The NAVIGATE Project – A Case-Study Approach to Overcoming Barriers to Advancement for Women in STEM

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Introduction to The NAVIGATE Project

• Women continue to encounter bias in STEM which deters them from achieving their career objectives.
• The NAVIGATE Project aims to help women to persist and move past gender-based barriers.
• NAVIGATE utilizes the case study method for training women graduate students to recognize and navigate complex gender issues in STEM disciplines.
• Training materials are freely available for anyone to use.
Case Studies

The NAVIGATE Project case studies were created as part of an NSF-funded project to develop a training program to help female STEM graduate students recognize—and devise strategies for dealing with—gender-based inequity, bias, and discrimination in the workplace.

A key component of The NAVIGATE Project is the development of a series of case studies with female STEM protagonists which promote strategic thinking, problem solving, and decision making around these issues. All of the cases are based on the real experiences of women in the workplace, with names, places, and, in some cases, certain details changed to maintain confidentiality.
See handout for Case Background, Case Scenario, and Key Concepts & Terms
Familiarize yourself with the case by reading it through twice.

Hint: Use close reading skills and highlight parts of the text that you think are particularly interesting.
Break into small groups & choose a new group facilitator to report out on your discussion.

(a) Perform a SWOT analysis of Brenna’s situation.

<table>
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<th><strong>Strengths:</strong> characteristics that provide an advantage over others.</th>
<th><strong>Weaknesses:</strong> characteristics that place you at a disadvantage relative to others.</th>
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<th><strong>Opportunities:</strong> elements in the environment that you could exploit to your advantage.</th>
<th><strong>Threats:</strong> elements in the environment that could cause trouble for you.</th>
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Decision Trees for Problem Solving Issues of Bias, Inequity, or Discrimination

A decision tree is a planning tool that uses a tree-like model of decisions and their possible consequences, including capturing different possible outcomes, costs, and usefulness. Decision trees are commonly used to help identify a strategy most likely to reach a goal. They are pretty simple to understand and interpret, and can be useful in ambiguous situations. An example is provided below:

Disturbing Event Occurs

- Discuss with trusted colleagues / peers
  - Not likely bias
    - Attempt to resolve directly with other party
      - Likely bias
        - Direct approach
          - Heard / engage in problem solving
            - Implement plan
              - Plan works
                - Goodness!
          - Escalate
            - Seek input / help from more senior person within org.
              - Ignored / dismissed
                - Plan doesn’t work
                  - Org. broken?
                    - Consider new position / organization.
            - Seek input / help from yet more senior person within org.
              - Ignored / dismissed
                - Plan works
                  - Goodness!
    - Heard / engage in problem solving
      - Ignored / dismissed
        - Plan works
          - Goodness!
      - Plan doesn’t work
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  - Likely bias
    - Direct approach
      - Heard / engage in problem solving
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          - Plan works
            - Goodness!
          - Plan doesn’t work
            - Org. broken?
              - Consider new position / organization.
Work in pairs to role play a conversation between Brenna and her committee in which Brenna’s dilemma is clearly articulated and possible solutions are proposed.
Wrap-up questions

1. **Work-life balance** – What particular choices does Brenna make in her life and in her work that are perhaps negatively impacting her path to promotion? How might she effectively mitigate against some of the negative impacts going forward?

2. **Communicating your impacts** – What do you think was effective or ineffective in Brenna’s efforts to advocate for herself to the promotion mentoring committee?

3. **Working smarter, not harder** – What particular risks does Brenna face in the coming years as she tries to prepare herself for promotion, now that she has received negative feedback from the promotion mentoring committee?

4. **Managing conflict** – How can Brenna productively respond to senior faculty like Mary and still make sure she is moving forward in her career?

5. **Organizing with other women across difference** - How might Brenna address the possible generational differences in thought and approach within her department as she moves forward in her career?

6. **Strategic planning and problem solving** – How does performing a SWOT analysis help with figuring out a strategy?
Authorship: The Brenna McGee case was developed first in 2018 by Dr. Laurene Tumiel-Berhalter, Associate Professor of Family Medicine and Director of Community Translational Research, Jacobs School of Medicine & Biomedical Sciences, University at Buffalo, as part of The NAVIGATE Project with support from the National Science Foundation Research Traineeship program. Dr. Liesl Folks and Nancy Schiller, University at Buffalo, provided invaluable input on case structure and edited the case for content and clarity. Further reviews and edits were contributed by Dr. Glenna Bett, University at Buffalo, and Dr. Coleen Carrigan, California Polytechnic.

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NAVIGATE seeks to help women understand that there are often many ways to strategically navigate bias in complex STEM workplaces without being derailed from their career goals.

- This in no way **excuses** bias or hostile workplace behaviors.
- This in no way **removes the responsibility of the institution** to address biased or hostile behaviors.
The NAVIGATE Project offers 10 case studies to be utilized with STEM women graduate students or early career professionals seeking to develop an understanding of, and strategic tools to address, gender-based bias that might impact their career trajectories.

- For more information, see;
  - Online and downloads are here: [https://www.buffalo.edu/navigate-project.html](https://www.buffalo.edu/navigate-project.html)
- **Anyone** can facilitate the cases – detailed teaching guides are provided.
- Each is timed for deliver in a 1 hour, 45 minute session.
- We welcome your feedback!