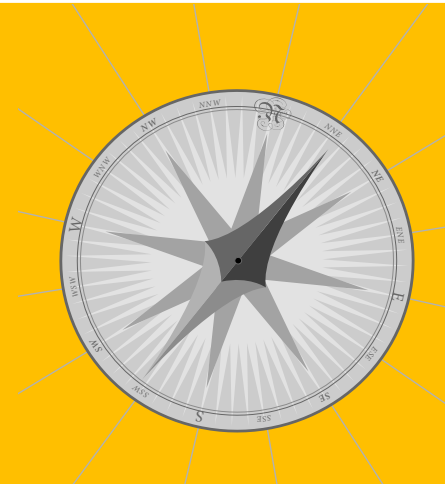


ICO



Charting a Meaningful Scholarly Career **2009 ICO Faculty Development Handbook**





THE INDEPENDENT COLLEGES OFFICE

June 2009

Friends:

For more than three decades, I have had the opportunity (and the great joy) to work with faculty responsible for the quality and character of learning of the undergraduates on their campus. My personal career trajectory began, part-time, in an office assigned to help people write competitive proposals to federal and private agencies.

The thrust of my career has evolved considerably, as many colleagues have helped me realize that “proposal writing” is only part of a larger agenda for institutions and individuals to “realize a future.” Thus, my reflections over the years have brought me to think more intentionally about the collective responsibility of an educational community to help faculty— as individuals and as members of departments and programs— shape their scholarly future.

The purpose of education is to bring us to some sense of citizenship— to some shared assumptions about individual freedoms and institutional needs, to some full sense of the full claims of self as they are to be shared with others. An ethically-based civic sense— nourished in an individual through education— leads to social action with a deeper purpose.

I keep returning to these words from A. Bartlett Giamatti (in *A Free and Ordered Space*). For me, they offer an important perspective about linking individual and institutional needs and priorities, and dreams for the future. They served in some small way as a catalyst for the development of this handbook.

If the liberally-educated person can be described as: *someone with a sure sense of self-based on his or her experiences, accomplishments, values, and communities; as one able to make connections between that self to the world in which he or she lives and works*, then we can see how such a person can creatively imagine a better future and intentionally commit to realizing that future.

This handbook is an ongoing attempt to organize ideas and materials in my head and on my shelves, including those captured and remembered from the wisdom and experience of many others. This handbook is a work-in-progress, so I invite your edits, comments, additions, and corrections. It hopefully leads to action with a deeper purpose for us all.

Cordially,

Jeanne L. Narum
Director

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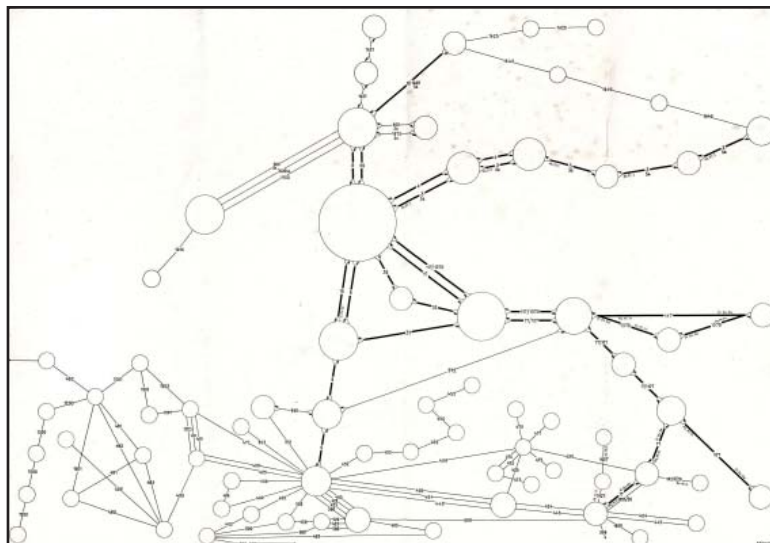
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Whether referred to as “grantsmanship” or “researchmanship,” the scholarship required for a successful research-grant application is as demanding as that for a lecture, a report for publication, or a textbook.

Preparation of a grant application is a scholarly endeavor that combines the values of a scientist and the skills of a scholar: dedication, enthusiasm, standards of excellence, intellectual honesty, ethicality, disciplined thinking, and clear writing.

— George Eaves, *Preparation of the Research Grant Application: NIH*. 1989.

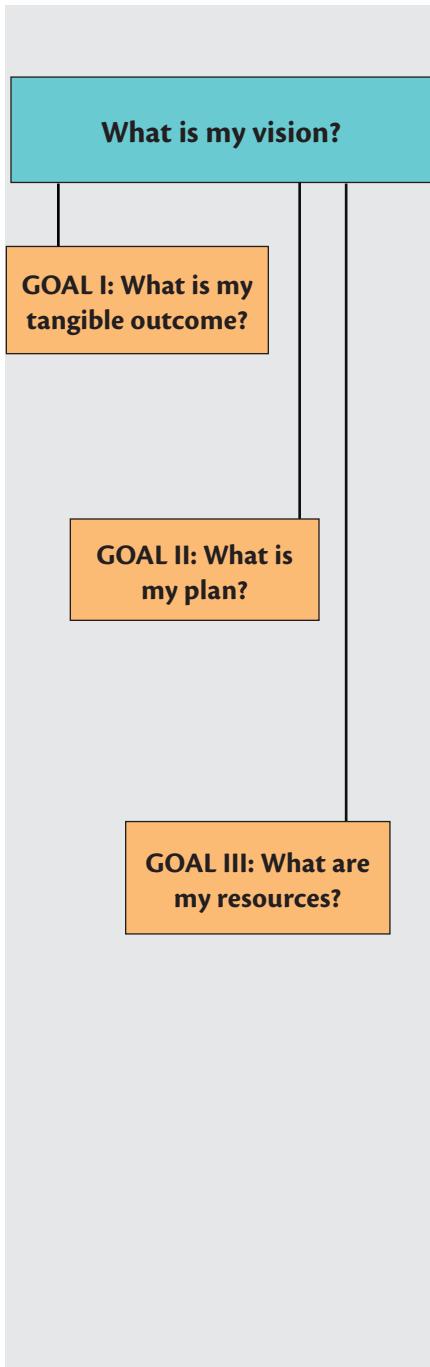


Part I: Starting with an audacious idea

VISION



BEGINNING WITH THE END IN MIND



Begin with an audacious idea about a “more desired future,” about some part of your world (your institutional, disciplinary or geographic community) that would be changed for the better if you could accomplish X,Y, & Z. This is the starting point for shaping the vision of your future.

