Perceptions of Climate and Connectivity
Among UNL STEM Faculty
Insights from STEM faculty at UNL from 2008

Julia McQuillan and Christina Falci

DATE: February 22, 2010
TIME: 11:30 AM — 1:00 PM
Overview

Part 1: Do UNL faculty differ from faculty at peer institutions?

Peer comparisons only for *pre-tenure* faculty

University of Illinois at Urbana-Champaign,
University of Iowa,
Iowa State University,
University of Kansas,
Ohio State University

Part 2: Within UNL, do women differ from men? Are there differences by rank?
THE COACHE SURVEY

• COACHE: Collaborative on Academic Careers in Higher Education

  – Co-PIs: Cathy Trower, Kiernan Matthews, Harvard Graduate School of Education

  – COACHE usually surveys pre-tenure faculty in all departments. We’re unique.

  – COACHE is designed to survey academics about academic issues and life
Peer comparison questions

Are assistant faculty in STEM departments at UNL better off, worse off, or no different from faculty at PEER institutions?

Does the answer differ by gender?
Parts of the COACHE Survey

1. Demographic

2. Tenure & Promotion Clarity & Reasonableness

3. Nature of the Work: Satisfaction with time allocation, quality of support services, teaching & research loads

4. Policies & Practices: Importance and effectiveness of work-life policies and professional development

5. Climate, Culture and Collegiality

6. Global Assessments
Caveats

Highlights – details available upon request

Small Sample sizes

UNL men = 28  Peer men = 188
UNL women = 9  Peer women = 26
Three kinds of comparisons

1. UNL compared to PEER

2. Men at UNL compared to men at PEER institutions

3. Women at UNL compared to women at peer institutions
First the tenure process
<table>
<thead>
<tr>
<th></th>
<th>Not Applicable</th>
<th>Very clear</th>
<th>Fairly clear</th>
<th>Neither unclear</th>
<th>Fairly unclear</th>
<th>Very unclear</th>
<th>Decline</th>
</tr>
</thead>
<tbody>
<tr>
<td>19. I find the tenure <em>process</em> in my department to be...</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>20. I find the tenure <em>criteria</em> (what things are evaluated) in my department to be...</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>21. I find the tenure <em>standards</em> (the performance threshold) in my department to be...</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>22. I find the <em>body of evidence</em> that will be considered in making my tenure decision to be...</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>23. My sense of whether or not I will achieve tenure is...</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
</tbody>
</table>
Clarity of the tenure process….

No differences

Tenure Process
Tenure Criteria (what things are evaluated)
Tenure Standards (the performance threshold)
Tenure Body of Evidence

Very Unclear to Very Clear

Men UNL  Men Peers  Women UNL  Women Peers
Is what’s expected in order to earn tenure clear to you regarding your performance as:

... a **scholar** (e.g., research and creative work)?

... a **teacher**?

... an advisor to students?

... a colleague in your department?

... a campus citizen?

... a member of the broader community (e.g., outreach)?
Do the clarity of particular tenure expectations differ? Some…

![Bar chart showing differences in clarity of tenure expectations among different groups. The chart compares 'A Member of Broader Community', 'A Scholar', and 'A Campus Citizen' for Men UNL, Men Peers, Women UNL, and Women Peers. The chart indicates that there are significant differences (indicated by *) among these groups.]
Do perceptions of the reasonableness of tenure differ? Yes

...A Teacher*  ...An Advisor*  ...A Colleague*  ...A Campus Citizen*  ...A Member of Broader Community

Men UNL  Men Peers  Women UNL  Women Peers

* indicates statistically significant difference from other groups.
“I have received consistent messages from tenured faculty in my department about the requirements for tenure.”

Not significantly different

“In my opinion, tenure decisions here are made primarily on performance-based criteria rather than on non-performance-based criteria.”

UNL = 4.19 >* PEER = 3.73
Next: NATURE OF THE WORK

The survey asked:

“The next set of items explores your day-to-day activities as a faculty member. Please indicate your level of satisfaction or dissatisfaction with the following aspects of your work”
Are there differences with satisfaction in aspects of teaching?

NO

...Level of courses

...Number of courses

...Degree of influence over students

...Discretion over course content

...Number of students
Are there differences with satisfaction with aspects of work in general?

NO

...Way you spend your time

...Number of hours a week

...Amount of time on research

...The amount of external funding expected to find

...Influence over the focus of research
Next:
Importance & Effectiveness of Policies & Practices
“Regardless of whether the following policies and practices currently apply to your institution, please rate how important or unimportant each would be to your success. Then rate how effective or ineffective each has been at your institution.”

