

Industrial and Manufacturing
Engineering
Wichita State University

Demonstrated Excellence



Current Faculty

Faculty	Rank/Position	Area
Don Malzahn	Professor, Interim Chair UG Coordinator Advisor to SWE, APM, TBP	Engineering Mgt, Systems Engr
Janet Twomey	Professor (promotion)	Neural Networks, Sustainability
Vis Madhavan	Professor (promotion) Advisor to SME	Manufacturing
Krishna Krishnan	Professor (promotion) Grad Coordinator	Facility Design
Lawrence Whitman	Associate Professor CoE Director of Engr Education Advisor to APICS	Lean, Engineering Education
Gamal Weheba	Associate Professor Advisor to ASQ Regents Excellence in Teaching Award Wallace Teaching Excellence Award Fellow of ASQ	Quality, Rapid Prototyping
Michael Jorgensen	Associate Professor	Ergonomics
Bayram Yildirim	Associate Professor (tenure & promotion) Advisor to IIE	Operations Research

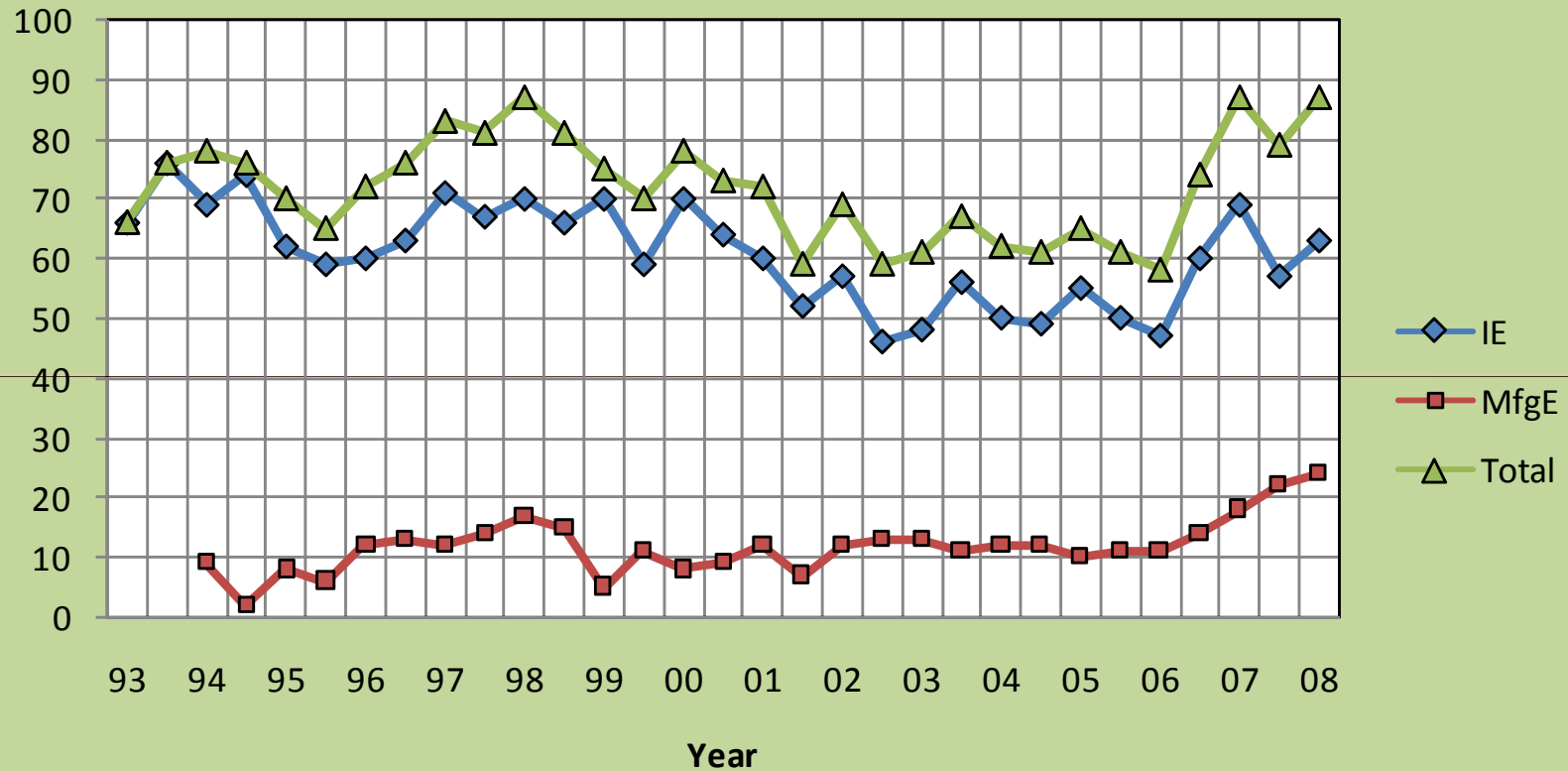


Increasing Enrollment Trends

- Aggressive recruiting program initiated
- Employment of a half-time undergraduate recruiter
- A focus on communicating opportunities of Masters of Engineering Management to local engineers