For example:

Vision I: My vision is to elevate the participation and success of students from groups currently under-represented in my field, so that our community of practitioners reflects national demographics.

Vision II: Our vision is that our students, upon graduation, understand the importance of mathematics within the community of disciplines.

Next, consider possible outcomes that must be met if your vision is to be realized. This is the starting point for thinking about goals that serve your vision. For example:

- *Vision I*
 - *Goal A— develop a state-of-the-art undergraduate research program within a curriculum tailored to serve minority students from the urban community in which our campus is set.*
 - *Goal B— integrate programs serving minority students into regular programmatic efforts on our campus.*
- *Vision II*
 - *Goal A— have faculty across disciplines on our campus have a common understanding of the role mathematics plays in these disciplines.*
 - *Goal B— have a community of faculty creating, implementing, evaluating and modifying approaches to integrate mathematics into all departments.*

VISION



SHAPING A MEANINGFUL CAREER

Then, step back and consider what it will take to realize your vision and goals, in the context of shaping a meaningful career. Understand the critical questions that the community will be asking: “why you?,” “why now?,” “so what?”

Develop a parallel set of goals that will advance your efforts toward your vision of shaping a meaningful career.

- Goal: To be able to answer the “so what?” question by documenting that my work is relevant, competitive and will have an impact in my field.
- Goal: To be able to answer the questions “why me?” and “why now?” by documenting that I have the expertise, experience, connections and resources to undertake and complete the work.
- Goal: To have a clear and compelling articulation of my idea/vision that keeps my work focused and moving ahead.

Then, you are ready to develop further goals that will enable you to shape a meaningful career.

- Goal: To have a realistic plan of action.
- Goal: To have adequate resources.

What is it most of us really want from work? We would like to find the most effective, most productive, most rewarding way to work together. We would like to know that our work process uses all of the appropriate and pertinent resources: human, physical, financial.

We would like a work process and relationships that meet our personal needs for belonging, for contributing, for meaningful work, for the opportunity to make a commitment, for the opportunity to grow and be at least reasonably in control of our own destinies.

Finally, we’d like someone to say “Thank you!”

— Max De Pree, *Leadership is an Art*. Doubleday, 2004.

THE IDEA



ADDRESSING THE “SO WHAT” QUESTION

Virtually everything human beings have done or said provides food for thought; nothing human is alien to the thoughtful person. Yet not everything done or said is equally deserving of thought and study, let alone equally deserving of student at public expense. In the evaluation of proposals for research in the humanities submitted to NEH Division of Research Programs, questions of importance or significance necessarily arise, and answers to these questions—the “so what” questions—play a role in funding decisions.

To help evaluators assess these matters, applicants are asked to address the following: Why do you believe this work is important? What difference will the results make, and to whom?

— NEH Guidelines, from the Division of Research Programs (mid-1980’s).

What makes a good proposal? A good proposal stems from a good concept. Other things being equal, the better the project the more likely the proposal is to win an award. Proposers and their colleagues should first think through several iterations of the project. The best proposals are those to which the reviewer responds, “Of course. I wish I had thought of that!”

— NSF Guidelines, from the Division of Undergraduate Education (mid-1990’s).

The importance of an idea

Significant ideas do not come automatically in response to deadline; most scholars who succeed in securing external support take time to play around with an idea, to answer the “so what” question. Do this at odd hours, in walking between classes, in talking with students and colleagues, in mowing the lawn. Do this without forcing the idea into some arbitrary form for proposals. Try the idea “on for size.”

When we talk about revitalizing a society or an organization we tend to put exclusive emphasis on finding new ideas. But there is usually no shortage of new ideas; the problem is to get a hearing for them. And that means breaking through the crusty rigidity and stubborn complacency of the status quo.

— Gardner, John W. *Self-Renewal*. Harper & Row, 1964.

My audacious idea:

THE IDEA



THINKING THROUGH WHAT DIFFERENCE MY IDEA WILL MAKE

To:

my scholarly field? _____

my students? _____

my community (institutional, disciplinary, geographic)? _____

- I have serious reservations about the narrow focus and the narrow goals outlined in this proposal... This project will not have as broad an impact as others under consideration in this review cycle. Although I see much merit in this proposal, others made a more compelling case for funding at this time.]

 - How many people care about this? Compared to what? How do we ensure that this research informs great theories, and not just the reverse?
- Selected Reviewer Comments from Federal Grant Programs.

GOALS



SETTING CHALLENGING GOALS

[The transitions] to new types of civilization are only possible when thought has run ahead of realization. The vigor of the race has then pushed forward into the adventure of imagination, so then in due season arouses itself to their realization.

Indeed, all physical adventure which is entered upon with a set purpose involves adventure of thought in regard to things as yet unrealized.

A people preserves its vigor so long as it harbors a real contrast between what has been and what may be; and so long as it is nerved by the vigor to adventure beyond the safeties of the past. [Remember] the great achievements of the past, in their day, were the adventures of the past.

