



Problem Framing as a Teachable Skill: A Practical Approach to Teaching Leadership Communication

Dr. Kathryn A. Neeley, University of Virginia

Kathryn A. Neeley is Associate Professor of Science, Technology, and Society in the Department of Engineering and Society in the School of Engineering and Applied Science. She holds B.A., M.A., and PhD degrees in English from the University of Virginia and is a past chair of the Liberal Education/Engineering and Society Division of ASEE. In addition to undergraduate and graduate teaching of written and oral communication. Dr. Neeley has conducted research and published on various aspects of communication in sociotechnical systems, including the use of sentence-headline design for PowerPoint slides.

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In the preface to the 2011 edition of *Leading Minds: An Anatomy of Leadership* (1995/2011), Howard Gardner notes “the explosion of interest in the topic of leadership” (p. xv) that occurred between the two editions of the book.⁴ The Engineering Leadership Constituent Committee within ASEE is but one of many manifestations of this explosion of interest. In virtually all formulations of leadership competencies, including Gardner’s, communication is identified as a fundamental leadership skill, and indeed both anecdote and empirical studies support such a claim. What is much less clear, however, are the specific, teachable skills that comprise leadership communication.

This paper argues that problem framing is one specific, teachable skill that is useful for, though certainly not limited in its usefulness to, leadership. Framing is a widely recognized though somewhat nebulous concept. In *The Art of Framing* (1996), Fairhurst and Sarr define framing as “the ability to shape the meaning of a subject. . . .When we share our frames with others (the process of framing) . . .we assert that our interpretations should be taken as real over other possible interpretations” (p. 3).³ By extension, this notion of framing implies that leaders are the individuals whose problem frames are most compelling to the relevant stakeholders.

In science and engineering, where facts are presumed to play a central role, framing can seem an alien and suspect process. Writing in *Science*, Nisbet and Mooney (2007)⁹ articulate a common perception of the way scientists think about controversial issues: “Many scientists retain the well-intentioned belief that, if laypeople better understood technical complexities from news coverage, their viewpoints would become more like scientists,’ and controversy would subside” (p. 56). They argue that “scientists must learn to actively ‘frame’ information to make it relevant to different audiences” (p. 56) Nisbet and Mooney identify three fundamental functions of frames:

1. Organizing: “central ideas, defining a controversy to resonate with core values and assumptions,”
2. Paring down: “complex issues by giving some aspects greater emphasis,”
3. Efficiently orienting readers by identifying: “why an issue matters, who might be responsible, and what should be done” (p. 56).

Morrone, Basta, and Somerville (2012 quoting Fletcher, 2009)⁷ describe the framing process this way: “how social actors use language—inclusive of rhetoric, metaphors, and storylines—to mobilise key stakeholders, attempt to build a broad public consensus around a course of action, and focus sustained media attention on a specific issue” (p. 147).

From a pedagogical perspective, framing is both powerful and difficult to teach: powerful because it is broadly applicable and difficult because it is so abstract. Alternative framings of issues are perhaps most visible in media coverage of controversial topics such as climate change, nuclear power, evolution, and stem cell research. The table below draws on several sources to synthesize a sampling of alternative frames for these topics.

Issue	Frames
Climate change	<ul style="list-style-type: none"> • Scientific uncertainty • Unfair economic burden • Pandora’s box of catastrophe • Religious morality • Political wrongdoing
Nuclear power	<ul style="list-style-type: none"> • National defense • Energy infrastructure • Threat to the environment • Solution to climate change • An economic interest
Evolution	<ul style="list-style-type: none"> • Indisputable scientific theory • Religious beliefs (“intelligent design”) • Scientific uncertainty • “Teach the controversy” • Building block for medical advances • Misuse of tax dollars
Stem cell research	<ul style="list-style-type: none"> • Social progress (hope for millions of Americans) • Economic competitiveness/business potential • Moral implications (“playing God” and destroying human life)

Drawn from Morrone, Basta, and Somerville (2012)⁷, Nisbet and Mooney (2007)⁹, Matthes (2009)⁶, and Gavin (2009)⁵.

