
MEG Advisory Board Executive Committee Meeting

April 27, 2006

Agenda

- Welcome (C. McCarrell)
 - College Update (C. McCarrell)
 - Department Update
 - Ray Kozak Scholarship
 - Recruitment of New Board Members
 - Assessment: M.S. Exit Interview
 - Assessment: Curriculum Review
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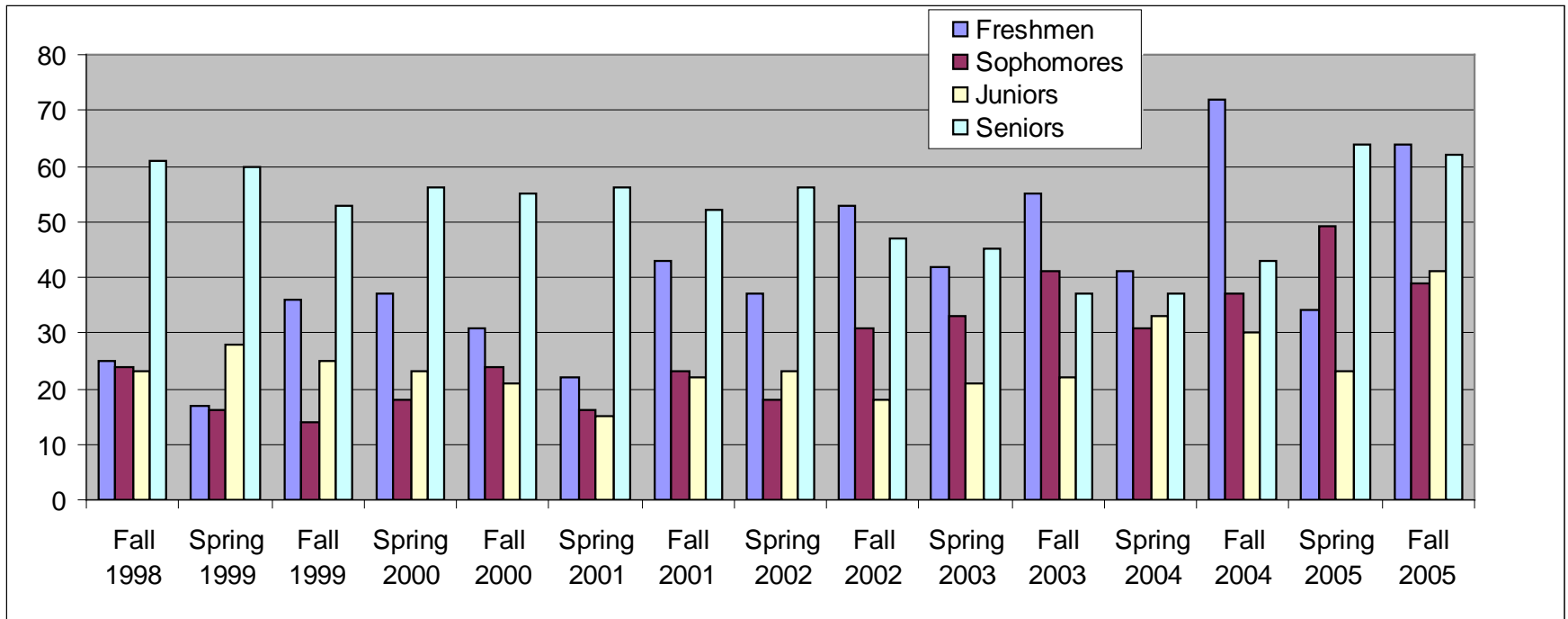
College Update

- Construction of a new Science and Engineering Building is going forward.
- The College hosted FIRST Robotic Competition in Thomas and Mack Center for the 2nd time.