— Alfred North Whitehead, *The Adventure of Ideas*. Macmillan Company, 1933.

Goals precede all other considerations because to plan, carry out, and present any scholarly projects, a scholar must know what questions to ask. A master scholar is a master question-raiser— a designation that fits, almost by definition, anyone who can be called a “path breaker” in scholarly and creative work.

Scholarly work usually has multiple goals, making it crucial that the scholar define each goal clearly within all relevant contexts, disciplinary or interdisciplinary, public or professional, and educational as well. For example, a teacher may select an intellectually significant problem for a new course but teach poorly because of ill-defined pedagogical goals. “Bad teaching most often results from a pursuit of the wrong ends, either because the teacher is unclear about his or her purposes or because plausible but harmful purposes get in the way of good ones” (Wayne Booth). Only by stating objectives clearly can the stage be set for conversations about appropriateness of goals.

Having clear goals also means understanding a project’s scope. Good guiding questions help the scholar define a project, give it structure, recognize relevant material, identify exceptions, and see new possibilities. Of course, the goals of a project may shift over time. Much of the excitement of scholarly work comes when a particular line of inquiry leads to new questions and these lead to new ones again.

A scholar’s goal must also be realistic, taking account of the limitations and the possibilities of the situation. Hopelessly grandiose goals may fade into irrelevancy. Goals should be practical and defensible. Even clear objectives hold little value if they cannot be reasonably met.

— Glassick, C.E., Huber, M.T., & Maeroff, G.I., *Scholarship Assessed: Evaluation of the Professoriate*. Jossey-Bass Inc., San Francisco, 1997.

GOALS



TAKING THE KALEIDOSCOPIC PERSPECTIVE

My Vision is: _____

Goal I (Tangible Outcome): _____

Goal II (Realistic Plan): _____

Goal III (Adequate Resources): _____

Through reflection comes creativity. This ability to invent, devise, envisage, and improvise, is the key to success in all types of scholarly work.... "Creativity" is the essential, and perhaps even defining, characteristic of scholarship... (Ernest Lynton).

Scholarship is the "antithesis of role and routine...." Scholarly work is not carrying out a recurring task according to a prescribed protocol, applying standard methodologies.

What unifies the activities of a scholar, whether engaged in teaching, research, or professional service, is an approach to each task as a novel situation, a voyage of exploration into the partially unknown.

— Glassick, C.E., Huber, M.T., & Maeroff, G.I., op cit.

QUESTIONS



UNDERSTANDING EXPECTATIONS OF THE SCHOLARLY COMMUNITY

RULES FOR BRAINSTORMING

- No criticism. This is the premier rule of brainstorming. During the brainstorm itself, criticism is out. Whatever's said goes on the list.
- Keep moving. Don't hover to develop details. Toss in ideas and move on. Go for quantity.
- Piggyback. Besides just making up ideas out of the air, take ideas already mentioned as a point of departure, extend them, and add a twist.
- Diversify. Try for different kinds of ideas— ideas in contrasting categories, ideas that come from different points of view.

— David Perkins, *The Eureka Effect: The Art and Logic of Breakthrough Thinking*. W.W. Norton & Company, New York, 2000.

Knowing questions to be considered in the process of faculty review and reward is helpful in charting your professional journey.

CLEAR GOALS

- Does the scholar state the basic purposes of his or her work clearly? Does the scholar define objectives that are realistic and achievable? Does the scholar identify important questions in the field?

ADEQUATE PREPARATION

- Does the scholar show an understanding of existing scholarship in the field? Does the scholar bring the necessary skills to his or her work? Does the scholar bring together the resources necessary to move the project forward?

APPROPRIATE METHODS

- Does the scholar use methods appropriate to the goals? Does the scholar apply effectively the methods selected? Does s/he modify procedures in response to changing circumstances?

SIGNIFICANT RESULTS

- Does the scholar achieve the goals? Does the scholar's work add consequentially to the field? Does the scholar's work open additional areas for further exploration?

EFFECTIVE PRESENTATION

- Does the scholar use a suitable style and effective organization to present his or her work? Does the scholar use appropriate forums for communicating work to its intended audiences? Does the scholar present his or her message with clarity and integrity?

REFLECTIVE CRITIQUE

- Does the scholar critically evaluate his or her own work? Does the scholar bring an appropriate breadth of evidence to his or her critique? Does the scholar use evaluation to improve the quality of future work?

— Glassick, C.E., Huber, M.T., & Maeroff, G.I., op cit.

QUESTIONS



ADDRESSING QUESTIONS RAISED BY THE COMMUNITY OF FUNDERS

This set of “asking myself” questions is adapted from a range of how-to guides from federal funding agencies.

Relating to clarity of idea:

- Are my ideas/goals valid and important, given my particular sphere of investigation?
- Are my hypotheses testable?
- Are my strategies logical, carefully-chosen, well-defined, clearly-stated, reasonable, and obtainable?

Relating to results:

- Have I presented a compelling vision of my project, what I intend to accomplish, in the context of recognizing the complexity of the field?

Relating to significance:

- Have I collected thoroughly, reviewed critically, and organized logically materials and data that justify this “next step” in my scholarly career?
- Can I demonstrate a thorough and balanced understanding of the state of the field through my discussion of pertinent literature?
- Can I document how my work will fill a defined gap in what is known about my field, advancing understanding, etc.?

Relating to feasibility and capacity:

- Can I provide evidence that my approach (methods, techniques, protocols) is feasible, adequate, appropriate, and within my competence, given the hypotheses I am testing?
- Can I provide evidence that my experience and expertise make me qualified to undertake this work, and that my results would be reliable, useful for my peers?

Relating to plan/resources:

- Have I anticipated potential difficulties and obstacles, and presented a convincing argument that I can circumvent both anticipated and unexpected difficulties?
- Have I set forth a carefully-focused, step-by-step, straightforward research agenda?
- Do I know what it will take to realize my vision?