Problem framing is central to the process of problem definition in engineering. The approach of mechanical engineer Amy Smith, winner of a 2004 MacArthur *Genius Award* frames invention not as increasingly sophistication and complexity technology aimed at economic gain, but rather as simple designs that solve real problems and save lives.

A practical approach to teaching problem framing that I have used successfully with undergraduate engineering students is the *Grounds for Argument* online tutorials (www.groundsforargument.org/drupal) developed by Greg Colomb *et al.* In these tutorials, a problem frame has three elements:

1. **Common ground**, that is, facts that are established and relevant but will be news to most members of the audience. Often, the challenge in establishing common ground is selecting from what is usually called “background information,” the specifics that will locate the problem in a meaningful and recognizable context. It may include assumptions or articulate shared values and beliefs (also called “warrants”) that the intended audience is likely to share.

2. **The problem**, which consists of a **destabilizing condition** whose **costs and consequences** provide a motivation for attention and action. Again, there are usually several destabilizing conditions in a given context, which means that the framer of problems must choose from among various possibilities the condition whose costs and consequences are most salient to the audience and lead logically to action.
3. **A resolution** that has the potential to stabilize the situation and thus eliminate the unacceptable costs and consequences of leaving the situation in its current state. In some cases, the resolution will be a clearly defined course of action. In other cases, the resolution will be an improved understanding of the problem that can inform decision making.

This approach to problem framing provides a vocabulary for creating and critiquing problem frames and can be applied in virtually any disciplinary or professional context, including engineering. The online tutorials are available to anyone and may be adapted by teachers and others, provided they give appropriate credit and use the material in a non-profit context. They are not a substitute for classroom instruction but rather provide an adaptable intellectual and experiential foundation on which teachers of leadership communication can build.

An Example Problem Frame from a Textbook: *Leadership Theory and Practice* (2004)

In academic writing and most other non-fiction genres, an abbreviated version of the problem frame serves as the introduction to the work in question. The example below is drawn from the summary that appears at the end of the introductory chapter of Peter G. Northouse's *Leadership: Theory and Practice* (2004).¹⁰ Like many textbooks, this book assumes that the reader understands the importance of the subject, so there is minimal treatment of the costs and consequences associated with the destabilizing condition. The discussion does, however, define the problem Northouse purports that his book will solve.

Common Ground (relevant and established facts; assertions that audience is likely to accept; put problem in a recognizable context)

In the six years since the first edition of this book was published, the public's fascination with leadership has grown exponentially. Bookstores have been flooded with books about about leaders. People are captivated by the idea of leadership, and they seek more information on how to become effective leaders. . . . [specific examples of the motivations of individuals, corporations, and academic institutions] Generally, leadership is a highly sought after and highly valued commodity (p. 1).

Destabilizing Condition (circumstance that calls for action and attention)

In addition to popular books, there are also many publications about leadership in the research literature. A review of the scholarly studies on leadership shows that there is a wide variety of different theoretical approaches to explain the complexities of the leadership process (e.g., Bass 1990; Bryman, 1992; Gardner, 1990; Hickman, 1998; Rost, 1991) [details on various conceptual and research approaches to leadership] Collectively, the research findings on

leadership from all of these areas provide a picture of a process that is far more sophisticated and complex than the often simplistic view presented in some of the textbooks on leadership (p. 1).

Resolution (approach that will stabilize and improve the situation)

The present book will treat leadership as a complex process having multiple dimensions. Based on the research literature, this text will provide an in-depth description and application of many different approaches to leadership. The emphasis in the text will be on how theory can inform the practice of leadership. In the book, we will describe each theory and explain how the theory can be used in real situations (p. 2)

Schematically, this problem frame might be represented like this:

Interest in leadership is increasing → Approaches to leadership tend to oversimplify → Describing the diversity of approaches to leadership and what they mean *in practice* is a better way to teach leadership because it illuminates the complexity

Leadership communication could also be framed as the “engineering of consent” (Bernays)¹, as forging “the connective tissues of society” and the “first condition of social cohesion” (Yeager and Utterbach)¹¹, as storytelling (Denning)², or as “valuing relationships over transactions” (Nair).⁸ Each of these framings implies a different mental model and requires different kinds of evidence.

