Comprehensive Institutional Intervention Strategy at Iowa State University

August 3-5, 2009
ISU ADVANCE
Comprehensive Approach:

- **Top Down**
  - **PROVOST’S OFFICE LEADERSHIP**
    - Policy Changes
    - Conference on Flexible Careers
    - Faculty Satisfaction Survey
    - Search Strategy Resources
  - **EQUITY ADVISORS**
    - College-level Coordination
    - Campus-wide Workshops
    - Chairs’ Workshops
  - **ADVANCE PROFESSORS**
    - Collaborative Transformations
    - Department Reports
    - Actions to Transform Culture

- **Bottom Up**
This morning’s four presentations

• Overview and Goal 1: Overcome known barriers for women in STEM
• Goal 2: Identify and eliminate departmental barriers
• Goals 3 and 4: Increase diversity among senior faculty and academic leaders, institutionalize change
• Evaluation, future outlook, challenges, sustainability
Building program structure and managing personnel changes

- Co-PIs, PI, executive director, research director
- ISU ADVANCE Council
- Internal and external advisory groups
- Recognizing the need for change in partners and expenditures
  - Institutional Research
  - Collaborative Transformation (CT) research
  - Evaluation synthesis
Goals, themes, principles

- Year 3: Recruiting the Best: The role of work-life flexibility
  - Internal and external dissemination
  - Second cohort of focal departments
  - October conference
  - Expand programs and partnerships
  - Sustain progress in search processes
  - Site visit

- Inclusiveness and consultation, transparency with data and information, efficiency in time and materials
Barrier: lack of transparency

COACHE survey results, 2005

<table>
<thead>
<tr>
<th>I find the tenure standards to be very clear</th>
<th>ISU tenure-eligible faculty</th>
<th>Peer institution tenure-eligible faculty</th>
<th>ISU Percentile</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>3.1</td>
<td>3.4</td>
<td>30th</td>
</tr>
</tbody>
</table>

(5=very clear, 1=very unclear)
Solution: increasing transparency

- Progress draws heavily on work of co-PIs, Equity Advisors, ADVANCE Professors, faculty fellows, and focal department chairs
- Diversity workshops and Readers Theatre presentations
- Recruitment materials, development and training
  - Web site and CD materials: short and usable
  - Workshops for department chairs and faculty
  - Partnership with Equal Opportunity and Diversity
- Promotion and tenure, advancement to full professor: formal and informal conversations
Barrier: isolation

- Collection of data pre- and post-award
- AAUDE Faculty Satisfaction Survey clarifies continuing sense of isolation for women
Solution: decreasing isolation

- University level events: training workshops
- College level events: informal networking lunches, workshops on promotion and tenure, awards recognitions
- Department level responses to CT: chairs’ breakfasts with pre-tenure faculty, governance document changes
- All levels: programming in concert with other partners
Barrier: inadequate mentoring

Have you had a formal mentor within your department?
(by race/ethnicity)

<table>
<thead>
<tr>
<th>Response</th>
<th>White Faculty</th>
<th>Faculty of Color</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes, one was assigned to me</td>
<td>24.0</td>
<td>46.0</td>
</tr>
<tr>
<td>Yes, one was chosen by me</td>
<td>23.5</td>
<td>18.0</td>
</tr>
<tr>
<td>No</td>
<td>52.5</td>
<td>36.0</td>
</tr>
</tbody>
</table>

Responses for tenured and tenure-eligible faculty only
Source: ISU AAUDE Faculty Satisfaction Survey 2008
Solution: improved mentoring

- Review of and changes to university-wide programs for new tenure-eligible faculty
- Year 4 focus on promotion from associate to full professor
- New mentoring programs developed at college level
- Department-level mentoring handbook discussions
- ISU ADVANCE Scholar Program (discussion later)
Barrier: lack of career flexibility

- Policy use and acceptance remains an ongoing challenge
- Data collection requires complex systems changes

Using the tenure clock policy might hurt chances for tenure

Source: ISU AAUDE Faculty Satisfaction Survey 2008
Solution: enhancing career flexibility

• Existing commitment: Dual Career Program
• Strong set of policies, including “modified duties”
• Year 3: Recruiting the Best: The role of work-life flexibility
  – “The New Norm of Faculty Flexibility: Transforming the Culture in Science and Engineering” (October 2008)
  – Faculty Fellow developing department chair resources on managing flexibility
• Consistent interest from current and prospective faculty
Discussion
Goal 2: Reducing department-specific barriers to the advancement of women faculty
ISU ADVANCE
Comprehensive Approach:

Top Down

- Policy Changes
- Conference on Flexible Careers
- Faculty Satisfaction Survey
- Search Strategy Resources

Bottom Up

- College-level Coordination
- Campus-wide Workshops
- Chairs’ Workshops

- Collaborative Transformations
- Department Reports
- Actions to Transform Culture
Addressing Department-specific Barriers

• To address Goal 2, ISU ADVANCE has designed a highly specialized project: “Collaborative Transformation” (CT).