Kakuzo Okakura, a Japanese Philosopher, said the following:

“One day Soshi was walking on the bank of a river with a friend. ‘How delightfully the fishes are enjoying themselves in the water,’ exclaimed Soshi. His friend spoke to him thus, ‘You are not a fish, how do you know that the fishes are enjoying themselves?’ ‘You are not myself,’ returned Soshi, ‘how do you know that I do not know that the fishes are enjoying themselves?’”

How can we know if we do not ask? Why should we ask if we are certain we know? All answers come out of the question. If we pay attention to our questions, we increase the power of mindful learning.

— Ellen J. Langer, *The Power of Mindful Learning*. Addison-Wesley, 1997.

SUMMARY



CONSIDERING WHAT MAKES A COMPETITIVE PROPOSAL

Figure out how, when seeking external support, to answer the questions reviewers will ask:

- Does the scholarship appear to be current?
- Has the scholar's preparation for the investigation adequately considered the state of the field?

Is the author in command of both primary sources and the standard secondary literature of the field?

- Does the applicant have the competencies to secure the essential resources to carry out the project; does the scholar bring the necessary skills to his or her work?

—Glassick, C.E., Huber, M.T., & Maeroff, G.I., op cit.

Reviewer Comment #1:

This project has success written all over. [The faculty] have already started their efforts. Previous years of pilot work show strong desire of faculty to accomplish the work.

Thoughts: _____

Reviewer Comment #2:

I have serious reservations about the narrow focus and the narrow goals outlined in this proposal.... This project will not have as broad an impact as others under consideration in this review cycle. Although I see much merit in this proposal, others made a more compelling case for funding at this time.

Thoughts: _____

Assignment:

In working groups, consider characteristics of a proposal that would have generated such reviewer comments. Identify one best practice and one worst practice to guide your steps toward shaping a competitive proposal.

SUMMARY



CONSIDERING WHAT MAKES A COMPETITIVE PROPOSAL

Reviewer Comment #3:

The hypotheses and objectives— are closely reasoned and follow upon the background material. The protocols are presented in admirable detail. The presentation was exemplary in terms of the adequacy, appropriateness, and completeness of the methodology proposed.

The very thoroughness with which the proposal was prepared and presented provides further evidence of their capability. Although these are young investigators, without extensive experience, they appear to be eminently qualified to undertake this research— if the care with which they have prepared this application is any indication.

Thoughts: _____

Reviewer Comment #4:

I find the array of topics to be covered so broad as to ensure superficiality. The proposal presents a grabbag list of activities to be done during the grant period.

Thoughts: _____

The panelists were impressed by the importance of your project and by the previous work you have done. To quote one, “this is an interesting project and the social/structural implications of [...] certainly has implications far beyond the scope of this single study.”

Other panelists were equally impressed: “this proposal is clear, well-orders and makes excellent statement about the quality of the work this applicant is capable of producing.” There were, however, concerns. These were primarily in regard to the lack of definition in regard to the ‘concept of values’ that is central to the research.

Others were puzzled that you did not mention work already done by others, which might have strengthened your case. Hence, in comparing your project with many excellent ones before them, the panelists decided that you did not argue your case as persuasively as others, and that your project was not as finely developed as others.

— Reviewer Comments from a NEH Proposal.

