Leadership: Competency Assessment with a Focus on Advancement of Women in Medicine

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Leadership: Competency Assessment with a Focus on Advancement of Women in Medicine

- Delineate issues related to gender discrepancies in academic medicine leadership
- Identify gaps in personal leadership competencies
- Gauge participant innovation levels and demonstrate ‘inside-the-box’ method of systematic innovation
- Develop an action plan to enhance leadership skills while using an innovation technique presented to solve a problem or create a breakthrough

Leadership

- The underrepresentation of women in leadership positions in industry and medicine continues even though the proportion of women in the workplace has increased.

- Recruitment, mentorship and advancement within academic medicine is challenging.

- The literature suggests that women may experience a number of gender-related individual challenges that impact their promotion and path to leadership, including gender differences in approaches to career and life goals.
1st National Women Physicians Day 2016

“If society will not admit of women’s free development, then society must be remodeled.”
-Elizabeth Blackwell, MD

Born February 3, 1821

First woman to receive a medical degree in America at Geneva Medical College (now known as Hobart and William Smith Colleges).

Leadership

I. Gender Discrepancies

II. Personal Leadership Competencies

III. Innovation Levels / ‘Inside-the-Box’

IV. Action Plan
Leadership

I. Gender Discrepancies

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The State of Women in Academic Medicine: The Pipeline and Pathways to Leadership, 2015-2016

METHODS:

• The Women in Medicine and Science (WIMS) Benchmarking Survey was distributed via email to the Group on Women in Medicine and Science (GWIMS) Designated Representatives and Faculty Roster Representatives at U.S. medical schools fully accredited by the Liaison Committee on Medical Education (LCME).

• Members had six weeks to complete the survey, and GWIMS Designated Representatives were encouraged to partner with Faculty Roster Representatives at their schools to complete the survey.

• This report primarily features information from the WIMS Survey with nonrespondent school data provided from the AAMC’s Faculty Roster.

The State of Women in Academic Medicine

<table>
<thead>
<tr>
<th>Students</th>
<th>Residents</th>
<th>Full Time Faculty</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
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</table>

<table>
<thead>
<tr>
<th>Full Professors</th>
<th>Tenured Professors</th>
<th>Division Chiefs</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Department Chairs</th>
<th>Senior Associate Vice Deans</th>
<th>Deans</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
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</tbody>
</table>

Comparison of Women in Leadership

<table>
<thead>
<tr>
<th>Position</th>
<th>2015-16</th>
<th>2008-09</th>
<th>2003-04</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dean</td>
<td>16.9%</td>
<td>33%</td>
<td>39%</td>
</tr>
<tr>
<td>Senior/Vice Dean</td>
<td>10%</td>
<td>24%</td>
<td>30%</td>
</tr>
<tr>
<td>Associate Dean</td>
<td></td>
<td>39%</td>
<td></td>
</tr>
<tr>
<td>Department Chair</td>
<td>15.8%</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>


Current: Family Medicine Program Directors

(Counted by Dr. Palmer from ACGME Website)

- Men: 31%
- Women: 66%
- Unable to Determine by Name: 3%

Counted by Dr. Palmer: Source [www.acgme.org](https://www.acgme.org) February 5, 2016
https://apps.acgme.org/ads/Public/Reports/ReportRun?ReportId=1&CurrentYear=2015&SpecialtyId=14&IncludePreAccreditation=false
Bias


- Women physicians who submit R01 proposals to NIH are significantly less likely than men to be funded (Ley & Hamilton Science, 2008)

- Letters of recommendation for women med school faculty are shorter, have more references to personal life, and contain fewer “outstanding” descriptors
  - (Trix & Psenka, Discourse & Soc, 2003)

- When the gender of the author is known, women are less likely to have their publications accepted (Budden et al, Trends Ecol Evol, 2008)

- Goldberg” designs indicate that work performed by women rated of lower quality than the work performed by men regardless of gender of rater
  - (Isaac et al, Acad Med 2009)

Stereotypes

AGENTIC

- Competitive
- Ambitious
- Independent
- Willing to take risks

COMMUNAL

- Nurturing
- Gentle
- Supportive
- Sympathetic
- Dependent

Multiple authors over 30 years: e.g. Eagly, Heilman, Bem, Broverman
Stereotypes

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Multiple authors over 30 years: e.g. Eagly, Heilman, Bem, Broverman

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**Perceived Challenges in Leadership Positions**

**Women IN Leadership Positions**
- Gender bias (24%)
- Political infighting (35%)

**Women NOT in Leadership Positions**
- Gender bias (40%)
- Political infighting (55%)

**Stereotypes in Medicine**

**AGENTIC**
- Surgery
- Orthopedics
- Urology

Higher Status: Procedures, higher rank, tenure

**COMMUNAL**
- Pediatrics
- Family Medicine
- Primary Care IM

Lower Status: Service, lower rank, non-tenured


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**Top Factors in Attaining Leadership Positions**