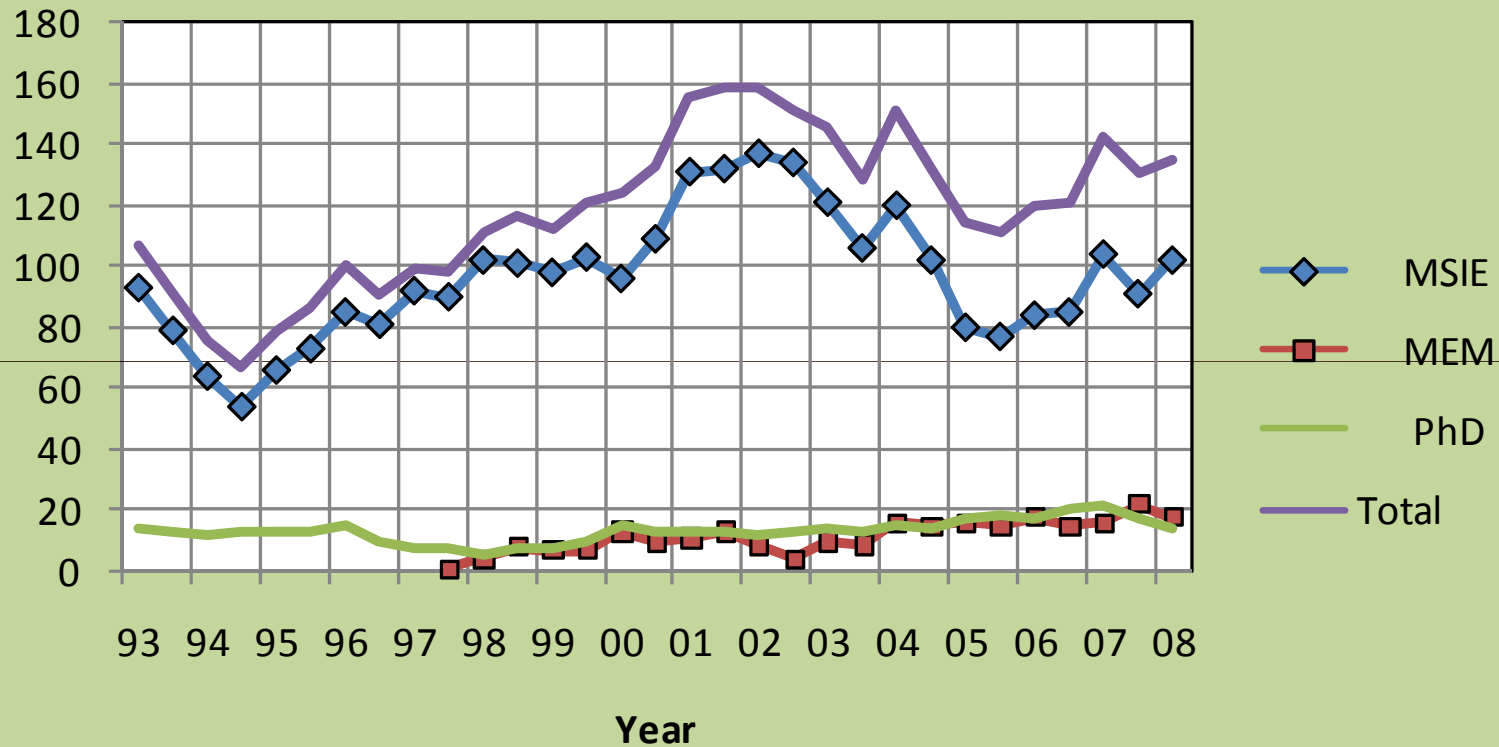
Number of Undergraduate Students



Undergraduate enrolment has reached an all time high. Within the last two years the Manufacturing Engineering program has experienced growth. New 2+2 transfer programs have developed with regional community colleges.



Number of Graduate Students



There has been a recent growth in the number of graduate students and new initiatives have been undertaken to publicize the Masters of Engineering Management in local industry.