SUMMARY



DRAFTING MY VISION & GOALS: #2

My vision* is: _____

What outcome(s) will signal progress toward realizing my vision?**

Peer-reviewed journal article _____

Book accepted for publication _____

Presentation at my major professional meeting _____

Submitted Proposal _____

New/Revised Course _____

New/Expanded Research Direction _____

Other _____

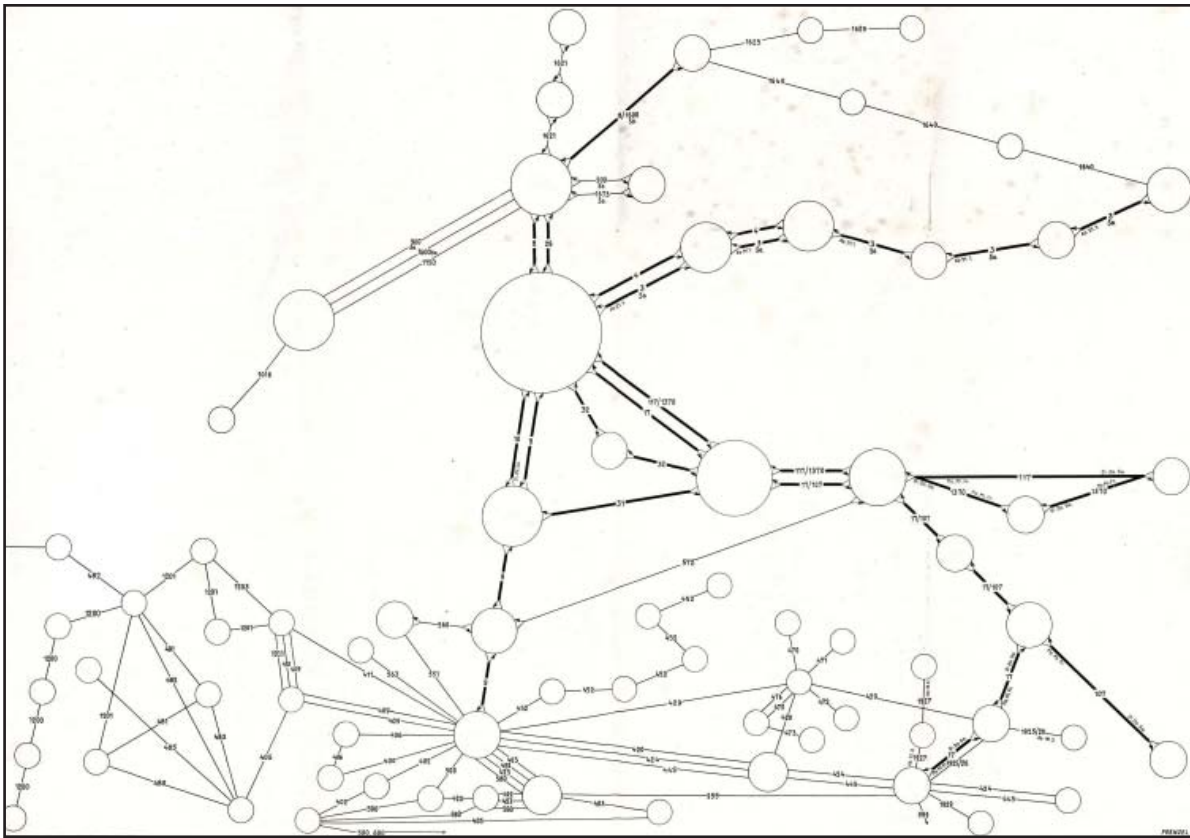
Other _____

Other _____

Other _____

* Vision = Idea

** Goals = Outcomes



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Shaping a meaningful scholarly career is like being on a journey.

To illustrate:

- Starting with the end in mind is critical.

Alice: Would you tell me, please, which way I ought to go from here?

Cheshire Cat: That depends a good deal on where you want to get to.

Planning is important, but a plan without a well-defined idea is virtually useless. Sometimes ideas are not as obvious as one might think. An important part of the process is to take some time to consider all possible options....Determining the final destination (the audacious idea) is essential if your journey is to be meaningful and make a difference.

- In implementing your plan, keeping track of where you are on the journey is equally critical.

A strategy is a plan to reach a goal cleverly. While it is sometimes possible to reach goals in a muddling and fatalistic way, there are advantages in thinking strategically, in using forethought, and in combining tactics as skillfully as possible... strategic planning is creative problem-solving.

— Excerpted from *Some Words of Wisdom for Faculty* (p. 40), ICO/PKAL 2007.



The whole difficulty of the matter is that life is not given us ready made. Like it or not, we must go along from instant to instant, deciding for ourselves. At each moment it is necessary to make up our minds what we are going to do next: the life of man is an ever recurrent problem. In order to decide at one instant what he is going to do or to be at the next, man is compelled to form a plan of some sort, however simple or puerile it may be. It is not that he “ought” to make a plan.

There is simply no possible life, sublime or mean, wise or stupid, which is not essentially characterized by its proceeding with reference to some plan. Even to abandon our life to chance, in a moment of despair, is to make a plan. Every human being, perforce, picks his way through life. Or what comes to the same, as he decides upon each act he performs, he does so “because” that act seems best, given the circumstances. This is tantamount to saying that every life is obliged, willy-nilly, to justify itself in its own eyes.

Self-justification is a constituent part of our life. We refer to one and the same fact, whether we say that “to live is to conduct oneself according to a plan,” or that “life is a continuous justification to oneself.” But this plan or justification implies that we have acquired some “idea” of the world and the things in it, and also of our potential acts which have bearing upon it.

— Jose Ortega y Gasset, *Mission of the University*. Princeton University Press, 1944.



Part II: Developing a realistic plan

STRATEGIES



BEING SELF-AWARE: REFLECTIONS & CONVERSATIONS

It's up to you to carve out your place in the work world and know when to change course. And it's up to you to keep yourself engaged and productive during a work life that may span some 50 years.

To do all of these things well, you'll need to cultivate a deep understanding of yourself. What are your most valuable strengths and most dangerous weaknesses? Equally important, how do you learn with and work with others? What are your most deeply held values? And in what type of work environment can you make the greatest contribution?

...we will have to learn to manage ourselves. We will have to learn to develop ourselves. We will have to place ourselves where we can make the greatest contribution.

— Peter F. Drucker, *Managing Oneself*.
Best of HBR, 1999.

- What do I want my resumé to look like in three years?
- When was the last time I reviewed my resumé?
- What abilities/skills do I need to have to get the result I desire?
- Do I have a clear understanding of how I work, and what kind of environment facilitates the most productive work from me?
- How do my strengths and values fit into my institution's future?
- What are my strengths?
- What are the limitations that hinder me from achieving my goals?
- Does my goal reflect an honest evaluation of my strengths, limitations, opportunities and barriers?

“SWOT” (*solb*) Analysis

<p>STRENGTHS</p> <ul style="list-style-type: none"> ■ What advantages do I have? ■ What do I do well? ■ What relevant resources do you have access to? ■ What do other people see as my strengths? 	<p>LIMITATIONS</p> <ul style="list-style-type: none"> ■ What could I improve? ■ What new skills do I need to acquire? What resources will I need to assemble? ■ What connections will I need to make?
<p>OPPORTUNITIES</p> <ul style="list-style-type: none"> ■ What are the good opportunities facing me right now? ■ What are the interesting trends you are aware of? 	<p>BARRIERS</p> <ul style="list-style-type: none"> ■ What obstacles might you face in your professional life? ■ What obstacles might you face in your personal life?

Assignment:

- Walk through the following page.
- Share your responses with your colleague(s).
- Think about the 360° review process.

STRATEGIES



BEING SELF-AWARE: REFLECTIONS & CONVERSATIONS

Strengths— Why am I the right person to pursue this audacious idea?

Opportunities— Why is this the right time for me to pursue...?

Limitations— What resources/expertise will be needed for me to pursue...?

Barriers— What will make it difficult for me to pursue...?

WHAT ARE MY STRENGTHS?