COACHE survey
Examples of Policies:

- Upper limit on committee & teaching assignments
- Formal /informal mentoring program
- Performance reviews
- Spousal/partner hiring; child care; housing assistance, stop-the-clock
- Support for externally funded grants
- Assistance with or peer review of teaching
- Paid or unpaid leave
- Travel funds
Importance of policies: which differ?

- Informal Mentoring Program*
- Upper Limit on Committee Assignments for Tenure-Track Faculty*
- Upper Limit on Teaching Obligations*

* * *

Men UNL  Men Peers  Women UNL  Women Peers
Effectiveness of policies: which differ?

- Formal Mentoring
- Informal Mentoring
- Childcare

Very Ineffective to Very Effective

- Men UNL
- Men Peers
- Women UNL
- Women Peers
Do perceptions of supports for work/life balance and tenure track (TT) differ? No

- Institutional Support for
  - having children and TT
  - raising children and TT

- Colleague Support for
  - for having children and TT
  - raising children and TT

- Colleagues' Respect for
  - personal work & responsibilities
Satisfaction with Climate, Culture and Collegiality

Differences between UNL and Peers

- Professional interaction with pre-tenured faculty
- Balance professional & personal/family time
- Fairness of immediate supervisor
- Interest tenured faculty take in your career
- Opportunities to collaborate with tenured faculty
- Professional & personal interaction with tenured faculty

Amount of personal interaction with pre-tenured faculty *

Compensation & benefits *

No differences between UNL and Peers
Are there differences in satisfaction on any aspects?

**Compensation and Benefits:**
- Men UNL
- Men Peers
- Women UNL
- Women Peers

**Amount of Personal Interaction with Pre-Tenured Faculty:**
- Men UNL
- Men Peers
- Women UNL
- Women Peers
No differences between UNL and Peer faculty on...

... how well they "fit" (e.g., sense of belonging, comfort level) in their department.

... ...the intellectual vitality of tenured faculty in their department.
GLOBAL SATISFACTION:

“Finally, we ask you to make some overall assessments about your department and your institution as a place to work.

Please check the two (and only two) best aspects about working at your institution.”
<table>
<thead>
<tr>
<th>Academic freedom</th>
<th>Assistance for grant proposals</th>
<th>My sense of “fit” here</th>
</tr>
</thead>
<tbody>
<tr>
<td>Support of colleagues</td>
<td>Spousal/partner hiring program</td>
<td>Quality of colleagues</td>
</tr>
<tr>
<td>Opportunities to collaborate</td>
<td>Cost of living</td>
<td>Support for professional development</td>
</tr>
<tr>
<td>Quality graduate students</td>
<td>Geographic location</td>
<td>Manageable pressure to perform</td>
</tr>
<tr>
<td>Quality undergraduates</td>
<td>Diversity</td>
<td>Promotion requirements in general</td>
</tr>
<tr>
<td>Quality of facilities</td>
<td>Presence of others like me.</td>
<td>Promotion criteria clarity</td>
</tr>
<tr>
<td>Compensation</td>
<td>Teaching load</td>
<td>Promotion process clarity</td>
</tr>
<tr>
<td>Support for teaching</td>
<td>Protections from service/assignments</td>
<td>Tenure criteria clarity</td>
</tr>
<tr>
<td>Availability/quality of childcare</td>
<td>Commute</td>
<td>Other (Please specify):</td>
</tr>
<tr>
<td>Tenure process clarity</td>
<td>Research requirements for tenure</td>
<td>There are no positive aspects.</td>
</tr>
<tr>
<td>Childcare policies/practices</td>
<td>Tenure requirements in general</td>
<td></td>
</tr>
<tr>
<td>Support for research (e.g., leave)</td>
<td>Research requirements for promotion</td>
<td></td>
</tr>
</tbody>
</table>
## UNL STEM Faculty compared to Peers

<table>
<thead>
<tr>
<th>UNL Rank</th>
<th>Best Aspects</th>
<th>Proportion Selected - UNL</th>
<th>Proportion Selected - Peer</th>
<th>Peer Rank</th>
<th>Peer Rank</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Academic freedom</td>
<td>.29</td>
<td>.03</td>
<td>20</td>
<td>-19</td>
</tr>
<tr>
<td>2</td>
<td>Cost of living</td>
<td>.26</td>
<td>.23</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>3</td>
<td>Quality of Colleagues</td>
<td>.20</td>
<td>.26</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>4</td>
<td>Assistance for grant proposals</td>
<td>.20</td>
<td>.05</td>
<td>12</td>
<td>-8</td>
</tr>
<tr>
<td>5</td>
<td>Support of colleagues</td>
<td>.14</td>
<td>.19</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>6</td>
<td>Opportunities to collaborate with colleagues</td>
<td>.14</td>
<td>.17</td>
<td>4</td>
<td>2</td>
</tr>
</tbody>
</table>
Summary: How are UNL STEM assistant professors better, worse, or no different from Peer STEM assistant professors?