Strategies for Teaching Framing as a Resource for Leaders

Once we recognize the value of problem framing (and reframing) as a resource for leaders, there is still the need to figure out how to take advantage of it in instruction. The following is a general outline of how this might be done.

1. Have students work through the tutorials on problem frames, which use examples from popular culture and academic writing in various disciplines.
2. Choose positive examples from the domain in which learners are likely to engage in leadership communication. (TED talks provide a diverse set of examples of reframing that would be useful in a leadership context.)
3. Identify negative examples that illustrate the flaws of and limitations to common ways of framing issues, focusing on the conceptual and practical roadblocks these commonly used frames present and indicating how and why they impede the resolution of the problem.
4. Draw the learners’ attention to the range of alternatives for establishing common ground and specifying the destabilizing condition.
5. Demonstrate the ways that expanding one’s knowledge base through research and observation can provide a larger body of evidence of the costs and consequences of the destabilizing condition and identify the details that will be most likely to resonate with a given audience.
6. Illustrate the ways in which assumptions, shared beliefs, symbolic meaning, and emotional appeals can strengthen a reframed understanding of the problem.

Conclusion

The idea that online resources can teach learners to communicate effectively has been a persistent fantasy among teachers of communication even before such resources became a viable option. As mentioned at the outset, it would be a mistake to imagine that the Grounds for Argument tutorials are a stand-alone method of teaching leadership communication. The effectiveness of the tutorials derives at least as much from a large body of scholarship on problem framing and a well design pedagogical approach as from the fact that the tutorials are available online. The principles and techniques of problem framing must be **taught** and cannot be mastered by students on their own. The investment required from instructors is large, but the payoff is even larger. Perhaps more importantly, the approach used in the tutorials makes the analysis, production, and teaching of communication more interesting and more connected to the substance that is being communicated.

Bibliographic Information

1. Bernays, E. (1947). The Engineering of Consent. *Annals of the American Academy of Political and Social Science*, Vol.250, No. 1, *Communication and Social Action*, pp.113-120.
2. Denning, S. (2007). *The Leader's Guide to Storytelling*. New York: Bantam)
3. Fairhurst, Gail Theus and Farr, Robert A. *The Art of Framing: Managing the Language of Leadership*. (Bloomington, IN: Jossey-Bass).
4. Gardner, Howard. (2011). Preface to *Leading Minds: An Anatomy of Leadership*. (N.Y.: Basic Books). Originally published in 1995.
5. Gavin, N.T. (2009). Addressing climate change: A media perspective. *Environmental Politics*, Vol. 18, No. 5, pp. 765-780.
6. Matthes, J. (2009). What's in a frame? A content analysis of media framing studies in the world's leading communication journals, 1990-2005. *Journalism and Mass Communication Quarterly*, Vol. 86, No. 2, pp. 349-367.
7. Morrone, M., Basta, T. B., and Somerville, J. (2012). Framing the national nuclear legacy at the local level: Implications for the future of federal facilities. *Energy Policy*, Vol. 43, pp. 145-152.
8. Nair, C. P. K. (2013). Leadership communication to beat the odds. *Leader to Leader*, Fall 2013, pp. 12-17.
9. Nisbet, M. and Mooney, C. (2007). Framing science. *Science*, Vol. 316, p. 56.
10. Northouse, Peter G. (2004). *Leadership in Theory and Practice*, 3rd ed. (Thousand Oaks, CA: Sage Publications).
11. Yeager, W.H. and Utterback, W. E. (1947). Foreword. *Annals of the American Academy of Political and Social Science*, Vol.250, No. 1, *Communication and Social Action*, pp. vii-viii.