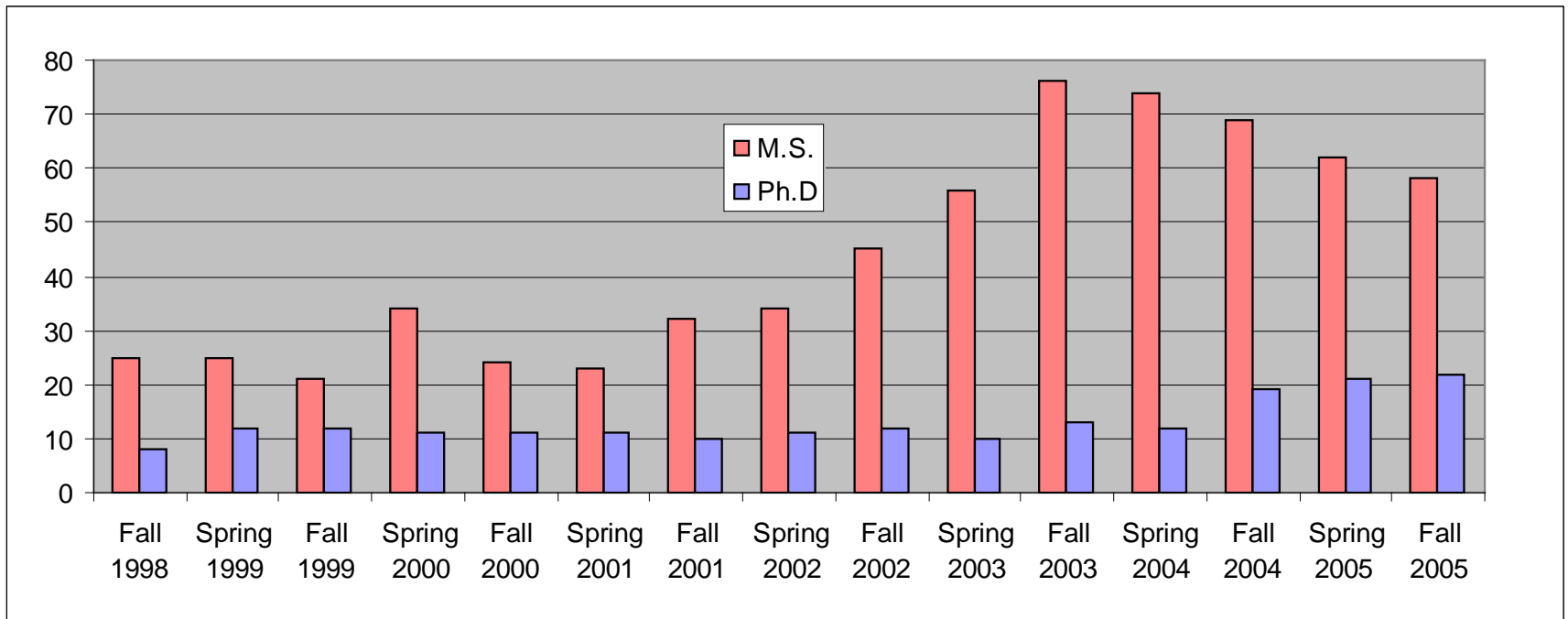
Department Update, Undergraduate Enrollment

- Undergraduate program continues to increase. Our Spring 06 numbers are in the same order.



Department Update, Graduate Enrollment

- We continue to stabilize our graduate enrollment.
- The ratio of Ph.D. to M.S. students continues to increase, which matches the outlook of the university.



Department Update, Lab Director

- We conducted a search for a lab director position.
 - Mr. Jeffrey Markle has accepted our offer for this position.
 - Jeff is an alumnus of UNLV (B.S. (1998) and M.S. (2001)). He has an extensive industrial experience in the MEMS area, with emphasis on single-chip pressure sensors for automotive applications.
 - Mr. Markle will supervise both teaching and research laboratories of the department. .
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Department Updates, Recent Lab Updates

- 16 Computers (7 for 337L, 7 for 100L, 2 for 421L): \$13,592
 - Monitors for MEG 337L: \$1,116
 - Seats for MEG 100L: \$1,248
 - Tables for MEG 421L: \$1,870
 - Torsion Testing Machine for 302L: \$5,181
 - Data Acquisition System for MEG 302L: \$3,966
 - Data Acquisition Boards for MEG 421L: \$854
 - Strain Conditioner Box for 302L: \$1,257
 - 250 Mathcad licenses (will be distributed to students in MEG 100):
\$3,265
 - Lab View Site License: \$5,000 (department share: \$1000)
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Department Updates, Student Activities

- Society for the Advancement of Materials and Process Engineering (SAMPE) student section
 - Society of Automotive Engineers (SAE) student section
 - UNLV student chapter of American Society of Mechanical Engineers hosted the Spring 2006 Diversity Action Seminar
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Department Updates, Senior Design Projects

- Solar UAV
 - Rapid Beverage Chiller
 - Automatic Can Crusher
 - Cooled Electron Target Optimized for Neutron-production (CETON)
 - Next Generation Football Helmet
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Senior Design Dinner

- Contest is on May 3 (all day)
- Senior Design Dinner will Friday, May 5, 6:00 p.m.



