Commission on Professionals in Science and Technology



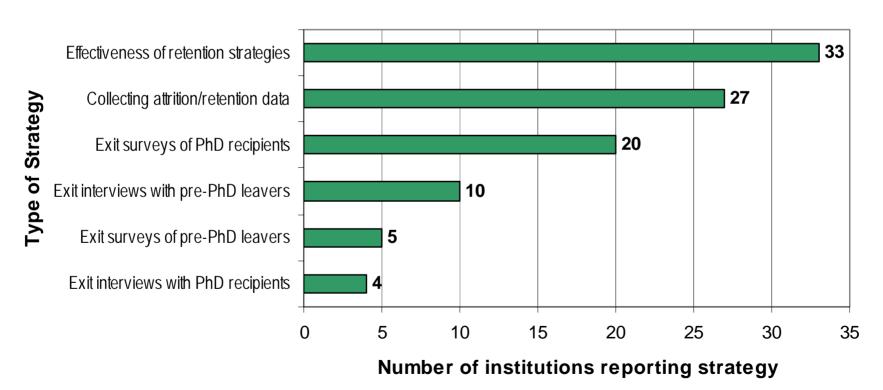
Lisa M. Frehill

Executive Director



Most institutions reported some kind of evaluation of retention but very few conduct interviews with those who leave without a Ph.D.

Evaluation Strategies Used at 43 AGEP Institutions





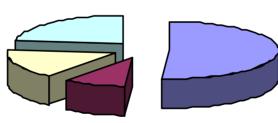
About half of the institutions reported that they collected retention data and were evaluating retention strategies while one in four reported neither activity.

Evaluating Graduate Strategies and Collecting Retention/Attrition Data (43 AGEP Institutions)

Neither evaluating nor collecting retention/attrition,

10

Collecting retention/attrition but not evaluating,



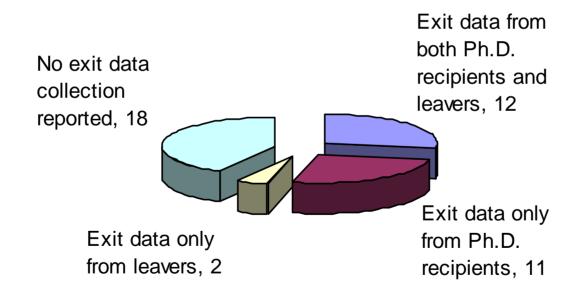
Collecting retention/attrition and evaluating, 22

Evaluating but not collecting retention/attrition,



Just over a fourth of institutions collected exit data from BOTH completers and leavers but 42% reported collecting no exit data from either group.

Exit Data Collection (43 AGEP Institutions)

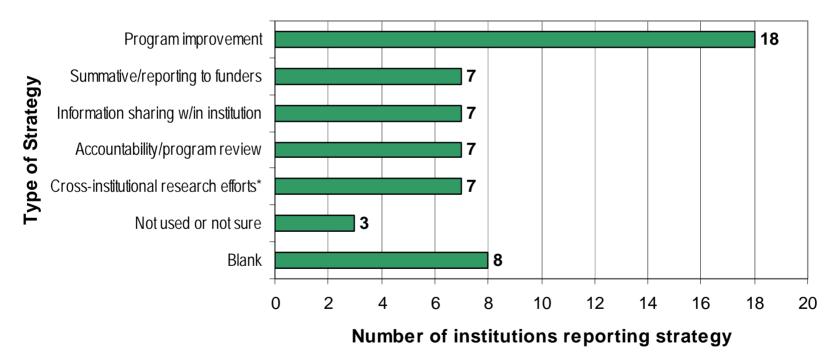




Uses of evaluation data fell into five categories. Program improvement was cited by 42% of institutions.

How Evaluation Data Are Used at 43 AGEP Institutions

(More than on use could be reported be each institution.)



^{*} Four institutions reported participating in the CGS Ph.D. Completion Project



Among those who said some version of "program improvement" (41.9%)

- 12 current use (27.9% of all)
- 4 planned future use
- 4 student monitoring
 - Example 1: UC Boulder made reference to intervening when a student might be faltering
 - Example 2: UMass Amherst is developing the Milestone Tracking Project
- This really should be 100%!



Accountability uses

Penn State

"Programs losing graduate students do have to answer to our dean."

UC Irvine

"currently looking at ways to incentivize individual departments and hold them more accountable for graduate student attrition/retention."

New Mexico

Faculty are access & program reach expanded by working with the NSF-funded ADVANCE and PAID programs at NMSU

- Faculty & scientists at three doctoral-granting institutions and Los Alamos National Lab
- Institutional transformation focused on climate change



Information sharing . . . the power of data

- University of Maryland, Baltimore County noted that having a research-based approach enabled the program to have stronger buy-in with faculty.
- Stony Brook "engages departments on a case-by-case basis."
- This has been a key strategy in the ADVANCE: IT initiatives.



NSF-ADVANCE: Institutional Transformation (IT)

Goals:

- Increase women's representation among STEM* faculty and administration.
- Transform the culture of academia.
- Very competitive awards (less than 15% of applicants funded).
- Round 1: 2001/2002; 2nd round: 2003.
- \$750,000 per year for five years.
- Cooperative agreements—for leverage to ensure IT progress:
 - reporting of key metrics.
 - mid-grant site visits.
 - Program evaluation.
 - Portal: http://www.advance-portal.net.

*STEM: Science, Technology, Engineering and Mathematics



Two Toolkits

(Prepared by ADVANCE Institutional Transformation Indicators Working Group

- (1) Toolkit for Reporting Progress Toward NSF ADVANCE: Institutional Transformation Goals
- (2) Using Program Evaluation To Ensure the Success of Your Advance Program

Available at:

http://www.nmsu.edu/~advprog/ http://www.advance-portal.net



How are evaluation data used?

Program improvement	18	41.9%
Accountability/program review	7	16.3%
Information sharing w/in institution	7	16.3%
Summative/reporting to funders	7	16.3%
Cross-institutional research efforts*	7	16.3%
Not used or not sure	3	7.0%
Blank	8	18.6%

^{*}Note: Four institutions reported participating in the Council of Graduate Schools' Ph.D. Completion Project.



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