• Efforts focus on enhancing departmental structures, cultures and practices.
  – 9 departments, phased in over 5 years
  – Lessons from CT inform many aspects of the overall ADVANCE program
Collaborative Transformation: Leadership

• In each focal department:
  – Departmental ADVANCE Professor
  – Departmental Advisory group
  – Department Chair/Head

• ADVANCE program Researchers
Collaborative Transformation: Gathering and Using Data

- Focus groups/interviews are used to collect data from each department.
- Data are analyzed to determine the most salient issues for each department.
- Analyzed results are then “mirrored back” to each department.
- Department teams develop strategies for addressing departmental issues.
Collaborative Transformation: An On-going Process

- Collaboration throughout this process involves:
  - Researchers conducting annual interviews with department Chairs.
  - ADVANCE Professors and Researchers documenting outcomes of departmental change efforts.
  - ADVANCE Equity Advisors using CT reports to inform College-level activities.
Collaborative Transformation: Outcomes

• Departmental change strategies led by ADVANCE Professors of the 1st three focal departments have focused on:
  – work-life balance
  – faculty recruitment
  – tenure and promotion
  – departmental climate
Change Strategies: Work-Life Balance

• Reconsideration of faculty meeting times.
• Provision of childcare for visiting speakers.
• Support for University-level “Modified Duties Policy” for the arrival of a child. (passed by ISU Faculty Senate, 1-20-2009).
Change Strategies: Faculty Recruitment

• Three focal departments had open faculty discussions about avoiding unintentional biases in faculty recruitment processes.
• Two focal departments jointly secured a women’s enrichment mini-grant to invite promising women scholars and scholars of color to campus.
Change Strategies: Tenure & Promotion

• One department developed seminar series for Assistant professors to present “research in progress.”
• One department formalized mentoring process for Associate professors.
Change Strategies: Department Climate

- All departments participated in “Recognizing and Reducing Unintentional Bias” workshop.
- Two departments discussed need to ensure that Assistant Professors feel safe to state their views openly during faculty meetings.
Collaborative Transformation: Products

- Needs assessment reports for each department
- Departmental intervention strategy plans
- Synthesis reports of results across departments
- Scholarly articles and presentations
Collaborative Transformation: Dissemination

• Results have been disseminated bi-annually on campus.
• Results are also being disseminated off campus - at disciplinary conferences.
Collaborative Transformation: Synthesis Reports

• **Report 1**: Synthesis of major departmental climate issues
  – Examples: barriers to recruitment of women; lack of mentoring for associate professors

• **Report 2**: Synthesis of departmental intervention outcomes
  – Examples: departments discussed subtle gender biases in recruitment; departments implemented mentoring for associate professors
Collaborative Transformation: Chairs’ Reactions

- Chairs have indicated:
  - Taking the initiative to help demystify P&T for Assistant Professors.
  - More open discussion in home departments about the recruitment, retention and promotion of diverse faculty.
  - Changes in departmental culture.
Department Chair Quotes:

• “ADVANCE has helped change how we talk about issues like recruitment in the department; you have changed the culture of our department.”

• “The [focal department] study told me that there were more issues [in my department] that needed my attention than I really knew about, and I really liked that.”
CT Project: Progress and Outlook

• **Round 1** focal departments:
  – have developed and implemented (some) change strategies.

• **Round 2** focal departments:
  – have participated in data collection phase, and have drafted departmental assessment reports.

• **Round 3** focal departments:
  – will join the CT project this fall.
CT Project: Progress and Outlook

• In years 4 and 5 of the grant, we will also be administering a second round of surveys (first administered in year 1 of the grant).
  – These will enable us to ascertain differences between focal and non-focal STEM departments in the extent of departmental climate change.
Discussion
Goals 3 & 4:

- Increasing diverse representation at the senior faculty and leadership levels
- Institutionalizing positive change
Goal 3 – Leadership

“Increase overall participation/advancement of women faculty in senior and leadership ranks.”