Department Updates, ASME Essential Teaching Seminar

- The Department of Mechanical Engineering hosted the ASME Essential Teaching Seminar on March 16-18.
 - The seminar, which targets engineering and technology faculty, helps faculty improve their teaching skills.
 - The seminar was attended by seventeen faculty from various institutions including Western Kentucky University, California Maritime Academy, Weber State University, Pennsylvania State University, Kansas State University, and University of Toledo in addition to those from UNLV.
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Department Updates, Interaction with Local High Schools

- Introduction to Mechanical Engineering (MEG 100) via Distance Learning
 - Rancho H.S. Aerospace Program
 - Advanced Technologies H.S.
 - Clark H.S. (AMSAT Program) (starting next Fall)

 - FIRST Competition
 - Cimarron H.S. (winner of 2006 regional competition)
 - Basic H.S.
 - Advanced Technologies H.S.
 - Rancho H.S.
 - Palo Verde H.S.
 - Coronado H.S.
 - Del Sol H.S.
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Department Update, Research

- Research activities continue expanding.
- Research expenditures were 4.5 million dollars for 2005 (\$700,000 in 1998).



Ray Kozak Scholarship

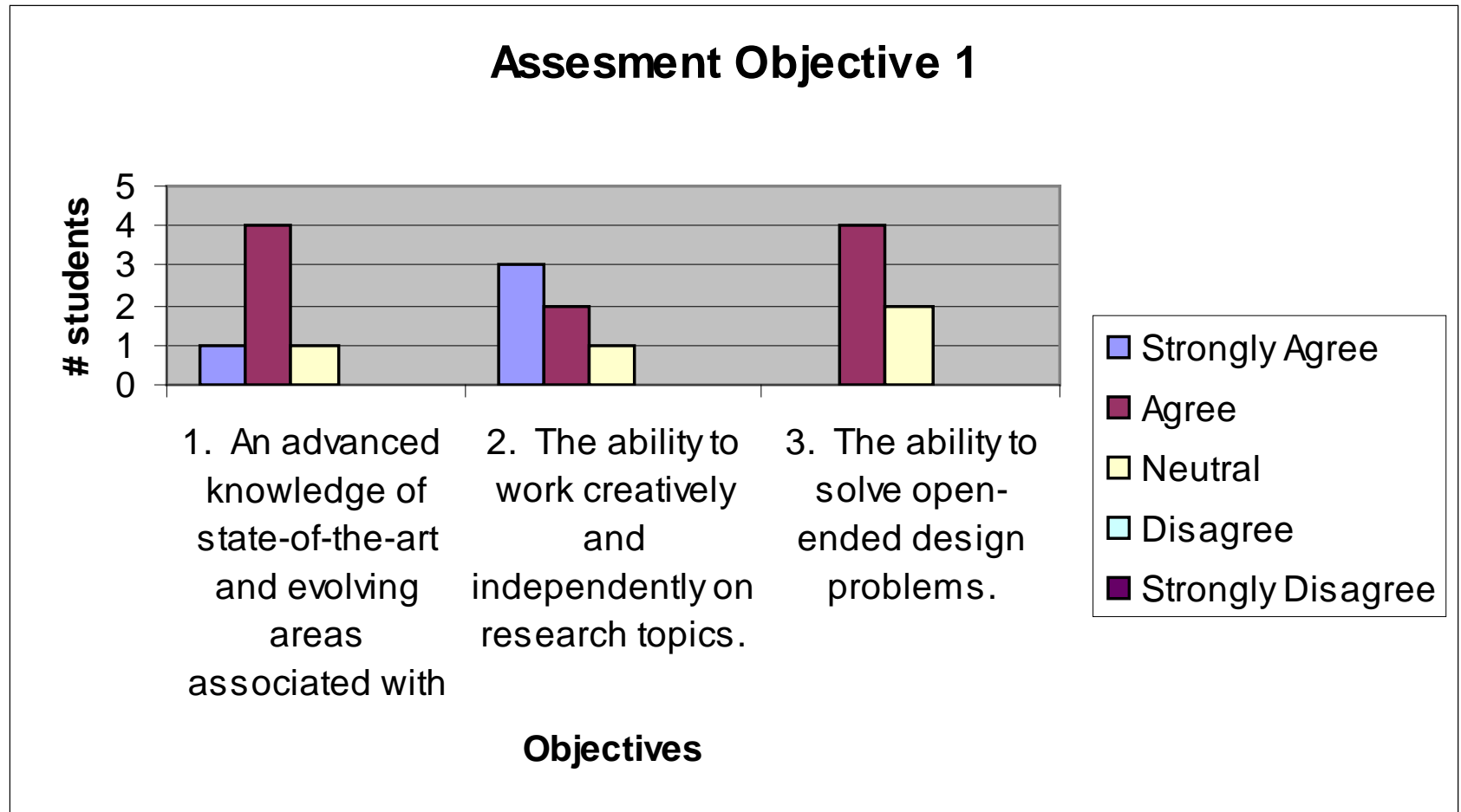
- We had several contributions for the Ray Kozak scholarship.
 - We decided to award it on annual basis to a non-traditional student.
 - Russell Robinson was awarded this scholarship for 2005.
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Recruitment of New Board Members