Assessment of Student Performance

- Departmental commitment to student development
- Four student professional societies, as many as the rest of the college combined
- Encourage student participation in competitions as a means of assessing student development and program efficacy



APICS Paper Competitions

Year	Graduate	Undergraduate
2008	Regional- Second	Regional – First
2007	Regional- First, Second, & Third	International – Second Regional – First, Second, & Third
2006	Regional- First, Second, & Third	Regional – First, Second, & Third
2005	Regional – First, Second, & Third	Regional – First
2004	Regional – First, Second, & Third	Regional – First
2003	Regional – First, Second, & Third	Regional – First, & Second
2002	Regional – First, Second, & Third	
2001	Regional – First, Second, & Third	Regional - Third
2000	Regional - First	

- 9 consecutive Gold level chapter development awards
- 4 consecutive Platinum level chapter development awards
- Only 6 programs in US at this level



ASQ Certification of Students

Year	CQIA	CQE	CSSGB	CSSBB
2008	2	1	17	2
2007	10	1	12	1
2006	3			1
2005	6	3		
2004	8	5		1
2003	9	4		
2002	26	1		

No other University program has certified as many students through ASQ

CQIA= Certified Quality Improvement Associate

CQE= Certified Quality Engineer

CSSGB= Certified Six Sigma Green Belt

CSSBB= Certified Six Sigma Black Belt



IIE Student Paper Contest

Name	IIE Regional Paper Place	IIE International Paper Award
Jenny Marshall	2008 (1)	2008 (3)
Daniele Davis	2008 (3)	
Michael Hurley	2007 (1)	
Mitch Rausch	2006 (1)	2006 (1)
Rebekah Drake	2006 (2)	
Janise Hamilton	2005 (1)	2005 (3)
Kelly Zens	2005 (3)	
Samantha (Vitt) Corocon	2004 (1)	2004 (1)
Marki (Farris) Huston	2004 (2)	
Virginia Youse	2003 (1)	
Jennifer Sutherland	2001 (1)	2001 (1)
Charity Kennedy	2001 (2)	
Vigneshara Sambasivan,	2000 (3)	

No other IE program has demonstrated the consistent performance of the IME WSU students at regional and national competitions.