- ISU ADVANCE Grant Proposal
Goal 3 – Leadership: women full professors

The number of STEM women full professors has increased
Goal 3 – Leadership: Women chairs of P and T committees

The % of P&T committee members who are women has risen to the level of the % of women associate & full professors (the candidate pool for membership)
Goal 3 – Leadership: Women department chairs in focal colleges

- Liberal Arts and Sciences: 1 out of 18
- Engineering: 1 out of 8
- Agriculture and Life Sciences: 1 out of 10
Goal 3 – Leadership

Increased diversity among top leaders

- 3 White women (EVPP, VPRE, Dean of Human Sciences)
- 1 Hispanic man (Dean of Design)
- 1 White man (Dean of Engineering)
Goal 3 – Leadership

Sample Engineering Dean candidate questions:

• As Dean, how would you create an atmosphere where increasing the diversity of the faculty, students and staff is a core function of the COE and Departments?

• As Dean, what specific actions would you take to empower the COE and Departments to be successful in increasing diversity?

• As Dean, how would you hold accountable/reward diversity efforts/outcomes?
Goal 4 – Institutionalizing Change

“Institutionalize positive changes at the university level by increasing awareness among and the proportion of top administrators actively supporting institutional transformation, improving faculty work satisfaction and organizational commitment, and reducing work/family conflict.”

- ISU ADVANCE Grant Proposal
Goal 4 – Institutionalizing Change

- Chair Workshops
- Networking Events
- Policy Changes
- Database Development
- Collaborative Transformation
- Leadership Development

Unintended Bias
Career Flexibility
Culture Change
Advancement
Goal 4 – Institutionalizing Change: New analyses, data, and voices

How many children do you have?

<table>
<thead>
<tr>
<th>Role</th>
<th>Female</th>
<th>Male</th>
</tr>
</thead>
<tbody>
<tr>
<td>Professor</td>
<td>1.20</td>
<td>2.07*</td>
</tr>
<tr>
<td>Associate Prof</td>
<td>1.24</td>
<td>1.83*</td>
</tr>
<tr>
<td>Assistant Prof</td>
<td>0.79</td>
<td>1.14</td>
</tr>
<tr>
<td>Non-Tenure-Eligible</td>
<td>1.27</td>
<td>1.55</td>
</tr>
</tbody>
</table>

Red line = mean response for all faculty
Source: Iowa State University Institutional Research (2008 AAUDE Faculty Satisfaction Survey)
Goal 4 – Institutionalizing Change: New analyses, data, and voices

Number of departmental committees served on within the past 12 months

<table>
<thead>
<tr>
<th></th>
<th>Female</th>
<th>Male</th>
</tr>
</thead>
<tbody>
<tr>
<td>Professor</td>
<td>3.85</td>
<td>3.21</td>
</tr>
<tr>
<td>Associate Prof</td>
<td>2.62</td>
<td>3.43</td>
</tr>
<tr>
<td>Assistant Prof</td>
<td>2.13</td>
<td>2.47</td>
</tr>
</tbody>
</table>

Responses for STEM tenured and tenure-eligible faculty only
Red line = mean response for all faculty
Source: Iowa State University Institutional Research (2008 AAUDE Faculty Satisfaction Survey)
Goal 4 – Institutionalizing Change

• New data collected and analyzed in Institutional Research because of ISU ADVANCE
• ISU ADVANCE work on university-wide committees, working groups, and grant writing teams.
Goal 4 – Institutionalizing Change

Faculty

Deans & Chairs

EAs & APs

Co-PI Team
Discussion
Evaluation, Challenges, Sustainability, and Future Outlook
Evaluation Plan and Progress

- ISU ADVANCE Council provides Formative Evaluation
- External Advisors
  - Drs. Callister, Litt, Turner & Van Ummersen
- External Evaluators
- Evaluation Synthesis
Council Formative Evaluation

• Annual Retreats and Discussions
  – Annual themes
  – Faculty Fellow topic of emphasis
  – Assessment of progress
  – Goals for upcoming year

• Evaluation of Workshops and Events
  – Generally positive; concerns have been addressed

• Faculty Satisfaction Surveys
  – COACHE and AAUDE: areas of concern among faculty regarding policies and faculty life