- Please suggest additional names
- We are lacking representative from county, cities, and small industry.

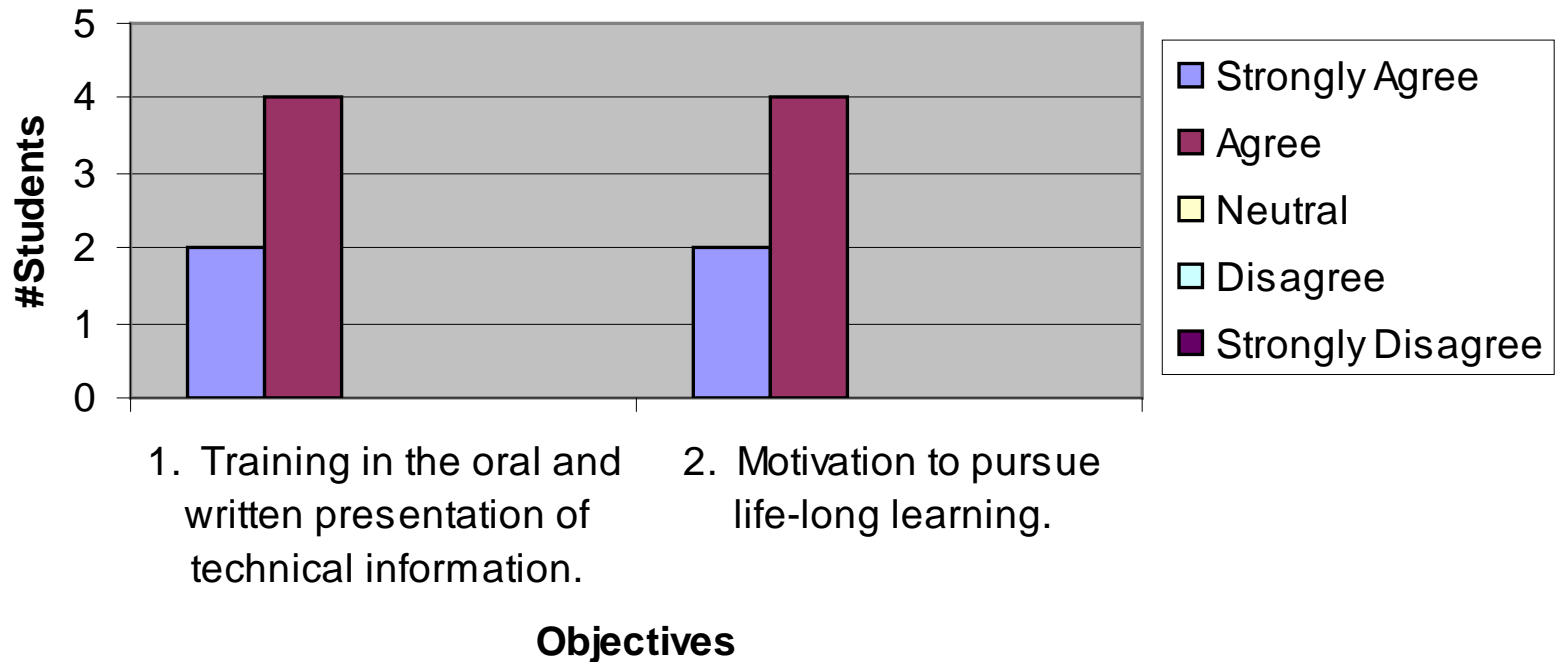


Assessment: M.S. Exit Interview