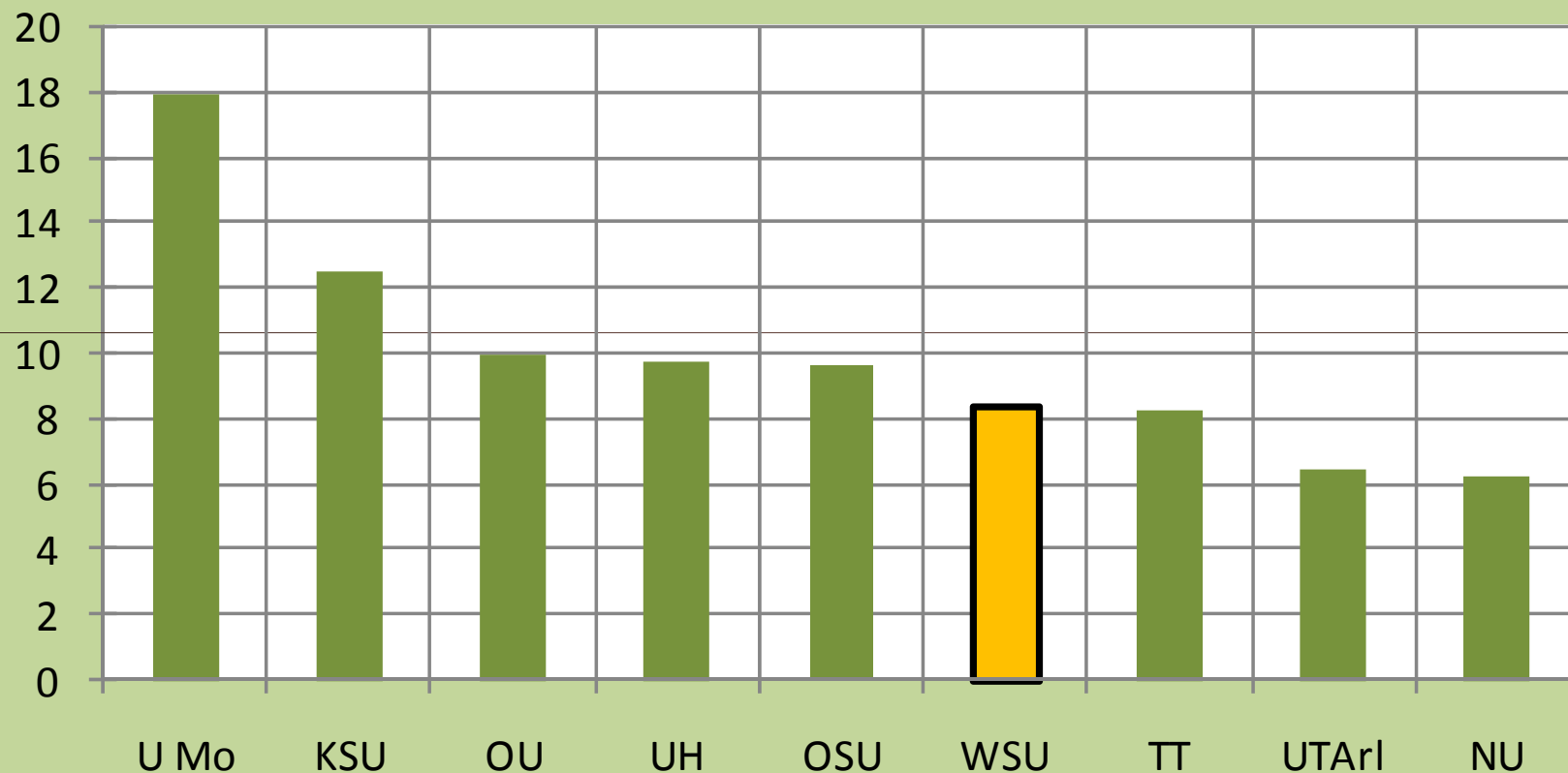


How Does the WSU IME Compare?

- Used the ASEE Program Profiles
- Regional Public IE programs
 - Kansas State University
 - University of Missouri – Columbia
 - University of Nebraska
 - Oklahoma State University
 - University of Oklahoma
 - Texas Tech University
- Urban Serving IE Programs
 - University of Texas – Arlington
 - University of Houston