Most people think they know what they are good at. They are usually wrong. Most often, people know what they are not good at— and even then more people are wrong than right. And yet, a person can perform only from strength. One cannot build performance on weaknesses, let alone something one cannot do at all.

Throughout history, people had little need to know their strengths. A person was born into a position and a line of work: The peasant's son would also be a peasant; the artisan's daughter, an artisan's wife; and so on. But now people have choices. We need to know our strengths in order to know where we belong.

The only way to discover your strengths is through feedback and analysis.

— Peter F. Drucker, op cit.

STRATEGIES



OUTLINING STEPS TO TAKE, ITERATIVELY, SHORT-TERM & LONG-TERM

A strategy is a plan to reach a goal cleverly. While it is sometimes possible to reach goals in a muddling and fatalistic way, there are advantages in thinking strategically, in using forethought, and in combining tactics as skillfully as possible... strategic planning is creative problem-solving oriented toward change.

If we are thinking about how to manage the future creatively, efficiently, and effectively, we must think about the role that strategy plays.

First of all, strategic planning is in itself a creative act. For most of us, strategic thinking is not automatic. It is a divergence from business as usual and not easy, since it causes us to confront the large uncertainties associated with the future.

Most of us are aware that we should be thinking strategically about our personal lives. Those of us who do tend to accomplish our goals more readily.

— James L. Adams, *The Care & Feeding of Ideas: A Guide to Encouraging Creativity*. Addison-Wesley Publishing Company, Inc., 1986.

A. Clarify vision and goals. Identify what strategies will enable me to document that this work will make a tangible difference (choose one or more) to my:

- disciplinary/scholarly/professional field
- students
- campus community.

B. Consider strategies that will enable me to:

- capitalize on my strengths
- address my limitations
- take advantage of my opportunities
- overcome barriers (real/perceived).

STRATEGIES



OUTLINING STEPS TO TAKE, ITERATIVELY, SHORT-TERM & LONG-TERM

C. Identify strategies to make critical collegial connections in the process of:

- clarifying my vision and goals
- considering my strengths, limitations, opportunities and barriers.

D. Develop a feasible time-line (priorities) that incorporates strategies that fit into my current professional and personal commitments, to:

- my students
- me/my family
- my department
- my broader community of peers within this campus
- my community of peers beyond the campus.

It is helpful to reviewers to see that you have devised a time frame. This will show that you have done adequate planning and are realistic about the program's implementation.

— Excerpted from *NSF 98-91: A Guide for Proposal Writing*. <http://www.nsf.gov/pubs/1998/nsf9891/nsf9891.pdf>

REFLECTIONS & CONVERSATIONS



BALANCING YOUR PROFESSIONAL & PERSONAL LIFE

Leadership is both active and reflective. One has to alternate between participating and observing. Walt Whitman described it as being “both in and out of the game.” For example, Magic Johnson’s greatness in leading his basketball team came in part from his ability to play hard while keeping in mind the whole game situation, as if he stood in the stands. Bobby Orr played hockey in the same way.

Although the principle may be easy to grasp, the practice is not. Rather than maintain perspective on the events that surround and involve us, we often get swept up by them. Consider the experience of dancing on a dance floor in contrast with standing on a balcony and watching other people dance.

Engaged in the dance, it is nearly impossible to get a sense of the patterns made by everyone on the floor. Motion makes observation difficult. Indeed, we often get carried away by the dance. Our attention is captured by the music, our pattern, and the need to sense the dancing space of others nearby to stay off their toes.

To discern the larger patterns on the dance floor— to see who is dancing with whom, in what groups, in what location, and who is sitting out which kind of dance— we have to stop moving and get to the balcony.

— Ronald A. Heifetz, *Leadership Without Easy Answers*. The Belknap Press of Harvard University Press, 1994.

Advice to faculty at all career stages, collected over the years, includes these words of wisdom:

1. Make your own path. Write fewer but stronger papers. Think outside the “box” of your discipline from time to time. If teaching inspires you, do it; you will get your reward from all the lives you touch.
2. Understand what works, if possible, at different career stages.
3. Aim high, make sure what you do is documented and makes you visible as a valuable faculty member. The quality of your work is the key.
4. Learn to say no, there will be times when you will have to say “no” even to attractive opportunities because they conflict with other commitments.
5. Find the right balance, establish a good network of friends and colleagues, nurturing good relationships with one’s students, and getting time for oneself may be key ingredients for flourishing as a leader in undergraduate education, while on the tightrope of shaping a meaningful career.
6. Understand the rules, system, and culture of your community— what is expected, evaluated, rewarded.
7. Make a plan.
8. Block out time every day for working toward your scholarly goals. Just as teaching commitments get scheduled and have to be met, so too should writing, reading, and researching be scheduled, with those commitments taking priority over any unscheduled activities.

Assignment:

- Reflect on one through eight above.
- Think about your personal experience relating to one or more of those words of advice.
- Share with colleagues and distill to one best practice.

THINK, PAIR, SHARE



EXPLORING WHAT WORKS IN BALANCING YOUR PROFESSIONAL & PERSONAL LIFE

? _____

? _____

WHAT WORKS

The main things are two-fold:

First: identify what you want to do, and be sure it's something you love. Don't worry about "is this going to help my career?" or "is this trendy?" Just pursue something you are enthusiastic about. (This applies more to people with tenure than without, of course)

Second: ruthlessly (and I mean ruthlessly!) carve out time to work on it. This means getting extended amounts of time to write, not an hour here and there. Cut out (ruthlessly) as many smaller projects (books reviews, readers' reports on other manuscripts, etc.) as possible, and concentrate on your main project.

Make sure as many people as possible in your department and in the administration know what you are doing, since they may create opportunities for you to secure outside funding and/or internal support.

During the academic year, do your class preparation in a compact block of time so you have other large blocks of time to work on your project. Use weekends and late nights, and, of course, your summers. Consider yourself "on duty" at all times, except when you are with family or friends, or sleeping.

