 1995	1993 - 1997	1995 - 1999
Creighton University	0.6%	0.5%	0.7%	0.8%	0.6%	0.6%	0.5%	0.4%	0.5%	0.6%	0.6%	0.6%	0.6%	0.6%	0.4%
Fairfield University	0.9%	0.8%	0.6%	0.5%	0.4%	0.3%	0.2%	0.2%	0.2%	0.2%	0.2%	0.2%	0.2%	0.4%	0.5%
Gonzaga University	0.8%	1.1%	1.4%	1.3%	1.0%	0.7%	0.7%	0.7%	0.6%	0.6%	0.6%	0.6%	0.4%	0.6%	0.5%
Providence	1.0%	1.0%	1.0%	0.7%	0.8%	0.6%	0.4%	0.2%	0.1%	0.2%	0.3%	0.3%	0.4%	0.4%	0.3%
St. Joseph's, Main Campus	1.3%	1.1%	1.1%	0.6%	0.7%	0.7%	0.7%	0.8%	0.6%	1.4%	1.2%	1.0%	0.4%	0.4%	0.5%
Santa Clara University	0.2%	0.4%	0.4%	0.3%	0.2%	0.2%	0.2%	0.2%	0.3%	0.3%	0.2%	0.3%	0.4%	0.4%	0.3%
Villanova University	0.6%	0.6%	0.5%	0.6%	0.6%	0.5%	0.5%	0.5%	0.4%	0.3%	0.3%	0.2%	0.2%	0.3%	0.3%
Xavier University	0.8%	0.6%	0.7%	0.7%	1.0%	1.0%	0.7%	0.3%	0.3%	0.5%	0.4%	0.5%	0.5%	0.4%	0.4%
Loyola	0.5%	0.6%	0.3%	0.3%	0.4%	0.4%	0.4%	0.4%	0.4%	0.4%	0.2%	0.2%	0.3%	0.5%	0.4%
AVERAGE*	0.8%	0.8%	0.8%	0.6%	0.6%	0.5%	0.5%	0.4%	0.4%	0.5%	0.4%	0.4%	0.4%	0.4%	0.4%

*simple average of 9 schools above, unweighted

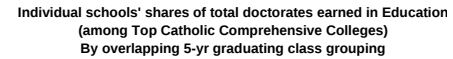
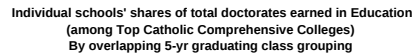
Top Ten Schools THEN & NOW
by percentage of graduates earning a doctorate in Education

THEN (cohort = 1967 - 1971)	NOW (cohort = 1995 - 1999)
1 Manhattan Christian College 5.2%	Cleveland Institute of Music 4.0%
2 University of the District of Columbia 4.7%	Fisk University 2.9%
3 Morehouse College 4.1%	Fort Valley State University 2.7%
4 Harris-Stowe State College 4.0%	Wesleyan College 2.5%
5 Philander Smith College 4.0%	Concordia Teachers College 2.4%
6 Springfield College 3.9%	Tougaloo College 2.1%
7 Fisk University 3.7%	Cheyney University of Pennsylvania 2.1%
8 Wheaton College (Wheaton, IL) 3.7%	Jackson State University 2.0%
9 Virginia State University 3.5%	Hendrix College 2.0%
10 Florida Agricultural and Mechanical University 3.4%	Union College (Lincoln, NE) 2.0%

Source for doctorates by institution: NSF Survey of Earned Doctorates
Source for baccalaureate degrees by institution: IPEDS Completions Survey
Assumption: Doctorates received correspond to baccalaureate degrees received 5 years earlier

The Baccalaureate Origins of Doctoral Recipients Peer Comparison Tool
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for use in conjunction with raw HEDS "Baccalaureate Origins" datafile

Comparison group = Top Catholic Comprehensive Colleges



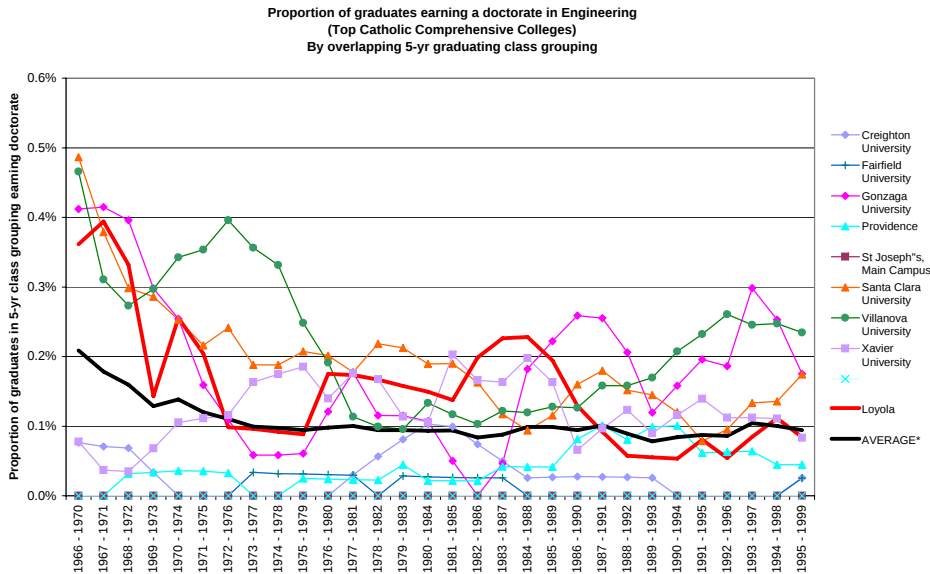
Top Ten Schools THEN & NOW				
by number of graduates earning a doctorate in Education				
THEN (cohort = 1967 - 1971)		NOW (cohort = 1995 - 1999)		
1	Ohio State University, Main Campus	318	University of Texas at Austin	210
2	Brigham Young University, Main Campus	279	Michigan State University	178
3	University of Illinois at Urbana-Champaign	274	University of Florida	169
4	Michigan State University	271	University of California-Los Angeles	168
5	University of Michigan at Ann Arbor	264	Pennsylvania State U, Main Campus	165
6	Wayne State University	258	University of Illinois at Urbana-Champaign	155
7	Pennsylvania State U, Main Campus	251	Florida State University	152
8	CUNY Brooklyn College	250	Brigham Young University, Main Campus	151
9	University of Wisconsin-Madison	244	Southern Illinois University-Carbondale	147
10	University of California-Los Angeles	238	Ohio State University, Main Campus	143