• Indicator Data to monitor progress
## External Evaluation Plan and Progress

<table>
<thead>
<tr>
<th>Year</th>
<th>Advisors, plan</th>
<th>Advisors, progress</th>
<th>Evaluators, plan</th>
<th>Evaluators, progress</th>
<th>Evaluation Synthesis</th>
</tr>
</thead>
<tbody>
<tr>
<td>Year 1</td>
<td>Visit</td>
<td>All visited</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Year 2</td>
<td>Visit</td>
<td>Email communication</td>
<td>Visit</td>
<td>Team of 2 visited</td>
<td></td>
</tr>
<tr>
<td>Year 3</td>
<td>Visit</td>
<td>2 visited for conference; telecon in March</td>
<td>(NSF site visit)</td>
<td></td>
<td>Began working with evaluator from Provost’s office staff</td>
</tr>
<tr>
<td>Year 4</td>
<td>Visit</td>
<td>Telecons planned</td>
<td>Visit</td>
<td>Visit planned for Spring 2010</td>
<td>Continue with evaluator</td>
</tr>
<tr>
<td>Year 5</td>
<td>Visit</td>
<td>Visit planned</td>
<td></td>
<td></td>
<td>Conclude with evaluator</td>
</tr>
</tbody>
</table>
External Evaluators, January 2008

Recommendations:
- Organize into units
- Rebudget funds
- Address CT issues campus-wide

Actions:
- Research, Scholar, EA/AP
- Reduced Equity Advisor $$, enhanced Research $$
- CT issues addressed by Fellows, Workshops

External Evaluators, May 2007 & March 2009

Recommendations:
- Meet with all STEM deans
- Equity Advisors & ADV Profs should be a primary group
- Redefine Team roles
- Team should commit to team building
- Disseminate CT results campus-wide

Actions:
- Internal Advisory Board formed
- EA/AP group formed
- Occurred through Year 2
- Team worked with consultant during Year 2
- Dissemination is ongoing
Evaluation Synthesis

• Began working with staff from Provost’s office
• Review of what we have done
• Plans for synthesizing our progress into an evaluation framework
• Preparation for additional evaluation to assess impact of the program
Challenges: Provide Stimulus for Change

- ISU ADVANCE Scholar Program
- Current Economic Climate
- ISU ADVANCE Toolkit
- Indicators of Recruitment and Retention
ISU ADVANCE Scholar Program

• Focuses on women faculty of color in STEM fields  
  (see section 5 in your notebook)

• Building program capacity

• Additional investment and plans for 2009-2010:
  – Graduate research assistant
  – Campus presentation on faculty mentoring
ISU ADVANCE Scholar Program

Faculty Recruitment

- Meetings with deans and department chairs of ISU colleges with STEM disciplines
- New faculty member in STEM department will participate
- Collaborations to foster sustainability potentials.
Sustainability Challenges

Current Economic Climate:

- Decreased state funding for public universities and colleges
- College commitments to fund EAs for three years following grant
- Implementation of bottom-up changes (e.g., modified duties policy)
- Key incentive: NSF expectations for Broader Impacts of funded research
ADVANCE Toolkit: development, dissemination and sustainability

• “Toolkit” has evolved into a comprehensive collection of resources:
  – CT reports and recommendations
  – Readers Theatre scripts and productions using ISU faculty
  – Faculty Fellow activities sponsored by Provost:
    • Recruitment resources (CD, workshops, Web site)
    • Faculty flexibility resources (handbook)
    • Associate to Full (coming in 2009-10)
• Dissemination and sustainability:
  – Equity Advisors (partnerships with Colleges)
Indicators of Recruitment and Retention

Indicators of Recruitment and Retention

Percentage of tenured and tenure-eligible faculty who are women has not increased in recent years.
Indicators of Recruitment and Retention

- Recruitment data are encouraging
- History of variation
- ISU ADVANCE activities began 2007
- Recruitment resources used in 2008

Hires per year:
- ISU: 50-100
- STEM: 30-50
Indicators of Recruitment and Retention

- Major focus is on CT work in departments — the “bottom-up” portion of our program
- Opportunity for lasting changes in departmental and institutional culture
The Future: Top Down and Bottom Up

- **Top down:**
  - Commitment of President, Provost, VPs and Deans

- **Bottom up:**
  - Engagement of growing body of faculty and chairs who embrace ADVANCE goals

- **Equity Advisors:**
  - Key link that will continue implementation and innovation

---

**Top Down**
- Policy Changes
- Conference on Flexible Careers
- Faculty Satisfaction Survey
- Search Strategy Resources

**Bottom Up**
- College-level Coordination
- Campus wide Workshops
- Chairs’ Workshops

**ISU ADVANCE**
Iowa State University
Discussion