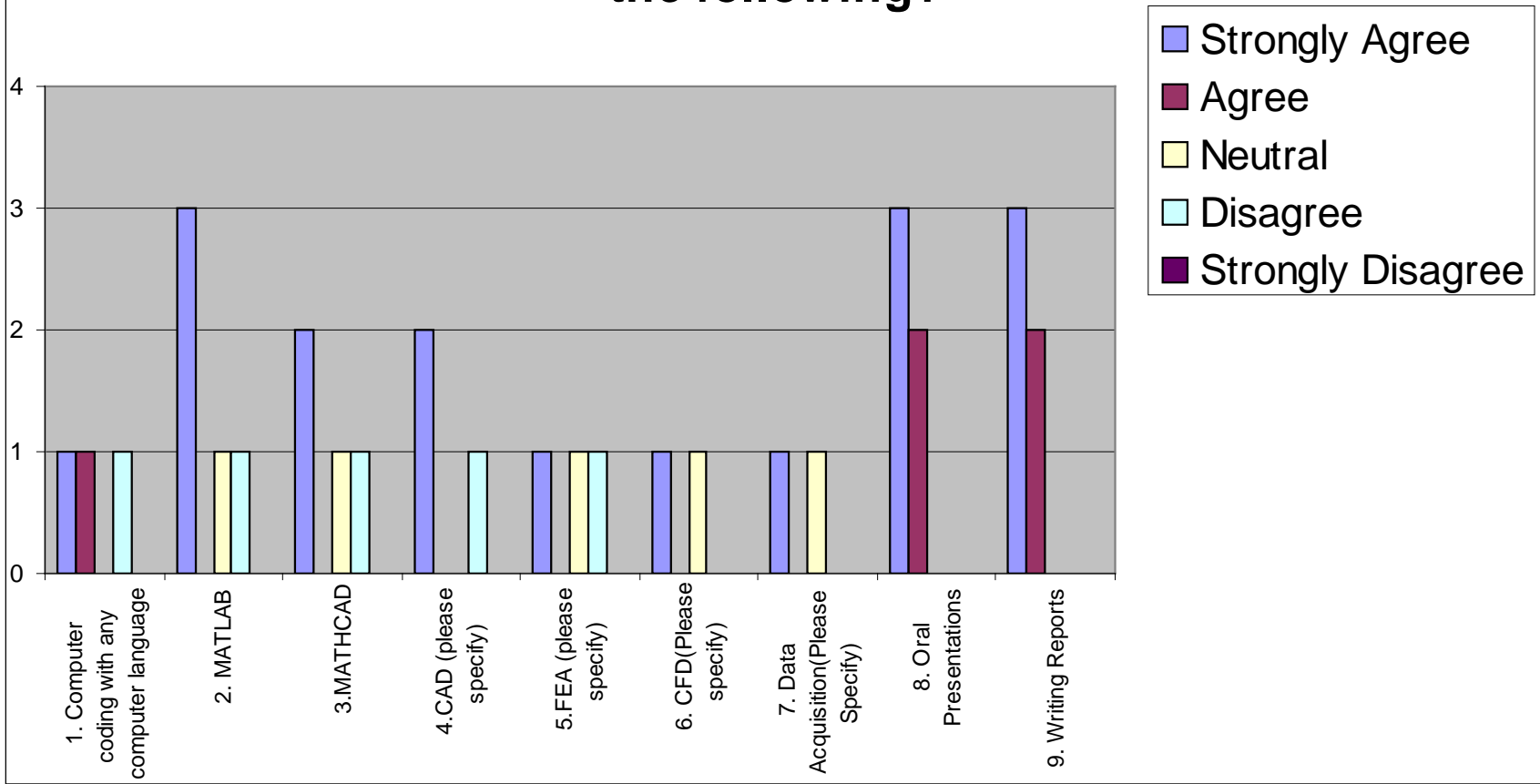
Assessment: M.S. Exit Interview

Assesment of Program Objectives



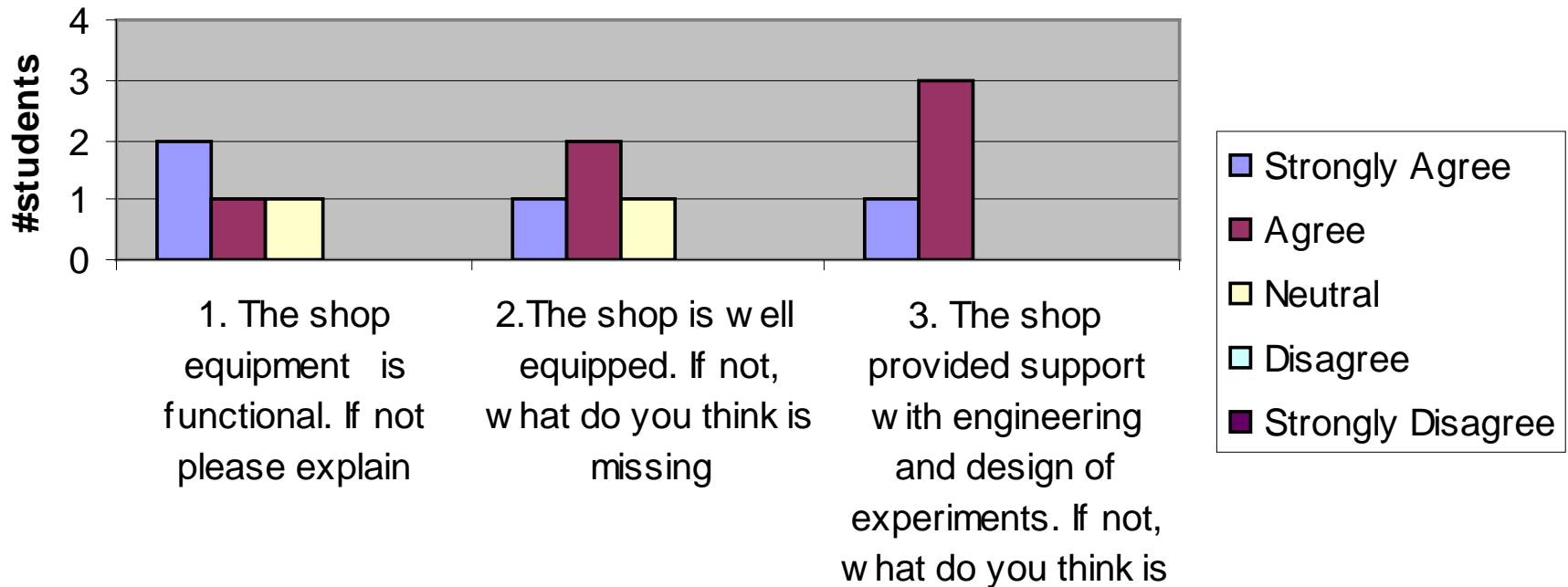
Assessment: M.S. Exit Interview