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Baccalaureate origins of doctoral recipients over time

Doctoral field = Engineering

Comparison group = Top Catholic Comprehensive Colleges



Proportion of graduates earning a doctorate in Engineering
(Top Catholic Comprehensive Colleges)
By overlapping 5-yr graduating class grouping

	1967 - 1971	1969 - 1973	1971 - 1975	1973 - 1977	1975 - 1979	1977 - 1981	1979 - 1983	1981 - 1985	1983 - 1987	1985 - 1989	1987 - 1991	1989 - 1993	1991 - 1995	1993 - 1997	1995 - 1999
Creighton University	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Fairfield University	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Gonzaga University	0.4%	0.3%	0.2%	0.1%	0.1%	0.2%	0.1%	0.1%	0.0%	0.2%	0.3%	0.1%	0.2%	0.3%	0.2%
Providence	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%	0.1%	0.1%	0.1%	0.0%
St. Joseph's, Main Campus	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Santa Clara University	0.4%	0.3%	0.2%	0.2%	0.2%	0.2%	0.2%	0.2%	0.1%	0.1%	0.2%	0.1%	0.1%	0.1%	0.2%
Villanova University	0.3%	0.3%	0.4%	0.4%	0.2%	0.1%	0.1%	0.1%	0.1%	0.1%	0.2%	0.2%	0.2%	0.2%	0.2%
Xavier University	0.0%	0.1%	0.1%	0.2%	0.2%	0.2%	0.1%	0.2%	0.2%	0.2%	0.1%	0.1%	0.1%	0.1%	0.1%
Loyola	0.4%	0.1%	0.2%	0.1%	0.1%	0.2%	0.2%	0.1%	0.2%	0.2%	0.1%	0.1%	0.1%	0.1%	0.1%
AVERAGE*	0.2%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%

*simple average of 9 schools above, unweighted

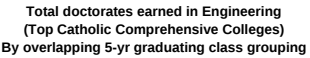
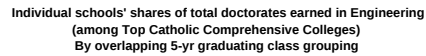
Top Ten Schools THEN & NOW
by percentage of graduates earning a doctorate in Engineering

THEN (cohort = 1967 - 1971)	NOW (cohort = 1995 - 1999)
1 Massachusetts Institute of Technology 9.9%	California Institute of Technology 9.7%
2 California Institute of Technology 8.9%	Massachusetts Institute of Technology 5.6%
3 Cooper Union 6.7%	Harvey Mudd College 4.7%
4 Polytechnic University 5.6%	Cooper Union 3.6%
5 Harvey Mudd College 4.4%	Rensselaer Polytechnic Institute 3.2%
6 Rensselaer Polytechnic Institute 4.2%	Carnegie Mellon University 2.4%
7 Worcester Polytechnic Institute 3.3%	Case Western Reserve University 2.3%
8 Montana Tech of the University of Montana 3.3%	Colorado School of Mines 2.3%
9 Carnegie Mellon University 3.2%	Georgia Institute of Technology, Main Camp. 2.2%
10 University of Missouri, Rolla 3.1%	University of Missouri, Rolla 2.1%

Source for doctorates by institution: NSF Survey of Earned Doctorates
Source for baccalaureate degrees by institution: IPEDS Completions Survey
Assumption: Doctorates received correspond to baccalaureate degrees received 5 years earlier

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Comparison group = Top Catholic Comprehensive Colleges



Top Ten Schools THEN & NOW

by number of graduates earning a doctorate in Engineering

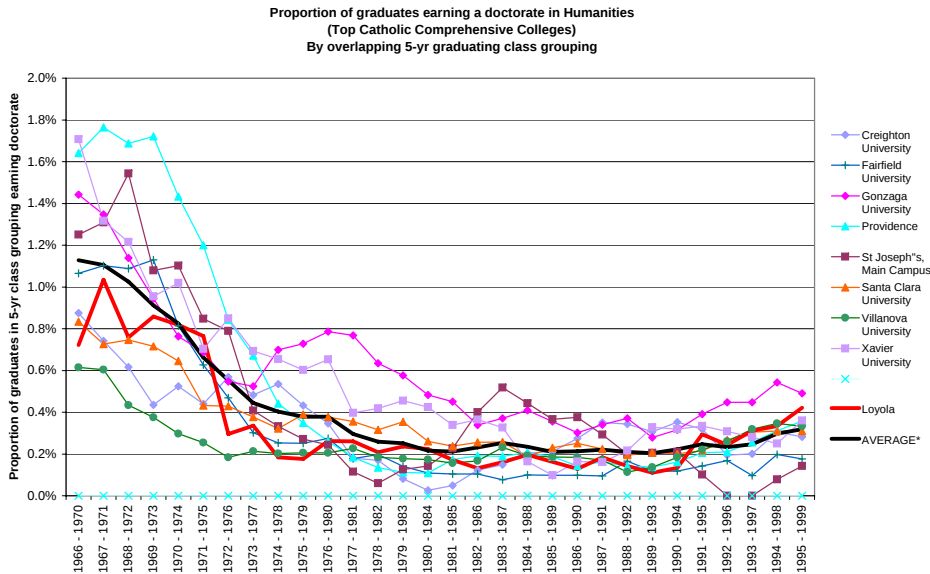
**Individual schools' shares of total doctorates earned in Engineering
(among Top Catholic Comprehensive Colleges)
By overlapping 5-yr graduating class grouping**