BS Students/Faculty

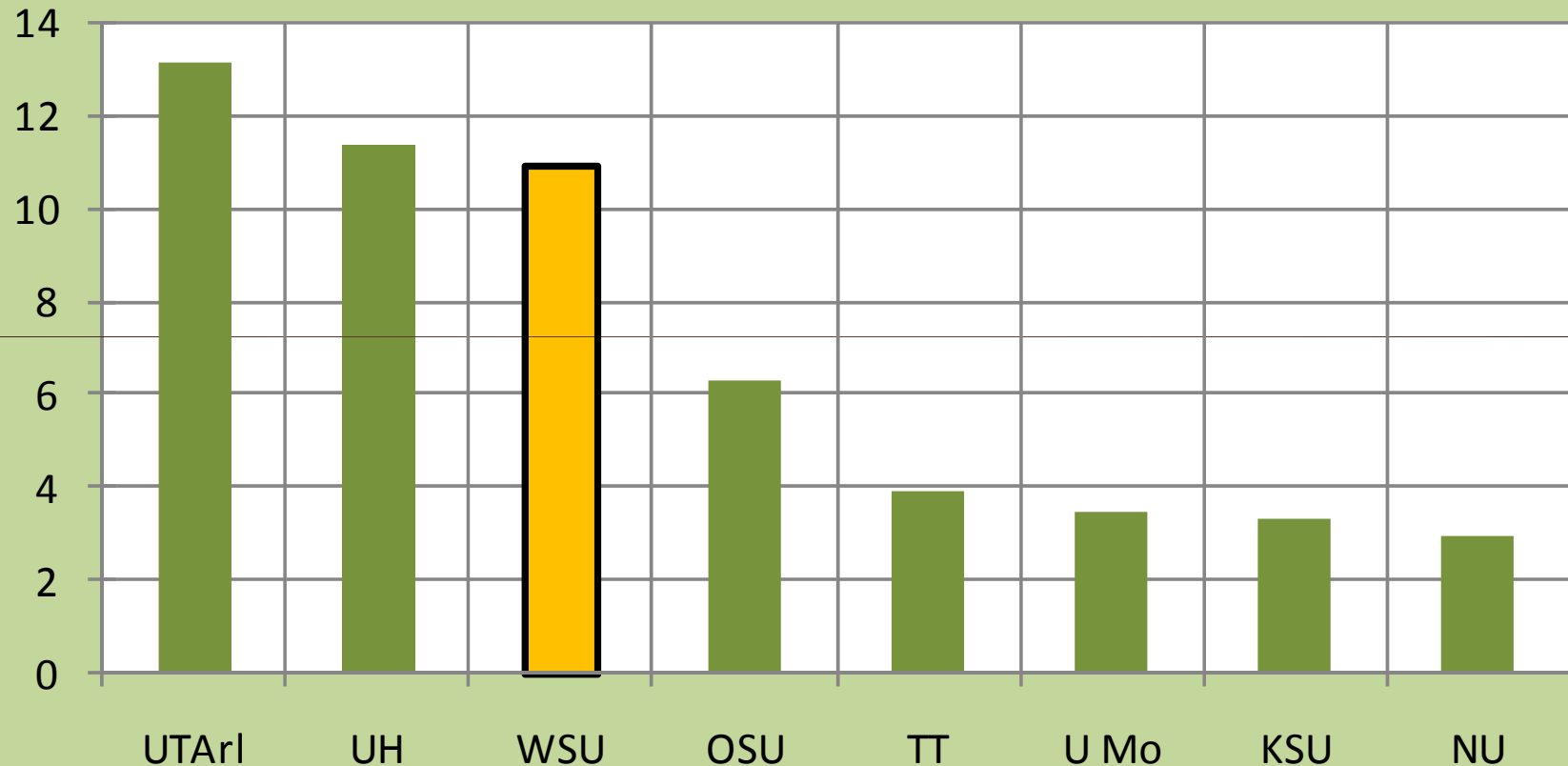


Source: 2007 ASEE Program Profiles

The undergraduate program at WSU is in line with the relative sizes of other programs. Only the University of Missouri and Kansas State University are significantly larger.