— Interview with History Faculty Member

BEST PRACTICE:

STRATEGIES



REFLECTING ON MY SCHOLARLY EXPERIENCES

Taking time— to reflect on one’s own experiences and style, as well as on how colleagues have charted a meaningful scholarly career— is an important step for faculty at all career stages.

The questions below, taken from *Creativity* by Mihaly Csikszentmihalyi, can be used for personal reflections and for connecting to colleagues. By exploring career-related issues, you can compare both your personal reflections and the responses received through interviews with colleagues.

See if and how you can identify “...special practices or strategies...” that enable people to keep focused, asking the right questions, making a difference for their students, their scholarly field, and their campus community. Use these questions to interview someone on your campus to find models of *what works*.

Of the things you have done in life, of what are you most proud?

Has there been a particular project or event that has significantly influenced the direction of your career? If so, could you talk a little about it?

How did you initially become involved or interested in [subject’s area]? What has kept you involved for so long?

Have there been points when what you were doing became less intensely involving [or] seemed less interesting or important to you? Can you describe a time that stands out?

STRATEGIES



REFLECTING ON MY SCHOLARLY EXPERIENCES

Of all the obstacles you have encountered in your life, which was the hardest to overcome?

If there has been a significant person (or persons) in your life who has influenced or stimulated your thinking and attitudes about your work, how did they influence your work and/or attitudes (e.g., motivation, personal or professional values)?

At any time in your life, have your peers been particularly influential in shaping your personal and professional identity?

In what ways have colleagues been important for your personal and professional identity and success?

Where do the ideas for your work generally come from? How do you go about developing an idea?

Can you describe your working methods?

— Mihaly Csikszentmihalyi, *Creativity: Flow and the Psychology of Discovery and Invention*. Harper Perennial, 1996 (Used with permission of the author).

SUMMARY



DRAFTING STRATEGIES THAT REFLECT MY VISION & GOALS

Vision:

GOAL I: _____

Strategy A (Strengths): _____

Strategy B (Opportunities): _____

Strategy C (Limitations): _____

Strategy D (Barriers): _____

SUMMARY



DRAFTING STRATEGIES THAT REFLECT MY VISION & GOALS

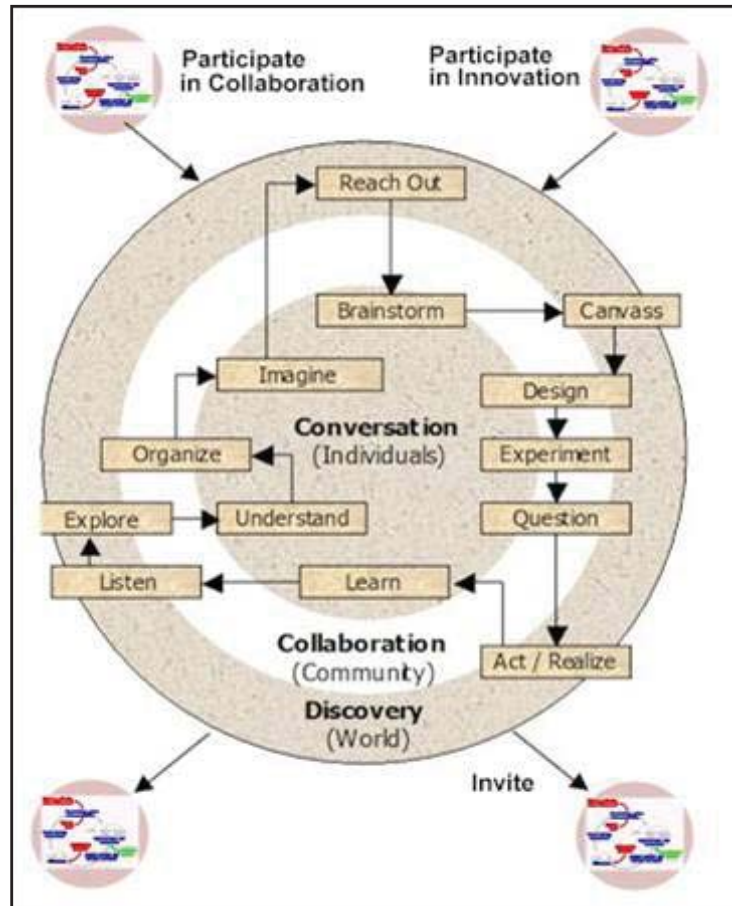
GOAL II: _____

Strategy A (Strengths): _____

Strategy B (Opportunities): _____

Strategy C (Limitations): _____

Strategy D (Barriers): _____



— Graphic from James Gentile, President— The Research Corporation. Cottrell Institutes.

Part II: Addendum



The Values of Leadership

In the broadest sense, we see the purposes of leadership as encompassing the following values:

- to create a supportive environment where people can grow, thrive, and live in peace with one another
- to promote harmony with nature and thereby provide sustainability for future generations, and
- to create communities of reciprocal care and shared responsibility where every person matters and each person's welfare and dignity is respected and supported.

— Astin & Astin, et al., *Leadership Reconsidered: Engaging Higher Education in Social Change*. W.M. Kellogg Foundation, 2000.





WHAT MATTERS - A PKAL TOOL

CHARACTERISTICS OF THE IDEAL ACADEMIC LEADER

Instructions:

The *Characteristics of the Ideal Leader Inventory*, designed by PKAL, will provide insight about your strengths and your potential as a leader. This inventory reflects ideas and from a wide range of reflective leadership theorists and practitioners. See *Leadership— A PKAL Portfolio, 2004: Investing in the Future: Building Institutional Leadership for Natural Science Communities* (<http://www.pkal.org/documents/LeadershipHandbook.cfm>)

Background:

Over the years, PKAL has assembled a rich archive of essays, interviews and stories about leadership, with a subset of materials about leadership in undergraduate science, technology, engineering and mathematics.