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Baccalaureate origins of doctoral recipients over time

Doctoral field = Humanities

Comparison group = Top Catholic Comprehensive Colleges



Proportion of graduates earning a doctorate in Humanities
(Top Catholic Comprehensive Colleges)
By overlapping 5-yr graduating class grouping

	1967 - 1971	1969 - 1973	1971 - 1975	1973 - 1977	1975 - 1979	1977 - 1981	1979 - 1983	1981 - 1985	1983 - 1987	1985 - 1989	1987 - 1991	1989 - 1993	1991 - 1995	1993 - 1997	1995 - 1999
Creighton University	0.7%	0.4%	0.4%	0.5%	0.4%	0.2%	0.1%	0.0%	0.1%	0.2%	0.4%	0.3%	0.3%	0.2%	0.3%
Fairfield University	1.1%	1.1%	0.6%	0.3%	0.3%	0.2%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%	0.2%
Gonzaga University	1.3%	0.9%	0.7%	0.5%	0.7%	0.8%	0.6%	0.5%	0.4%	0.4%	0.3%	0.3%	0.4%	0.4%	0.5%
Providence	1.8%	1.7%	1.2%	0.7%	0.3%	0.2%	0.1%	0.2%	0.2%	0.2%	0.1%	0.2%	0.3%	0.4%	
St Joseph's, Main Campus	1.3%	1.1%	0.8%	0.4%	0.3%	0.1%	0.1%	0.2%	0.5%	0.4%	0.3%	0.2%	0.1%	0.0%	0.1%
Santa Clara University	0.7%	0.7%	0.4%	0.4%	0.4%	0.4%	0.4%	0.2%	0.3%	0.2%	0.2%	0.2%	0.2%	0.3%	0.3%
Villanova University	0.6%	0.4%	0.3%	0.2%	0.2%	0.2%	0.2%	0.2%	0.2%	0.2%	0.2%	0.1%	0.2%	0.3%	0.3%
Xavier University	1.3%	1.0%	0.7%	0.7%	0.6%	0.4%	0.5%	0.3%	0.3%	0.1%	0.2%	0.3%	0.3%	0.3%	0.4%
Loyola	1.0%	0.9%	0.8%	0.3%	0.2%	0.3%	0.2%	0.2%	0.2%	0.2%	0.2%	0.1%	0.3%	0.3%	0.4%
AVERAGE*	1.1%	0.9%	0.7%	0.4%	0.4%	0.3%	0.3%	0.2%	0.3%	0.2%	0.2%	0.2%	0.2%	0.2%	0.3%

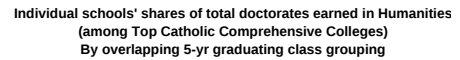
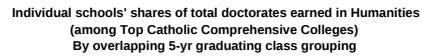
*simple average of 9 schools above, unweighted

Top Ten Schools THEN & NOW
by percentage of graduates earning a doctorate in Humanities

THEN (cohort = 1967 - 1971)		NOW (cohort = 1995 - 1999)	
1	Bryn Mawr College 9.0%	Reed College 4.8%	
2	Swarthmore College 7.1%	Amherst College 4.6%	
3	University of Chicago 6.6%	St John's College (Annapolis, MD) 4.0%	
4	Haverford College 5.7%	Yale University 3.9%	
5	Amherst College 5.6%	Swarthmore College 3.8%	
6	Hamilton College 5.5%	Wesleyan University 3.6%	
7	Wellesley College 5.3%	Carleton College 3.6%	
8	Barnard College 5.3%	Hampshire College 3.5%	
9	Harvard University 5.0%	Bryn Mawr College 3.5%	
10	Carleton College 4.5%	Williams College 3.3%	

Source for doctorates by institution: NSF Survey of Earned Doctorates
Source for baccalaureate degrees by institution: IPEDS Completions Survey
Assumption: Doctorates received correspond to baccalaureate degrees received 5 years earlier