MS Students/Faculty

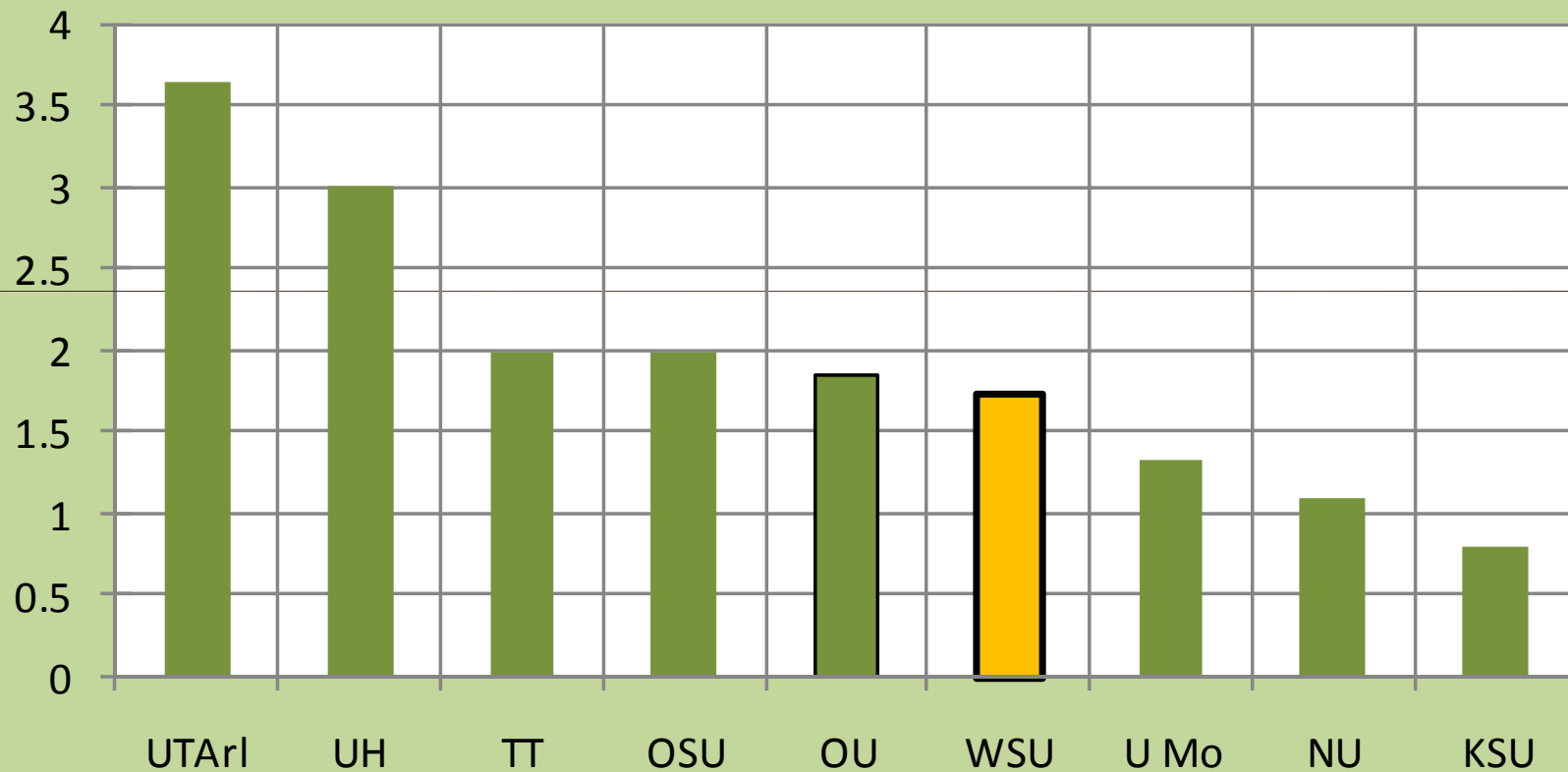


Source: 2007 ASEE Program Profiles

The Masters program is large, just as the other urban serving programs, The University of Texas-Arlington and The University of Houston . The urban serving programs are over twice the size of other state supported programs.



PhD Students/Faculty

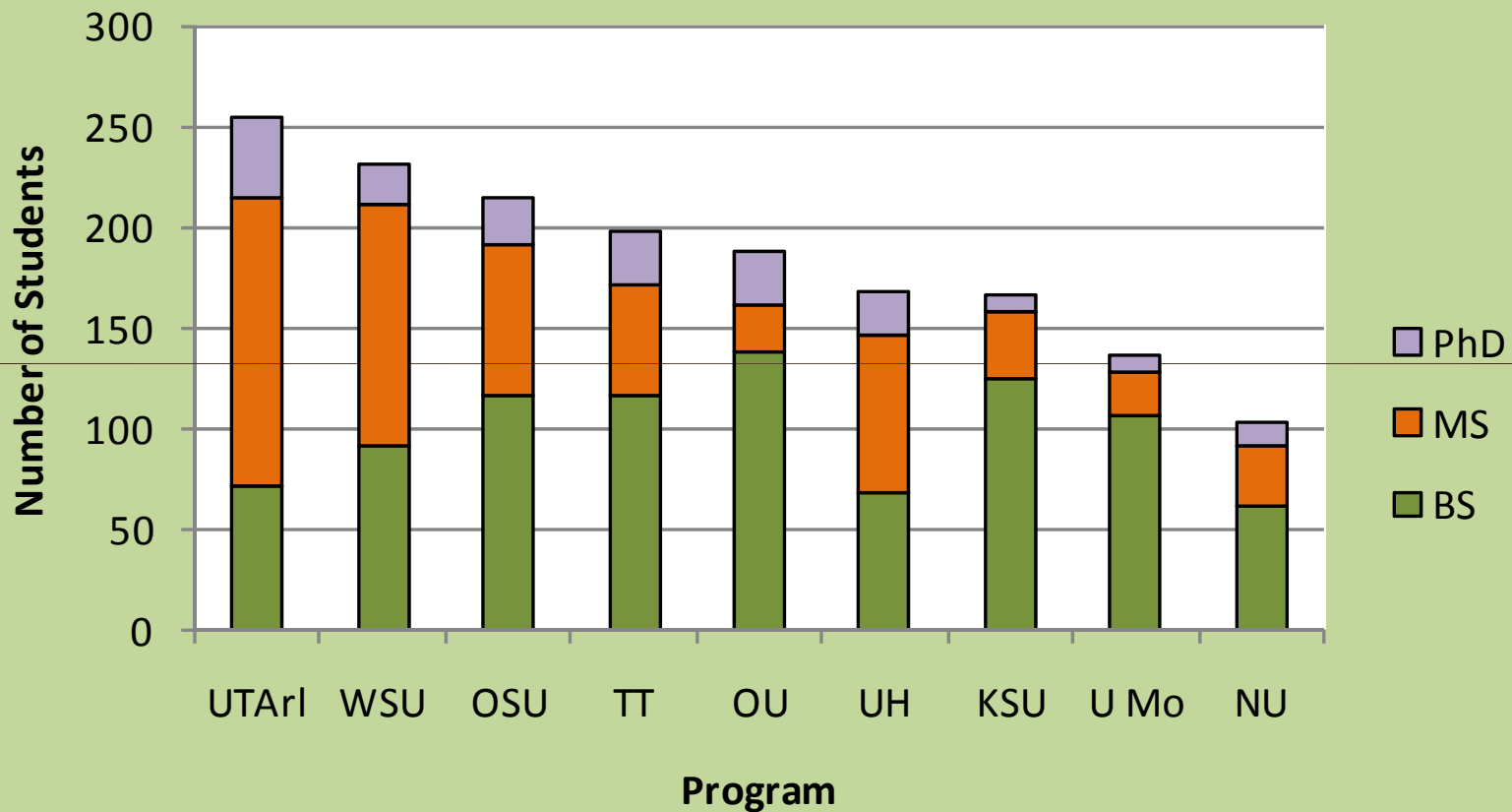


Source: 2007 ASEE Program Profiles

The Doctoral program at WSU is comparable in size to other regional programs.