Have your studies helped you develop proficiency in the following?



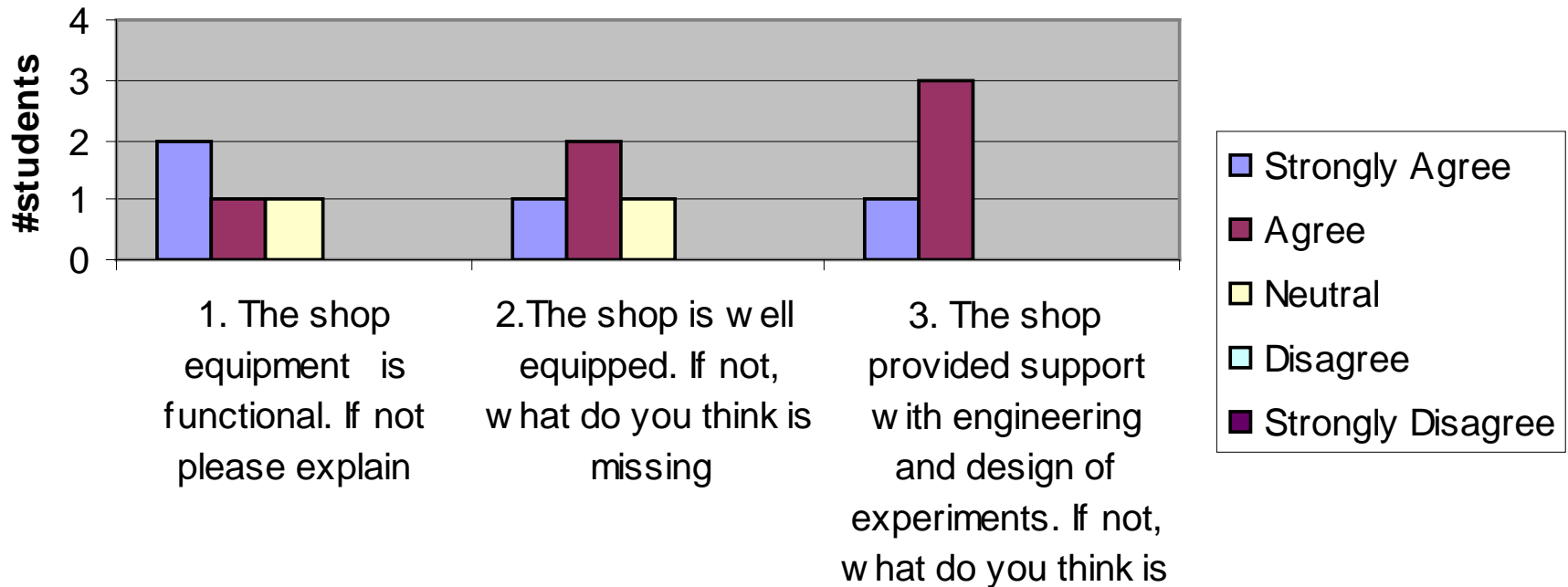
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Shop evaluation