Comparison group = Top Catholic Comprehensive Colleges



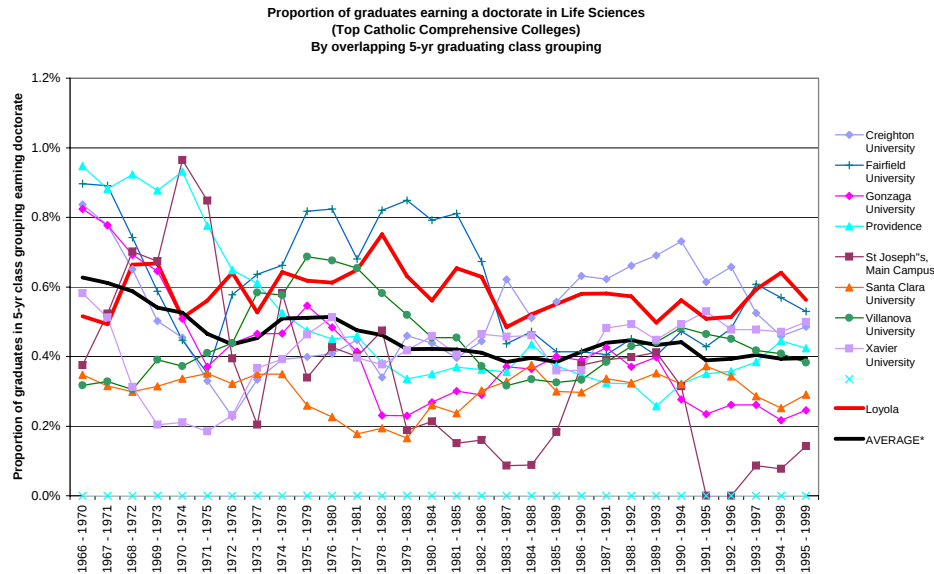
Top Ten Schools THEN & NOW				
by number of graduates earning a doctorate in Humanities				
THEN (cohort = 1967 - 1971)		NOW (cohort = 1995 - 1999)		
1	Harvard University	373	University of California-Berkeley	335
2	University of California-Berkeley	292	Yale University	253
3	Stanford University	246	Harvard University	222
4	Columbia University in the City of New York	245	University of Michigan at Ann Arbor	184
5	University of California-Los Angeles	237	University of California-Los Angeles	164
6	University of Michigan at Ann Arbor	237	Brown University	153
7	Yale University	202	Columbia University in the City of New York	148
8	CUNY City College	186	Princeton University	147
9	CUNY Brooklyn College	174	University of Texas at Austin	140
10	University of Wisconsin-Madison	166	Brigham Young University, Main Campus	134

[illegible]

Baccalaureate origins of doctoral recipients over time

Doctoral field = Life Sciences

Comparison group = Top Catholic Comprehensive Colleges



Source for doctorates by institution: NSF Survey of Earned Doctorates
Source for baccalaureate degrees by institution: IPEDS Completions Survey
Assumption: Doctorates received correspond to baccalaureate degrees received 5 years earlier

Proportion of graduates earning a doctorate in Life Sciences
(Top Catholic Comprehensive Colleges)
By overlapping 5-yr graduating class grouping

	1967 - 1971	1969 - 1973	1971 - 1975	1973 - 1977	1975 - 1979	1977 - 1981	1979 - 1983	1981 - 1985	1983 - 1987	1985 - 1989	1987 - 1991	1989 - 1993	1991 - 1995	1993 - 1997	1995 - 1999
Creighton University	0.8%	0.5%	0.3%	0.3%	0.4%	0.4%	0.5%	0.4%	0.6%	0.6%	0.6%	0.7%	0.6%	0.5%	0.5%
Fairfield University	0.9%	0.6%	0.4%	0.6%	0.8%	0.7%	0.8%	0.8%	0.4%	0.4%	0.4%	0.4%	0.4%	0.6%	0.5%
Gonzaga University	0.8%	0.6%	0.4%	0.5%	0.5%	0.4%	0.2%	0.3%	0.4%	0.4%	0.4%	0.4%	0.2%	0.3%	0.2%
Providence	0.9%	0.9%	0.8%	0.6%	0.5%	0.5%	0.3%	0.4%	0.4%	0.4%	0.3%	0.3%	0.4%	0.4%	0.4%
St. Joseph's, Main Campus	0.5%	0.7%	0.8%	0.2%	0.3%	0.4%	0.2%	0.2%	0.1%	0.2%	0.4%	0.4%	0.0%	0.1%	0.1%
Santa Clara University	0.3%	0.3%	0.4%	0.3%	0.3%	0.2%	0.2%	0.2%	0.3%	0.3%	0.3%	0.4%	0.4%	0.3%	0.3%
Villanova University	0.3%	0.4%	0.4%	0.6%	0.7%	0.7%	0.5%	0.5%	0.3%	0.3%	0.4%	0.4%	0.5%	0.4%	0.4%
Xavier University	0.5%	0.2%	0.2%	0.4%	0.5%	0.4%	0.4%	0.4%	0.5%	0.4%	0.5%	0.4%	0.5%	0.5%	0.5%
Loyola	0.5%	0.7%	0.6%	0.5%	0.6%	0.6%	0.6%	0.7%	0.5%	0.6%	0.6%	0.5%	0.5%	0.6%	0.6%
AVERAGE*	0.6%	0.5%	0.5%	0.5%	0.5%	0.5%	0.4%	0.4%	0.4%	0.4%	0.4%	0.4%	0.4%	0.4%	0.4%

*simple average of 9 schools above, unweighted

Top Ten Schools THEN & NOW				
by percentage of graduates earning a doctorate in Life Sciences				
THEN (cohort = 1967 - 1971)		NOW (cohort = 1995 - 1999)		
1	Philadelphia College of Pharmacy and Science	5.0%	California Institute of Technology	6.1%
2	California Institute of Technology	4.7%	Reed College	5.8%
3	Earlham College	4.1%	Harvey Mudd College	4.2%
4	Pomona College	4.1%	Swarthmore College	4.1%
5	University of Chicago	4.0%	Earlham College	3.7%
6	Swarthmore College	3.8%	Grinnell College	3.6%
7	Delaware Valley College	3.8%	University of Chicago	3.6%
8	Massachusetts College of Pharmacy and Allied Health Sciences	3.4%	Carleton College	3.5%
9	Haverford College	3.4%	College of the Atlantic	3.4%
10	SUNY College of Environmental Science and Forestry	3.2%	Massachusetts Institute of Technology	3.3%