Total Program Size

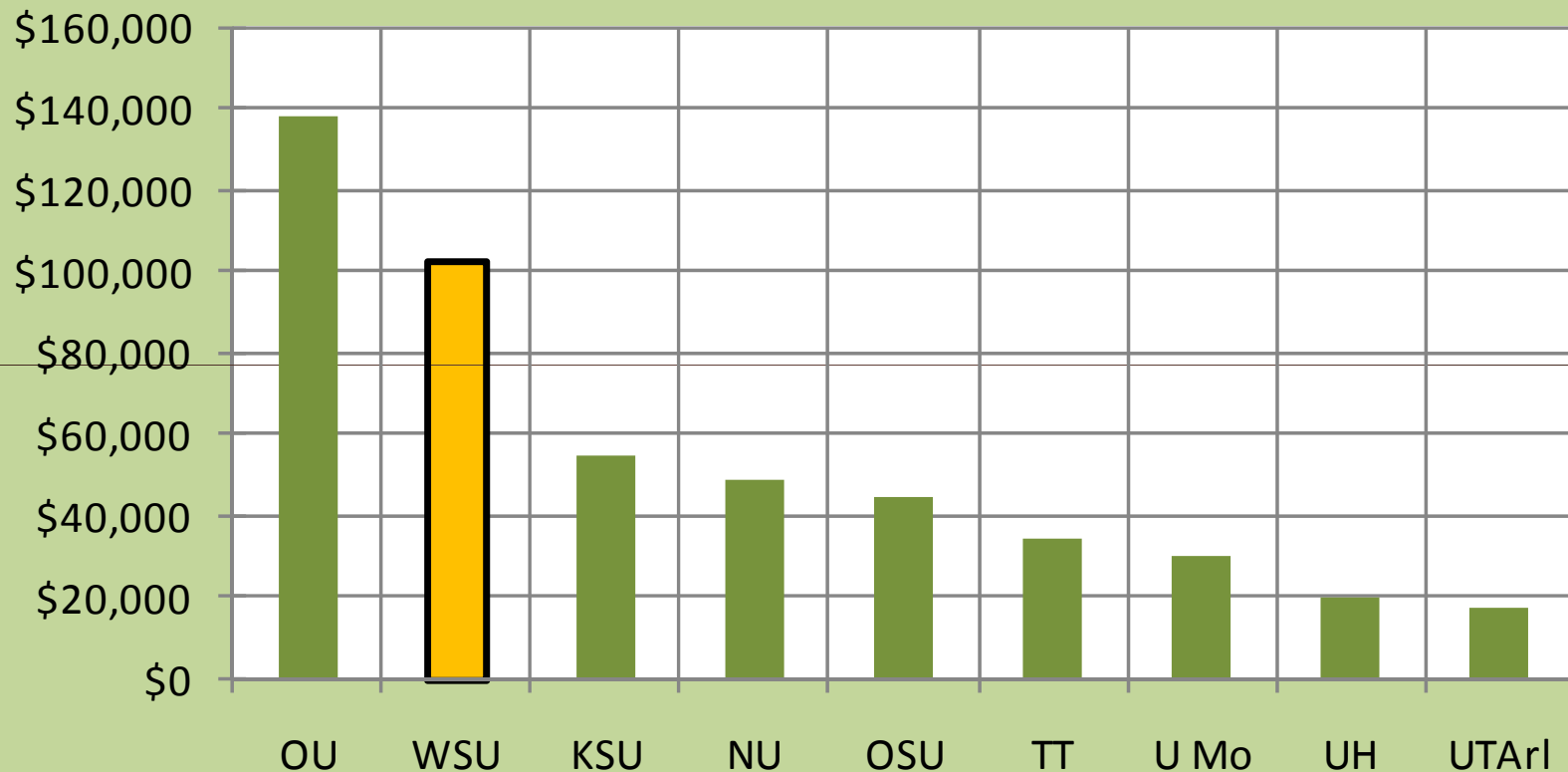


Source: 2007 ASEE Program Profiles

In absolute total program size, only the University of Texas-Arlington is larger.