Clarity and reasonableness of tenure
- UNL < PEERS clarity for community, scholar, campus citizen
- UNL < PEERS reasonableness of teacher, advisor, colleague, campus citizen, member broader community
- UNL > PEERS tenure based on performance-based criteria

Satisfaction with teaching and general work situation:
- UNL = PEERS

Policies and Procedures
- UNL < PEERS importance of informal mentoring, upper limit on committees, and upper limit on teaching obligations
- UNL < PEERS effectiveness of formal mentoring, informal mentoring, child care
- UNL = PEERS on work/life balance & tenure track

Satisfaction
- UNL < PEERS on compensation/benefits & personal interaction with pre-TT

Global satisfaction
- UNL = PEERS on sense of fit and intellectual vitality
- UNL > PEERS best aspects academic freedom and assistance for grant proposals
- UNL < PEERS best aspect “sense of fit”
Part 2:
Focusing on Gender and Rank

All Ranks
Only UNL
Expectations for tenure that differ by gender

Expectations as an advisor

Expectations as a colleague

Very Unclear to Very Clear

Men Women
Future plans

“Assuming you have or will achieve tenure, how long do you plan to remain at your institution?”
Does organizational commitment differ by gender? Yes

- For the foreseeable future
- For no more than 5 years
- I haven't thought that far ahead
- For the rest of my career
Percentage time on service differs by gender

In the past month, percentage of time spent on: service

- Men
- Women
Importance of 2 policies differs for women and men

Importance of policy for success:
- spouse/partner hiring
  - Not very Important to Very Important
  - Men: [Graph]
  - Women: [Graph]

Importance of policy for success:
- paid and unpaid personal leave
  - Not very Important to Very Important
  - Men: [Graph]
  - Women: [Graph]
Men are more likely to see the institution as helping to make family and career compatible

My institution helps to make family/career compatible

Strongly Disagree to Strongly Agree

Men vs Women
Summary: How does gender matter?

Expectations of tenure (advisor/colleague)
  \( \text{Men} > \text{Women} \)

Organizational commitment
  \( \text{Men} > \text{Women} \)

Spousal hiring and child care policies
  \( \text{Women} > \text{Men} \)

Time on service (administrators?)
  \( \text{Men} > \text{Women} \)

Perceptions of support for work/life
  \( \text{Men} > \text{Women} \)
Patterns that differ by gender & rank
Clarity of the tenure process performance expectations:

Significant gender by rank differences

A colleague

A campus citizen

A member of the broader community

very unclear

very clear

- Full
- Associate
- Assistant
Clarity of the promotion process from associate to full:

- **Women**
  - Very unclear: 3
  - Very clear: 4

- **Men**
  - Very unclear: 4
  - Very clear: 5

- **Full**
  - Very unclear: 4
  - Very clear: 5

- **Associate**
  - Very unclear: 3
  - Very clear: 4
The number of students you teach:
- Very unsatisfied: Women (3), Men (4)
- Very satisfied: Women (4), Men (5)

The way you spend your time:
- Very unsatisfied: Women (3), Men (4)
- Very satisfied: Women (4), Men (5)

Legend:
- Full
- Associate
- Assistant
Opportunities to collaborate with pre-tenured faculty

Very unsatisfied  |  Very satisfied

Women

Men

- Full
- Associate
- Assistant
My Institution Helps Make Family and Career Compatible

Strongly Disagree to Strongly Agree

Women

Men

Assistant  Associate  Full
Importance of Formal Mentoring

Importance of Informal Mentoring

Not very important to Very important

Assistant Associate

Women

Men

[Graph showing bar charts for the importance of formal and informal mentoring for women and men, with scales from 1 to 5 indicating the level of importance.]

Women

Men

[Nebraska seal]
Best aspects of UNL
Top 5 selected aspects by gender and rank
*the next slide can be dizzying
# Best 5 Aspects of UNL

<table>
<thead>
<tr>
<th>rank</th>
<th>Men</th>
<th>Women</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td><strong>Academic Freedom</strong></td>
<td>Opportunities to collaborate with colleagues</td>
</tr>
<tr>
<td>2</td>
<td><strong>Cost of living</strong></td>
<td>Academic Freedom</td>
</tr>
<tr>
<td>3</td>
<td><strong>Quality of Colleagues</strong></td>
<td>Quality of Colleagues</td>
</tr>
<tr>
<td>4</td>
<td><strong>Assistance for grant proposals</strong></td>
<td>Spousal/partner hiring program</td>
</tr>
<tr>
<td>5</td>
<td><strong>Support of Colleagues</strong></td>
<td>Cost of living</td>
</tr>
</tbody>
</table>