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Comparison group = Top Catholic Comprehensive Colleges

This stacked area chart illustrates the total doctorates earned by 5-year graduating class groupings from 1966 to 1999. The y-axis represents the total number of doctorates, ranging from 0 to 180 in increments of 20. The x-axis shows the years from 1966 to 1999. The chart is composed of nine stacked series, each representing a different institution. The total number of doctorates starts at approximately 135 in 1966, dips to a low of about 105 in 1975, and then generally increases, peaking at nearly 170 in 1993 before declining to around 150 by 1999. The largest contributors to the total are Loyola (red), Xavier University (light purple), Villanova University (green), and Santa Clara University (orange).

Year	Loyola	Xavier University	Villanova University	Santa Clara University	St. Joseph's, Main Campus	Providence	Gonzaga University	Fairfield University	Creighton University
1966	15	10	20	15	5	25	10	15	20
1970	20	15	25	15	5	25	10	15	20
1975	10	10	20	15	5	25	10	15	10
1980	15	15	25	15	5	25	10	15	20
1985	20	15	25	15	5	25	10	15	20
1990	25	15	25	15	5	25	10	15	20
1995	20	15	25	15	5	25	10	15	20
1999	20	15	25	15	5	25	10	15	20

Share of total doctorates earned

100%
90%
80%
70%
60%
50%
40%
30%
20%
10%
0%

1966 - 1970
1967 - 1971
1968 - 1972
1969 - 1973
1970 - 1974
1971 - 1975
1972 - 1976
1973 - 1977
1974 - 1978
1975 - 1979
1976 - 1980
1977 - 1981
1978 - 1982
1979 - 1983
1980 - 1984
1981 - 1985
1982 - 1986
1983 - 1987
1984 - 1988
1985 - 1989
1986 - 1990
1987 - 1991
1988 - 1992
1989 - 1993
1990 - 1994
1991 - 1995
1992 - 1996
1993 - 1997
1994 - 1998
1995 - 1999

Loyola
 Xavier University
 Villanova University
 Santa Clara University
 St Joseph's, Main Campus
 Providence
 Gonzaga University
 Fairfield University
 Creighton University

	1967 - 1971	1969 - 1973	1975	1973 - 1977	1977 - 1979	1977 - 1981	1979 - 1983	1981 - 1985	1983 - 1987	1987 - 1991	1989 - 1993	1993 - 1995	1993 - 1997	1995 - 1999	
Creighton University	22	15	9	9	12	15	17	16	25	21	23	27	25	21	19
Fairfield University	17	13	9	19	26	23	30	31	17	17	17	17	18	25	21
Gonzaga University	15	13	7	8	9	7	4	6	8	9	10	10	6	7	7
Providence	26	26	22	20	19	20	15	17	17	18	16	13	17	18	19
St Joseph's, Main Campus	4	5	6	2	5	7	3	2	1	2	4	4	-	1	2
Santa Clara University	10	11	13	13	10	7	7	10	14	13	15	17	19	15	15
Villanova University	19	25	29	41	47	46	38	35	26	28	34	39	40	34	31
Xavier University	14	6	5	9	10	9	11	12	14	11	15	15	19	17	18
Loyola	10	14	11	13	14	15	16	19	15	17	19	18	19	21	20
TOTAL	138	128	111	132	152	149	141	148	137	136	153	160	163	159	157

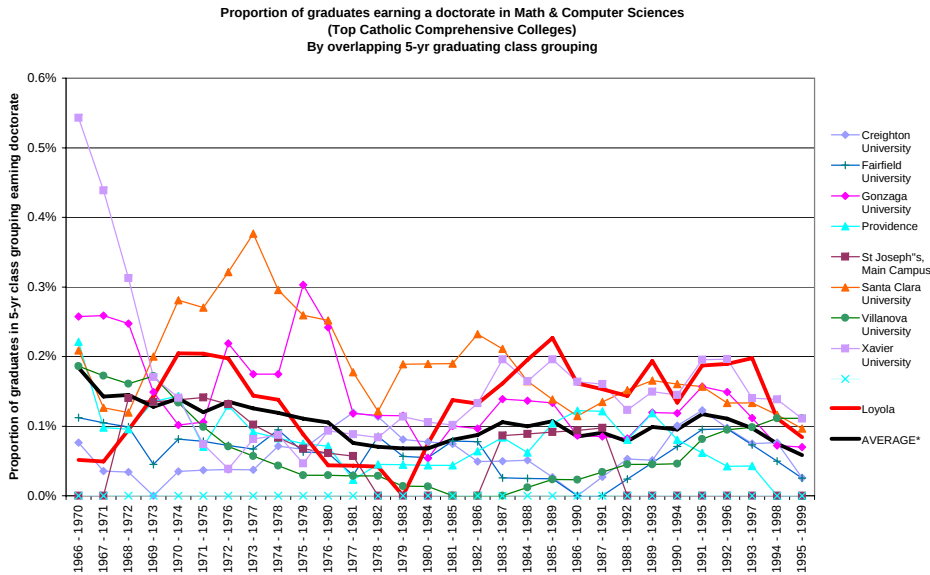
THEN (cohort = 1967 - 1971)		NOW (cohort = 1995 - 1999)	
1 University of California-Berkeley	365	University of California-Berkeley	497
2 University of Illinois at Urbana-Champaign	277	University of California-Davis	380
3 University of Wisconsin-Madison	247	University of Illinois at Urbana-Champaign	359
4 Michigan State University	233	Pennsylvania State U, Main Campus	330
5 Pennsylvania State U, Main Campus	229	University of Wisconsin-Madison	319
6 Ohio State University, Main Campus	226	University of California-San Diego	314
7 University of California-Davis	212	University of Michigan at Ann Arbor	314
8 University of Minnesota - Twin Cities	210	University of California-Los Angeles	297
9 Purdue University, Main Campus	188	Texas A&M University Main Campus	292
10 University of Michigan at Ann Arbor	188	Harvard University	273