Women **IN** Leadership Positions
- excelling at their jobs (72%)

Women **NOT** in Leadership Positions
- building alliances with others (60%)
- support of peers (54%)
- mentors (50%)

Leadership

I. Gender Discrepancies

II. Personal Leadership Competencies

III. Innovation Levels / ‘Inside-the-Box’

IV. Action Plan

Survey: Women as Physician Leaders

Method:

• 3285 female physicians across all specialties
• Query participation and interest in leadership positions

Representation at the Top

DEFINITION

• women = leaders
  held one or more positions of leadership in main practice setting, a professional organization, or an academic department


Poll Question 1

How important is it that women attain a leadership position?

A. Very important
B. Somewhat important
C. Neutral
D. Not very important
E. Not important at all
Poll Question 2
How important is attaining a leadership position for you personally?

A. Very important
B. Somewhat important
C. Neutral
D. Not very important
E. Not important at all
Survey: Women as Physician Leaders

2. How important is attaining a leadership position for you personally?

<table>
<thead>
<tr>
<th>Importance</th>
<th>Non-Leaders</th>
<th>LEADERS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Very</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Somewhat</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Neutral</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Not Very</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Not At All</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>


Poll Question 3

How would you describe your current work-life balance?

A. Work gets in the way of personal life
B. Balanced
C. Personal life gets in the way of work
Survey: Women as Physician Leaders

3. How would you describe your current work-life balance?

- Personal life gets in way
- Balanced
- Work get in way


EXERCISE: Leadership
Exercise: Leadership Competencies

- Competence
- Character
- Vision
- Communication
- Commitment

- Cohesion
- Decision Making
- Action Taking
- Resilience
- Renewal


Leadership

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SYSTEMATIC INVENTIVE THINKING

GAUGE INNOVATIVE THINKING
WHERE ARE YOU?
EXERCISE: Innovation

INNOVATOR QUIZ
Are YOU an Innovator?
Place a check mark beside the statement you agree with most.

1. ☐ A. Innovation occurs by adding features to a product.
   ☑ B. Innovation occurs by taking features out of a product.

2. ☐ A. Innovation is finding problems that are solved by hypothetical solutions.
   ☑ B. Innovation is finding solutions to difficult problems.

3. ☐ A. I am more likely to innovate when I work alone.
   ☑ B. I am more likely to innovate when I work in a group.

4. ☐ A. Innovation is more about creating novel ideas.
   ☑ B. Innovation is more about selecting the best ideas.

5. ☐ A. When I innovate, I "brainstorm" ideas out of my head.
   ☑ B. When I innovate, I follow a series of steps to find ideas.

6. ☐ A. Innovating is predictable and not risky.
   ☑ B. Innovating is unpredictable and risky.

7. ☐ A. The ability to innovate is a gift that you are born with.
   ☑ B. The ability to innovate is a skill that you can learn.

8. ☐ A. I prefer ambiguity when pondering new ideas.
   ☑ B. I prefer clarity when pondering new ideas.

9. ☐ A. The Post-It Note is a good example of innovation because it was spontaneous.
   ☑ B. The Post-It Note is a bad example of innovation because it was spontaneous.

10. ☐ A. I feel responsible for innovating new ideas.
    ☑ B. I feel others are responsible for innovating new ideas.

11. ☐ A. Innovating is a random, improvisational, back-and-forth experience.
    ☑ B. Innovating is a systematic, linear experience.

12. ☐ A. Constraints on resources like time and money drive innovation.
    ☑ B. Constraints on resources like time and money inhibit innovation.

13. ☐ A. Homogeneous groups are more likely to innovate.
    ☑ B. Diverse groups are more likely to innovate.

14. ☐ A. Innovation can be scheduled. It can occur anytime I want.
    ☑ B. Innovation cannot be scheduled. It occurs randomly.

15. ☐ A. Innovation is an unstructured process.
    ☑ B. Innovation is a patterned, "templated" process.
Scoring the *Are YOU an Innovator?* QUIZ

- For odd numbered questions, give yourself one point for each “B” statement.
- For even numbered questions, give yourself one point for each “A” statement.