## Assistant

<table>
<thead>
<tr>
<th>rank</th>
<th>Men</th>
<th>Women</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td><strong>Quality of Colleagues</strong></td>
<td>Academic Freedom</td>
</tr>
<tr>
<td>2</td>
<td><strong>Cost of living</strong></td>
<td>Support of Colleagues</td>
</tr>
<tr>
<td>3</td>
<td><strong>Academic Freedom</strong></td>
<td>My sense of &quot;fit&quot; here</td>
</tr>
<tr>
<td>4</td>
<td><strong>Quality of facilities</strong></td>
<td>Quality of facilities</td>
</tr>
<tr>
<td>5</td>
<td><strong>My sense of &quot;fit&quot; here</strong></td>
<td>Assistance for grant proposals</td>
</tr>
</tbody>
</table>

## Associate

<table>
<thead>
<tr>
<th>rank</th>
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<th>Women</th>
</tr>
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<tbody>
<tr>
<td>1</td>
<td><strong>Quality of Colleagues</strong></td>
<td>My sense of &quot;fit&quot; here</td>
</tr>
<tr>
<td>2</td>
<td><strong>Cost of living</strong></td>
<td>Assistance for grant proposals</td>
</tr>
<tr>
<td>3</td>
<td><strong>Academic Freedom</strong></td>
<td>Quality of undergraduate students</td>
</tr>
<tr>
<td>4</td>
<td><strong>Quality of facilities</strong></td>
<td>My sense of &quot;fit&quot; here</td>
</tr>
<tr>
<td>5</td>
<td><strong>My sense of &quot;fit&quot; here</strong></td>
<td>Geographic location</td>
</tr>
</tbody>
</table>

## Full

<table>
<thead>
<tr>
<th>rank</th>
<th>Men</th>
<th>Women</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td><strong>Quality of Colleagues</strong></td>
<td>Quality of Colleagues</td>
</tr>
<tr>
<td>2</td>
<td><strong>My sense of &quot;fit&quot; here</strong></td>
<td>Quality of undergraduate students</td>
</tr>
<tr>
<td>3</td>
<td><strong>Academic Freedom</strong></td>
<td>My sense of &quot;fit&quot; here</td>
</tr>
<tr>
<td>4</td>
<td><strong>Opportunities to collaborate with colleagues</strong></td>
<td>Academic Freedom</td>
</tr>
<tr>
<td>5</td>
<td><strong>Quality of graduate students</strong></td>
<td>Geographic location</td>
</tr>
</tbody>
</table>
Open-Ended Responses: Best about Specific Position

- Quality of core of faculty
- Variety of work
- Freedom to teach/research
- Interaction with students
- Interactions with colleagues and students
Summary

• Gender shapes faculty experiences differently in different ranks
• Shows the need to “control” for potential confounding variables.
Open-Ended Responses: Best about UNL

• Spousal hiring possibilities (not a program, but my department makes a lot of effort)

• Research & Teaching opportunities

• Support by upper administration for growth in the area of research

• Career advancement
Summary of Gender by Rank

Clarity of the tenure process
A colleague:
- Women: Assistant > Associate > Full
- Men: Full > Assistant > Associate
A campus citizen
- Women: Assistant > Associate > Full
- Men: Full > Associate Assistant
Member of a broader community
- Women: Assistant > Associate > Full
- Men: Full > Assistant > Associate
Promotion process from associate to full
- Women: Associate > Full
- Men: Full > Associate

Policies and Procedures
My Institution helps make family and career compatible
- Women: Assistant > Associate = Full
- Men: Full > Assistant = Associate
Importance of formal mentoring
- Women: Assistant > Full
- Men: Assistant = Full
Importance of informal mentoring
- Women: Associate > Assistant
- Men: Assistant > Associate

Global
- Academic Freedom: All 6 groups
- Quality of Colleagues: All but associate women
- Cost of living: Assistants; Associate Men
- Assistance for grants: Assistant men, Associate women
- Support of Colleagues: Assistant men, associate women
- Opportunities collaborate: Assistant women
- Spousal/partner hiring: Assistant women
- Quality of Facilities: Associate
- My Sense of Fit here: Associate and Full
- Quality of students: Full
- Geographic Location: Full women

Satisfaction with aspects of work
The number of students you teach
- Women: Associate > Assistant > Full
- Men: Full > Assistant > Associate
The way that you spend your time
- Women: Assistant > Associate > Full
- Men: Full > Associate Assistant
Opportunities to collaborate with pre-tenured
- Women: Assistant > Full > Associate
- Men: Full > Associate > Assistant
Thank you!
Next data collection
Spring 2011