[illegible]

Baccalaureate origins of doctoral recipients over time

Doctoral field = Math & Computer Sciences

Comparison group = Top Catholic Comprehensive Colleges



Proportion of graduates earning a doctorate in Math & Computer Sciences
(Top Catholic Comprehensive Colleges)
By overlapping 5-yr graduating class grouping

	1967 - 1971	1969 - 1973	1971 - 1975	1973 - 1977	1975 - 1979	1977 - 1981	1979 - 1983	1981 - 1985	1983 - 1987	1985 - 1989	1987 - 1991	1989 - 1993	1991 - 1995	1993 - 1997	1995 - 1999
Creighton University	0.0%	0.0%	0.0%	0.0%	0.1%	0.1%	0.1%	0.1%	0.0%	0.0%	0.0%	0.1%	0.1%	0.1%	0.0%
Fairfield University	0.1%	0.0%	0.1%	0.1%	0.1%	0.0%	0.1%	0.1%	0.0%	0.0%	0.0%	0.0%	0.1%	0.1%	0.0%
Gonzaga University	0.3%	0.1%	0.1%	0.2%	0.3%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%	0.2%	0.1%	0.1%
Providence	0.1%	0.1%	0.1%	0.1%	0.1%	0.0%	0.0%	0.0%	0.1%	0.1%	0.1%	0.1%	0.1%	0.0%	0.0%
St Joseph's, Main Campus	0.0%	0.1%	0.1%	0.1%	0.1%	0.1%	0.0%	0.0%	0.1%	0.1%	0.1%	0.0%	0.0%	0.0%	0.0%
Santa Clara University	0.1%	0.2%	0.3%	0.4%	0.3%	0.2%	0.2%	0.2%	0.2%	0.1%	0.1%	0.2%	0.2%	0.1%	0.1%
Villanova University	0.2%	0.2%	0.1%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%	0.1%	0.1%
Xavier University	0.4%	0.2%	0.1%	0.1%	0.0%	0.1%	0.1%	0.1%	0.2%	0.2%	0.2%	0.1%	0.2%	0.1%	0.1%
Loyola	0.0%	0.1%	0.2%	0.1%	0.1%	0.0%	0.0%	0.1%	0.2%	0.2%	0.2%	0.2%	0.2%	0.2%	0.1%
AVERAGE*	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%

*simple average of 9 schools above, unweighted

Top Ten Schools THEN & NOW
by percentage of graduates earning a doctorate in Math & Computer Sciences

THEN (cohort = 1967 - 1971)		NOW (cohort = 1995 - 1999)	
1	Harvey Mudd College 5.4%	California Institute of Technology	4.1%
2	California Institute of Technology 5.1%	Massachusetts Institute of Technology	2.2%
3	Massachusetts Institute of Technology 3.6%	Harvey Mudd College	2.0%
4	Reed College 2.5%	Harvard University	1.2%
5	University of Chicago 2.4%	Carnegie Mellon University	1.1%
6	Rice University 1.9%	Rice University	1.1%
7	Lyon College 1.4%	Princeton University	1.1%
8	Swarthmore College 1.3%	University of Chicago	1.0%
9	Harvard University 1.3%	Reed College	0.9%
10	Princeton University 1.3%	Williams College	0.8%

Source for doctorates by institution: NSF Survey of Earned Doctorates
Source for baccalaureate degrees by institution: IPEDS Completions Survey
Assumption: Doctorates received correspond to baccalaureate degrees received 5 years earlier

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Comparison group = Top Catholic Comprehensive Colleges

Total degrees earned by 5-yr graduating class grouping

Y-axis: Total degrees earned by 5-yr graduating class grouping (0 to 50).
X-axis: 5-yr graduating class grouping (1966-1970 to 1995-1999).

Legend:

- Loyola
- Xavier University
- Villanova University
- Santa Clara University
- St. Joseph's, Main Campus
- Providence
- Gonzaga University
- Fairfield University
- Creighton University

Share of total doctorates earned

100%
90%
80%
70%
60%
50%
40%
30%
20%
10%
0%

1966 - 1970 1971 1972 1973 1974 1975 1976 1977 1978 1979 1980 1981 1982 1983 1984 1985 1986 1987 1988 1989 1990 1991 1992 1993 1994 1995 1996 1997 1998 1999

Loyola
 Xavier University
 Villanova University
 Santa Clara University
 St Joseph's, Main Campus
 Providence
 Gonzaga University
 Fairfield University
 Creighton University