**How do you rate?**

<table>
<thead>
<tr>
<th>POINTS</th>
<th>Guideline</th>
</tr>
</thead>
<tbody>
<tr>
<td>11 to 15</td>
<td>Consider yourself an innovator</td>
</tr>
<tr>
<td>6 to 10</td>
<td>Innovating is a mixed bag for you, but you may be headed in the right direction</td>
</tr>
<tr>
<td>0 to 5</td>
<td>Consider formal training</td>
</tr>
</tbody>
</table>

EXERCISE: Thinking
NINE DOT PUZZLE

Connect all nine dots using 4 straight lines without lifting your pen off the paper

JP Guilford, psychologist 1970's
NINE DOT PUZZLE
NINE DOT PUZZLE

“Thinking outside the box”

J. P. Guilford, as referenced in Inside the Box: A Proven System of Creativity for Breakthrough Results

NINE DOT PUZZLE

What percentage of people solve the puzzle and are thus, *creative*?

Given same instructions as you were given
NINE DOT PUZZLE
What percentage of people solve the puzzle and are thus, creative?

Given same instructions as you were given

• 20%

NINE DOT PUZZLE
What percentage of people solve the puzzle and are thus, creative?

Given same instructions as you were given

• 20%

Given explicit instructions to think outside the box

• 25%
• Burnham/Davis & Alba/Weisberg
• Additional 5% not statistically significant
• Thinking outside the box and creativity = myth
Systematic Inventive Thinking

WHAT IS SYSTEMATIC INVENTIVE THINKING ?

- Innovating methodically
- A practical approach to creativity, innovation and problem solving
- Using patterns, templates and tools in creative thinking
BENEFITS OF SYSTEMATIC INVENTIVE THINKING

➢ Provides a framework for creative thought, innovation, problem solving
➢ Simplifies and organizes thought processes
➢ Provides techniques to “prime the pump”, fight closed mindedness, provide new perspectives, escape functional fixedness
➢ Helps to engage participants

Examples
Systematic Inventive Thinking

➢ Inside the Box
➢ Lateral Thinking
Inside the Box: A Proven Strategy of Creativity for Breakthrough Results
Drew Boyd and Jacob Goldenberg, NY: Simon & Schuster 2013

Thinking Inside the Box

5 Techniques

1. Subtraction
2. Division
3. Multiplication
4. Task Unification
5. Attribute Dependency
1. Subtraction – removing a component

2. Division – take a component and rearrange its function, take a component and change it physically, or divide the component into smaller pieces retaining function

3. Multiplication – create a copy of one of the components, change the multiplied component in some way

4. Task Unification – take an existing feature and give it additional responsibilities

5. Attribute Dependency – correlate a selected attribute with one another

---

How does it work?

Subtraction

i. Identify the outcome, goal or product

ii. list the components

iii. remove an essential component

iv. Visualize result

v. Ask could this be valuable? Feasible?
### Thinking Inside the Box

<table>
<thead>
<tr>
<th>Techniques</th>
<th>Samples</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1. Subtraction</strong> – removing a component</td>
<td>No frills airlines, ear buds, dry erase markers</td>
</tr>
<tr>
<td><strong>2. Division</strong> – take a component and rearrange its function, take a component and change it physically, or divide the product into smaller pieces retaining function</td>
<td>Printers with individual color ink cartridges</td>
</tr>
<tr>
<td><strong>3. Multiplication</strong> – create a copy of one of the components, change the multiplied component in some way</td>
<td>Picture-in- picture TV</td>
</tr>
<tr>
<td><strong>4. Task Unification</strong> – take an existing feature and give it additional responsibilities</td>
<td>Moisturizers with sunscreen, ads on buses</td>
</tr>
<tr>
<td><strong>5. Attribute Dependency</strong> – correlate attributes with one another</td>
<td>Headlights that dim automatically, eyeglasses that darken outdoors</td>
</tr>
</tbody>
</table>
Thinking Inside the Box

5 Techniques

The Components:
- Faculty Core
- Residents Core
- Staff Core
- Clinic Core
- Faculty Rural
- Residents Rural
- Staff Rural
- Clinic Rural
- Hospital (Rural) Administration
- Curriculum

<table>
<thead>
<tr>
<th>Techniques</th>
<th>Samples</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Subtraction – removing a component</td>
<td></td>
</tr>
<tr>
<td>2. Division – take a component and rearrange its function, take a component and change it physically, or divide the product into smaller pieces retaining function</td>
<td></td>
</tr>
<tr>
<td>3. Multiplication – create a copy of one of the components, change the multiplied component in some way</td>
<td>Advanced Life Support in OB (ALSO): Copied curriculum for rural community adding paramedics to docs, nurses and then multiplied safety portion to combine with TeamSTEPPS</td>
</tr>
<tr>
<td>4. Task Unification – take an existing feature and give it additional responsibilities</td>
<td></td>
</tr>
<tr>
<td>5. Attribute Dependency – correlate attributes with one another</td>
<td></td>
</tr>
</tbody>
</table>
LATERAL THINKING