Research Dollars/Faculty

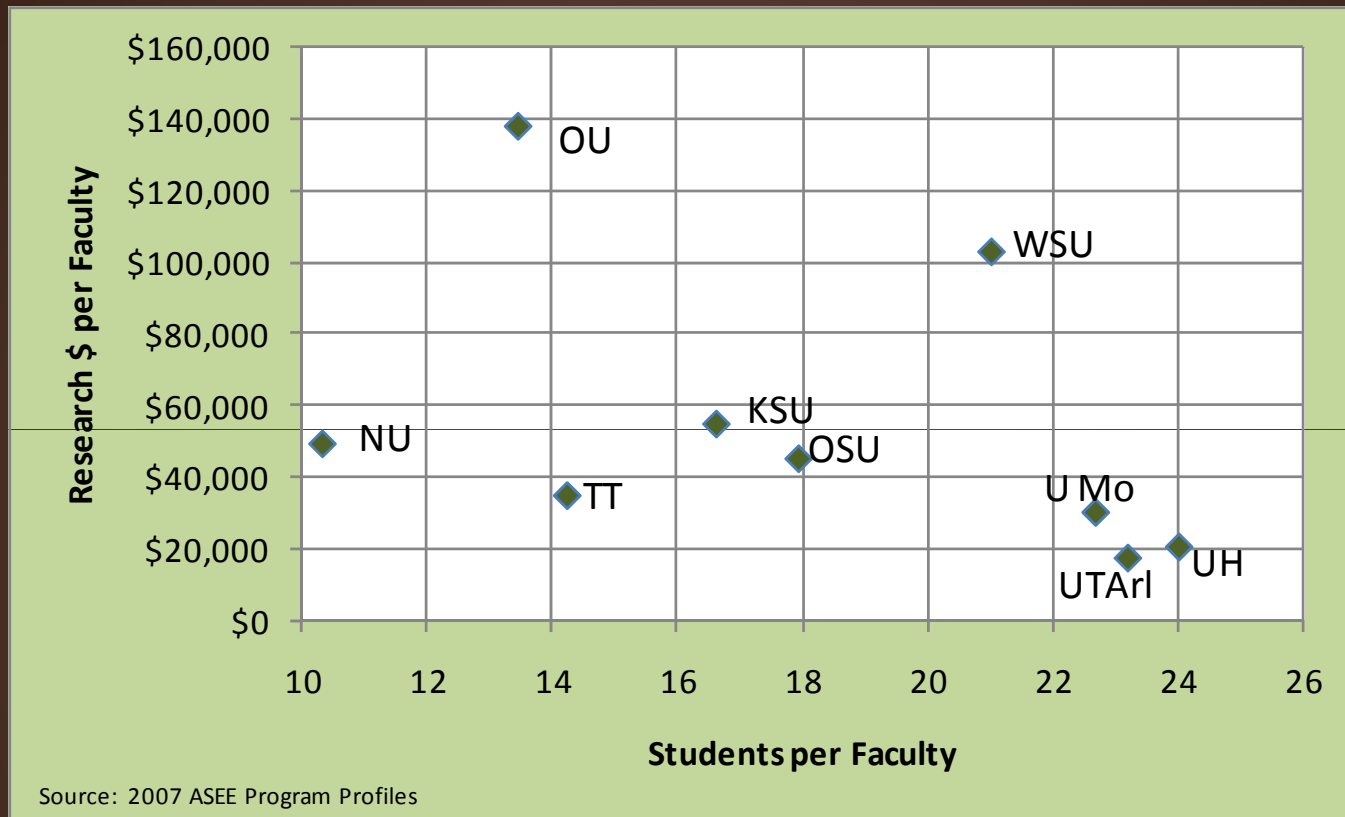


Source: 2007 ASEE Program Profiles

Only the University of Oklahoma generates more externally funded research per faculty than do the faculty an IME at WSU. The WSU rate is more that twice that of regional programs.



Program Total Productivity



A measure of program total productivity consists of some combination of student education and research. The most effective programs would graph as exterior points (Pareto optimal) when plotted on a Research vs. Students graph. The University of Oklahoma is optimal for a research weighted objective, University of Houston for education, and Wichita State for a balanced objective.



Demonstrated Excellence

- Students assessed at national level
 - Multiple venues (IIE, APICS, and ASQ)
 - Consistent performance over 8 years
 - Exceptional level of achievement
- Department compared to regional peers
 - Total program size among the largest
 - Research productivity among the highest
 - Superior program total productivity