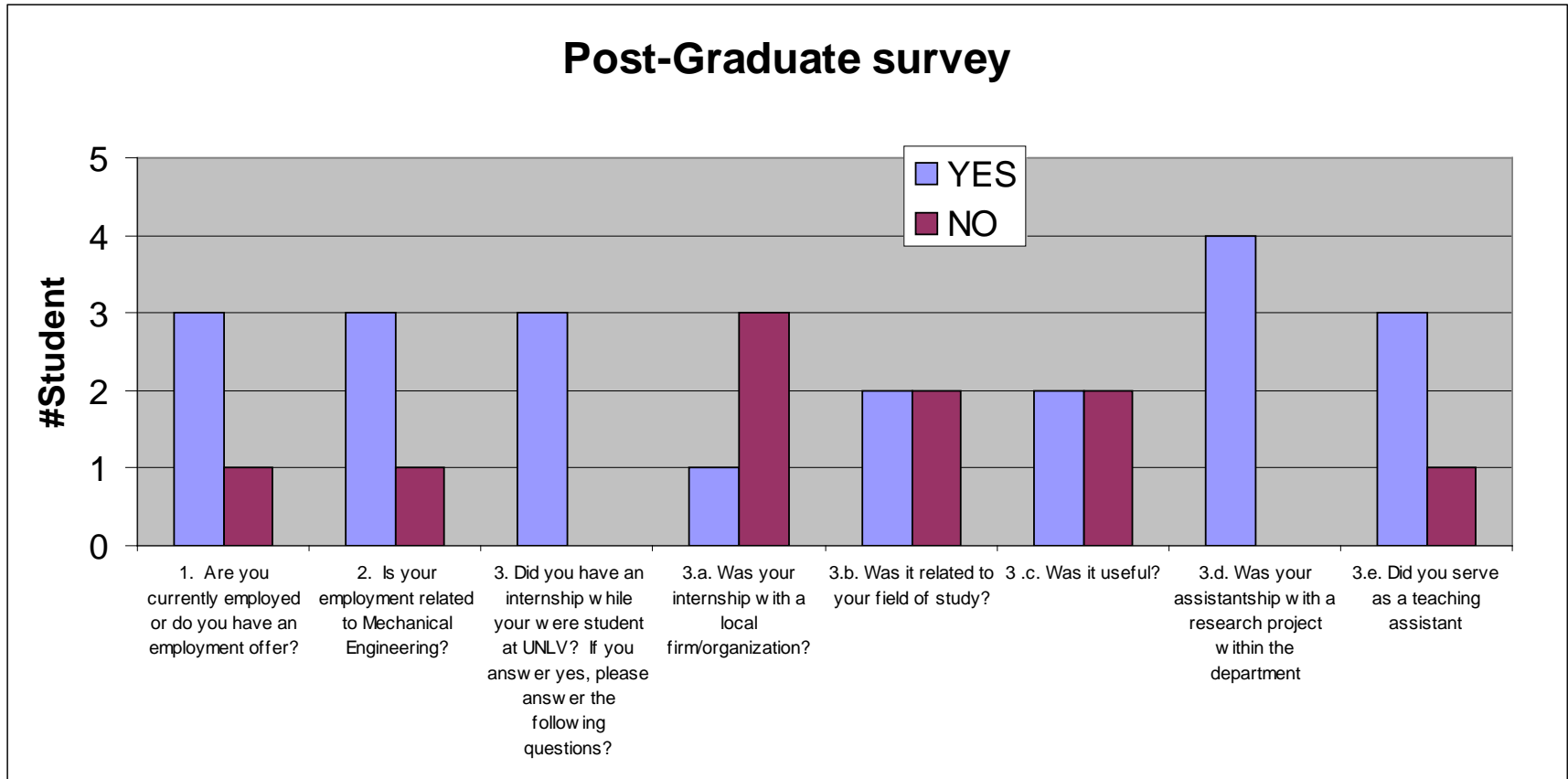


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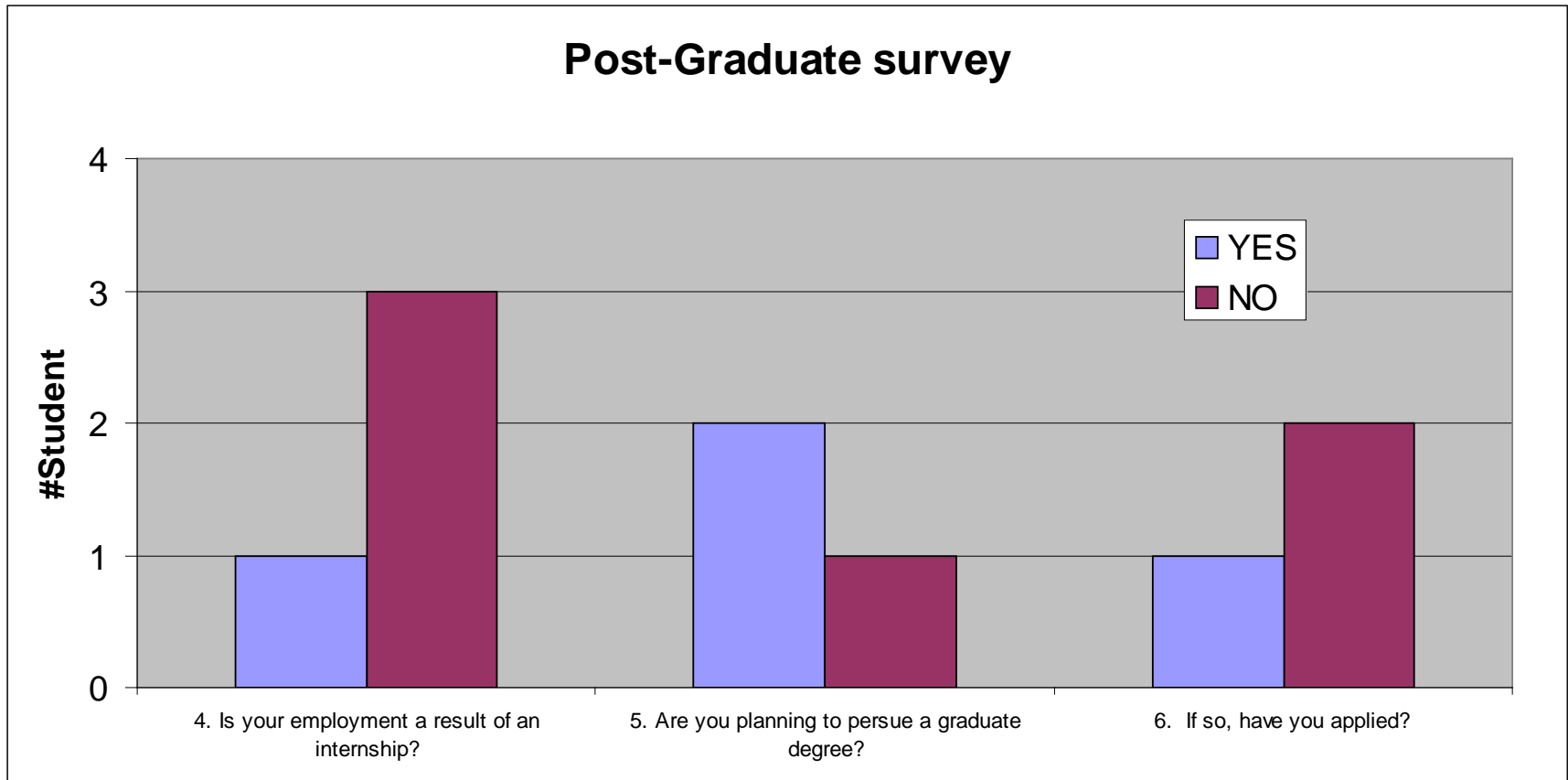
Shop evaluation



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Assessment: M.S. Exit Interview



Curriculum Review

- Divide curriculum into four areas: thermal sciences, fluid mechanics, dynamics and control, design and materials.
- Identify two contact faculty contacts in each area.
- Identify two local evaluators
- Send evaluators course descriptions in the specific areas (please see attached examples)
- Invite evaluators to attend relevant lectures / labs as needed
- Set meeting(s) between evaluators and faculty to answer their questions
- Evaluators write a report summarizing their conclusions and recommendations (please see attached examples)
- Department review reports and modify curriculum accordingly