*Six Thinking Hats*

Viewing a problem from different perspectives depending on which “hat” you’re wearing

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**Lateral Thinking**

<table>
<thead>
<tr>
<th><strong>WHITE HAT</strong></th>
<th><strong>BLACK HAT</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Thinking</strong></td>
<td><strong>Thinking</strong></td>
</tr>
<tr>
<td>Neutral and objective</td>
<td>Gloomy and negative</td>
</tr>
<tr>
<td>Concerned with facts and figures</td>
<td></td>
</tr>
<tr>
<td><strong>Encourages</strong></td>
<td><strong>Allows</strong></td>
</tr>
<tr>
<td>Thinker to separate clearly what is fact and what is extrapolation or interpretation</td>
<td>Problem to be pointed out for comments about why it will not work</td>
</tr>
</tbody>
</table>

### Lateral Thinking

<table>
<thead>
<tr>
<th>RED HAT</th>
<th>YELLOW HAT</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Thinking</strong></td>
<td><strong>Thinking</strong></td>
</tr>
<tr>
<td>Anger, rage, emotions</td>
<td>Sunny and positive</td>
</tr>
<tr>
<td>Emotional view</td>
<td>Focuses on</td>
</tr>
<tr>
<td><strong>Gives</strong></td>
<td>optimism, benefits</td>
</tr>
<tr>
<td>Official permission for expression of feelings to range from pure emotions to hunches</td>
<td>Listing of positive points which may not be obvious at first</td>
</tr>
<tr>
<td>Freedom not to justify or explain feelings</td>
<td>Constructive thinking and trying to make things happen</td>
</tr>
</tbody>
</table>

**GREEN HAT**

- **Thinking**
  - Abundant, fertile growth
  - Creativity, new ideas
- **Creates**
  - Alternatives, change, new approaches to problems

**BLUE HAT**

- **Thinking**
  - Cool, sky color, above everything else
  - Control and organization of the thinking process
- **Organizes**
  - The ‘use’ of other hats
  - Other aspects of thinking such as the assessment of priorities, listing of constraints
OBSTACLE

Physicians ↔ Hospital Administration
OBSTACLE

Physicians ↔ Hospital Administration

Negatives:
- Push back
- Not fast enough
- Conflict

Focus on Big Picture:
- Residency

Gather Information:
- Money flow
- Finances

New Ideas:
- Patient Safety

OBSTACLE

Physicians ↔ Hospital Administration

Negatives:
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Physicians ↔ Hospital Administration

**Negatives:**
- Push back
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- Conflict

**Gut Feelings:**
- Frustration
- Left out
- Up and down

**Way Forward:**
- education through
- ALSO + residency

**Gather Information:**
- Money flow
- Finances
OBSTACLE

Physicians ↔ Hospital Administration

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New Ideas:
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Focus on Big Picture:
- Residency

Focus on Big Picture:
- Residency

Gather Information:
- Money flow
- Finances

New Ideas:
- ALSO
- Patient Safety

Way Forward:
- education through ALSO + residency
EXERCISE

THINKING

EXERCISE: Tools

Your Activity

Thinking Inside the Box

• Identify a new project, goal, outcome or product
• Enter the components and attributes of the project
• Select one of the five techniques to apply to the new project
• Capture new ideas discovered
• List the benefits
• Implement / document results

Choose a Technique

• 5 Techniques
  • Subtraction
  • Division
  • Multiplication
  • Task unification
  • Attribute dependency
• Six Thinking Hats
Leadership

I. Gender Discrepancies

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Bias

- Bias training
  - significantly changed all faculty members’ perceptions of bias
  - had a small but significant positive effect on the implicit biases surrounding women and leadership of all participants regardless of age or gender

- Male gender and age were significantly associated with greater implicit bias associating leadership with men more than women

http://journals.lww.com/academicmedicine/Abstract/publishahead/Reducing_Implicit_Gender_Leadership_Bias_in.98579.aspx
Leadership Tools and Programs

**Tool Kit:**
Leadership Architect Suite. Lominger Ltd. [www.lominger.com](http://www.lominger.com)

**Programs:**
National Institute of Program Director Development (NIPDD) [www.afmrd.org](http://www.afmrd.org)
Association of American Medical Colleges: Early and Mid-Career Women Faculty Professional Development Seminar

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**EXERCISE: Action Plan**

1. 
2. 
3.
Poll Question:

Enter your email address to be included in any follow-up communication from the presenter(s).
Leadership: Competency Assessment with a Focus on Advancement of Women in Medicine

Thank you
Elissa J Palmer MD FAAFP
elissa.palmer@unlv.edu

Please…

Complete the session evaluation.

Thank you.