	1967-1971	1969-1973	1971-1975	1973-1977	1975-1979	1979-1981	1981-1983	1983-1985	1985-1987	1987-1989	1989-1991	1991-1993	1993-1995	1995-1997	1997-1999
Creighton University	1	-	1	1	2	4	3	3	2	1	1	2	5	3	1
Fairfield University	2	1	2	2	2	1	2	3	1	1	-	2	4	3	1
Gonzaga University	5	3	2	3	5	2	2	2	3	3	2	3	4	3	2
Providence	3	4	2	3	3	1	2	2	4	5	6	6	3	2	-
St Joseph's, Main Campus	-	1	1	1	1	1	-	-	1	1	1	-	-	-	-
Santa Clara University	4	7	10	14	10	7	8	8	9	6	6	8	8	7	5
Villanova University	10	11	7	4	2	2	1	-	-	2	3	4	7	8	9
Xavier University	12	5	2	2	1	2	3	3	6	6	5	5	7	5	4
Loyola	3	3	4	3	2	1	0	4	5	7	5	7	7	7	3
TOTAL	38	35	31	33	29	21	21	25	31	32	29	37	45	38	23

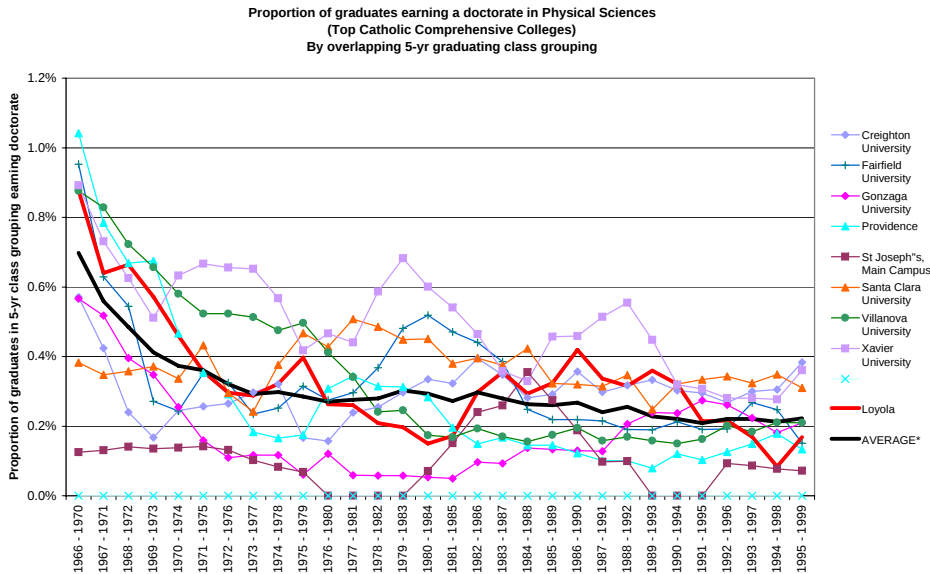
THEN (cohort = 1967 - 1971)		NOW (cohort = 1995 - 1999)	
1	Massachusetts Institute of Technology	155	Massachusetts Institute of Technology
2	University of California-Berkeley	101	University of California-Berkeley
3	Harvard University	97	Harvard University
4	CUNY City College	62	Princeton University
5	University of Texas at Austin	60	Carnegie Mellon University
6	CUNY Brooklyn College	59	Brigham Young University, Main Campus
7	University of Chicago	57	University of Michigan at Ann Arbor
8	Columbia University in the City of New York	54	Stanford University
9	University of Michigan at Ann Arbor	54	University of Texas at Austin
10	University of California-Los Angeles	52	California Institute of Technology

[illegible]

Baccalaureate origins of doctoral recipients over time

Doctoral field = Physical Sciences

Comparison group = Top Catholic Comprehensive Colleges



Proportion of graduates earning a doctorate in Physical Sciences
(Top Catholic Comprehensive Colleges)
By overlapping 5-yr graduating class grouping

	1967 - 1971	1969 - 1973	1971 - 1975	1973 - 1977	1975 - 1979	1977 - 1981	1979 - 1983	1981 - 1985	1983 - 1987	1985 - 1989	1987 - 1991	1989 - 1993	1991 - 1995	1993 - 1997	1995 - 1999
Creighton University	0.4%	0.2%	0.3%	0.3%	0.2%	0.2%	0.3%	0.3%	0.3%	0.3%	0.3%	0.3%	0.3%	0.3%	0.4%
Fairfield University	0.6%	0.3%	0.4%	0.2%	0.3%	0.3%	0.5%	0.5%	0.4%	0.2%	0.2%	0.2%	0.2%	0.3%	0.2%
Gonzaga University	0.5%	0.3%	0.2%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%	0.2%	0.3%	0.2%	0.2%
Providence	0.8%	0.7%	0.4%	0.2%	0.2%	0.3%	0.3%	0.2%	0.2%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%
St. Joseph's, Main Campus	0.1%	0.1%	0.1%	0.1%	0.1%	0.0%	0.2%	0.3%	0.3%	0.1%	0.0%	0.0%	0.1%	0.1%	0.1%
Santa Clara University	0.3%	0.4%	0.4%	0.2%	0.5%	0.5%	0.4%	0.4%	0.4%	0.3%	0.3%	0.2%	0.3%	0.3%	0.3%
Villanova University	0.8%	0.7%	0.5%	0.5%	0.5%	0.3%	0.2%	0.2%	0.2%	0.2%	0.2%	0.2%	0.2%	0.2%	0.2%
Xavier University	0.7%	0.5%	0.7%	0.7%	0.4%	0.4%	0.7%	0.5%	0.4%	0.5%	0.5%	0.4%	0.3%	0.3%	0.4%
Loyola	0.6%	0.6%	0.4%	0.3%	0.4%	0.3%	0.2%	0.2%	0.4%	0.3%	0.3%	0.4%	0.2%	0.2%	0.2%
AVERAGE*	0.6%	0.4%	0.4%	0.3%	0.3%	0.3%	0.3%	0.3%	0.3%	0.3%	0.2%	0.2%	0.2%	0.2%	0.2%

*simple average of 9 schools above, unweighted

Top Ten Schools THEN & NOW
by percentage of graduates earning a doctorate in Physical Sciences

	THEN (cohort = 1967 - 1971)	NOW (cohort = 1995 - 1999)
1 California Institute of Technology	17.4%	9.9%
2 Harvey Mudd College	15.0%	9.4%
3 Massachusetts Institute of Technology	7.7%	3.2%
4 Rice University	4.8%	2.8%
5 New Mexico Institute of Mining and Technolo	4.3%	2.1%
6 Polytechnic University	3.7%	1.9%
7 Rensselaer Polytechnic Institute	3.6%	1.8%
8 Benedictine University	3.5%	1.8%
9 University of Chicago	3.1%	1.6%
10 Haverford College	2.8%	1.6%

Source for doctorates by institution: NSF Survey of Earned Doctorates
Source for baccalaureate degrees by institution: IPEDS Completions Survey
Assumption: Doctorates received correspond to baccalaureate degrees received 5 years earlier

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Comparison group = Top Catholic Comprehensive Colleges

Total doctorates earned by 5-yr graduating class grouping

Year Grouping	Loyola	Xavier University	Willanova University	Santa Clara University	St. Joseph's, Main Campus	Providence	Gonzaga University	Fairfield University	Creighton University
1966 - 1970	40	30	30	20	10	20	10	10	10
1967 - 1971	35	25	25	20	10	20	10	10	10
1968 - 1972	30	20	20	20	10	20	10	10	10
1969 - 1973	25	15	20	20	10	20	10	10	10
1970 - 1974	20	15	20	20	10	20	10	10	10
1971 - 1975	15	15	20	20	10	20	10	10	10
1972 - 1976	10	15	20	20	10	20	10	10	10
1973 - 1977	10	15	20	20	10	20	10	10	10
1974 - 1978	10	15	20	20	10	20	10	10	10
1975 - 1979	10	15	20	20	10	20	10	10	10
1976 - 1980	10	15	20	20	10	20	10	10	10
1977 - 1981	10	15	20	20	10	20	10	10	10
1978 - 1982	10	15	20	20	10	20	10	10	10
1979 - 1983	10	15	20	20	10	20	10	10	10
1980 - 1984	10	15	20	20	10	20	10	10	10
1981 - 1985	10	15	20	20	10	20	10	10	10
1982 - 1986	10	15	20	20	10	20	10	10	10
1983 - 1987	10	15	20	20	10	20	10	10	10
1984 - 1988	10	15	20	20	10	20	10	10	10
1985 - 1989	10	15	20	20	10	20	10	10	10
1986 - 1990	10	15	20	20	10	20	10	10	10
1987 - 1991	10	15	20	20	10	20	10	10	10
1988 - 1992	10	15	20	20	10	20	10	10	10
1989 - 1993	10	15	20	20	10	20	10	10	10
1990 - 1994	10	15	20	20	10	20	10	10	10
1991 - 1995	10	15	20	20	10	20	10	10	10

Share of total doctorates earned

100%
90%
80%
70%
60%
50%
40%
30%
20%
10%
0%

1966 - 1970
1967 - 1971
1968 - 1972
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1992 - 1996
1993 - 1997
1994 - 1998
1995 - 1999

Loyola
 Xavier University
 Villanova University
 Santa Clara University
 St. Joseph's, Main Campus
 Providence
 Gonzaga University
 Fairleigh University
 Creighton University

	1967-1971	1969-1973	1971-1975	1973-1977	1975-1979	1977-1981	1979-1983	1981-1985	1983-1987	1985-1989	1987-1991	1989-1993	1991-1995	1993-1997	1995-1999
Creighton University	12	5	7	8	5	8	11	13	14	11	11	13	12	12	15
Fairfield University	12	6	9	7	10	10	17	18	15	9	9	8	8	11	6
Gonzaga University	10	7	3	2	1	1	1	2	3	3	3	6	7	6	6
Providence	24	20	10	6	7	15	14	9	8	7	5	4	5	7	6
St Joseph's, Main Campus	1	1	1	1	1	-	-	2	3	3	1	-	-	1	1
Santa Clara University	11	13	16	9	18	20	19	16	16	14	14	12	17	17	16
Villanova University	48	42	37	36	34	24	18	13	14	15	14	14	14	15	17
Xavier University	20	15	18	16	9	10	18	16	11	14	16	15	11	10	13
Loyola	13	12	7	6	9	6	5	5	11	10	11	13	8	6	6
TOTAL	151	121	108	91	94	94	103	93	94	86	84	85	82	85	86

THEN (cohort = 1967 - 1971)		NOW (cohort = 1995 - 1999)	
1	Massachusetts Institute of Technology	333	Massachusetts Institute of Technology
2	University of California-Berkeley	264	University of California-Berkeley
3	University of Illinois at Urbana-Champaign	181	Harvard University
4	University of Michigan at Ann Arbor	162	University of Illinois at Urbana-Champaign
5	CUNY City College	159	California Institute of Technology
6	University of California-Los Angeles	151	College of William and Mary
7	Harvard University	148	University of Michigan at Ann Arbor
8	Rensselaer Polytechnic Institute	139	University of California-San Diego
9	California Institute of Technology	134	Pennsylvania State U. Main Campus
10	University of Wisconsin-Madison	125	University of Texas at Austin

[illegible]