A wondrous pattern begins to emerge from a review of these materials. Most speak about the ability of the leader to deal with what is not known or is unfamiliar, in the context of understanding the future and/or the current reality. Leaders are likened to inventors, in that they are comfortable working *on the margins of established knowledge* (The Lemelson-MIT Program).

Some essayists describe the importance of dealing with mavericks (Finzel) and the *outstanding positive deviants* within a campus community (Herschbach); others suggest the need to provide such *gifted individuals with enough rope* (Alberts) to ensure that creative solutions are found to problems not amenable to standard operating procedures.

Another dimension of focusing on the future that comes alive in these leadership materials relates to the structural changes needed to *move the system away from the status quo* (Fullan). This requires the ability to *scan the environment and identify emerging trends* (Hesselbein and Johnston) in order to bring about the radical *changes consistent with the new mindset* (Fullan).

Transforming systems calls for leaders who know how to foster collaborations that are enriched by the *multiple perspectives emerging through community discourse* (Arias et.al.), who involve *more rather than fewer people* (George), and whose *trust in colleagues is contagious* (Kouzes and Posner). Such collaborations thrive when the leader articulates a vision that *gives meaning and clarifies the organization's identity* (Northouse).

Leadership also has a personal side. Whether the analysis is from the theoretical or experiential perspective, certain characteristics are unmistakable, from being risk takers *and very hard workers* (Millar) to knowing *that there is life beyond the campus* (Denton). The reality is that each of these dimensions of leadership must be integrated with integrity into the lives of leaders intent on ensuring the nation's undergraduate STEM programs— today and tomorrow— serve students, science and society most effectively.

We must work together to *promote cultural enrichment, creative expression, intellectual honesty, the advancement of knowledge, and personal freedom coupled with social responsibility* (Astin and Astin).



WHAT MATTERS - A PKAL TOOL

CHARACTERISTICS OF THE *IDEAL* ACADEMIC LEADER

With respect to the QUALITIES OF INDIVIDUAL LEADERS, leaders:	How do I rate myself on these characteristics of the ideal leader?
♦ are aware of their particular talents & strengths.	1 2 3 4 5
♦ require that their actions be consistent with their most deeply felt values and beliefs.	1 2 3 4 5
♦ have the capacity to “put themselves in another person’s place.”	1 2 3 4 5
♦ have the knowledge, skill, & expertise required to complete the transformation.	1 2 3 4 5

With respect to the IMPORTANCE OF GIFTED INDIVIDUALS, leaders:	How do I rate myself on these characteristics of the ideal leader?
♦ overcome inertia by identifying and supporting gifted individuals in their community.	1 2 3 4 5
♦ provide enough flexibility to those with great ideas to make changes.	1 2 3 4 5
♦ capture and customize lessons learned from successful models emerging elsewhere.	1 2 3 4 5
♦ use limited resources creatively to affect change (a carrot rather than a stick)—within their sphere of influence and responsibility.	1 2 3 4 5

With respect to TRANSFORMATIONAL CHANGE, leaders:	How do I rate myself on these characteristics of the ideal leader?
♦ are strong role models.	1 2 3 4 5
♦ create vision.	1 2 3 4 5
♦ listen, but also initiate.	1 2 3 4 5
♦ understand organizational culture.	1 2 3 4 5



WHAT MATTERS - A PKAL TOOL

CHARACTERISTICS OF THE *IDEAL* ACADEMIC LEADER

With respect to LEADERSHIP LESSONS LEARNED, leaders:	How do I rate myself on these characteristics of the ideal leader?
♦ do not over-prepare.	1 2 3 4 5
♦ do not burn any bridges.	1 2 3 4 5
♦ learn how to delegate, empower, relinquish control.	1 2 3 4 5
♦ leave all options open and choose their battles.	1 2 3 4 5

With respect to the INDIVIDUAL AS CHANGE AGENT, leaders:	How do I rate myself on these characteristics of the ideal leader?
♦ belong to an organization capable of individual and collective inquiry.	1 2 3 4 5
♦ are change agents with a moral purpose.	1 2 3 4 5
♦ intersect with like-minded colleagues to bring about continuous improvements.	1 2 3 4 5
♦ understand the systems and the culture of their organization.	1 2 3 4 5

With respect to SUCCESSFUL STEM EDUCATIONAL LEADERS:	How do I rate myself on these characteristics of the ideal leader?
♦ are able to take risks, inspired by a sense of mission.	1 2 3 4 5
♦ are savvy and persistent about obtaining resources, can maneuver around constraints.	1 2 3 4 5
♦ are a proactive and pragmatic problem-solvers.	1 2 3 4 5
♦ are active networkers.	1 2 3 4 5



WHAT MATTERS - A PKAL TOOL

CHARACTERISTICS OF THE *IDEAL* ACADEMIC LEADER

With respect to A WILLINGNESS TO TRUST, leaders are ready to:	How do I rate myself on these characteristics of the ideal leader?					
♦ admit mistakes.	<table border="1"> <tr> <td>1</td> <td>2</td> <td>3</td> <td>4</td> <td>5</td> </tr> </table>	1	2	3	4	5
1	2	3	4	5		
♦ listen attentively to what others have to say.	<table border="1"> <tr> <td>1</td> <td>2</td> <td>3</td> <td>4</td> <td>5</td> </tr> </table>	1	2	3	4	5
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♦ show they are willing to change their mind.	<table border="1"> <tr> <td>1</td> <td>2</td> <td>3</td> <td>4</td> <td>5</td> </tr> </table>	1	2	3	4	5
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♦ trust others, trust is contagious.	<table border="1"> <tr> <td>1</td> <td>2</td> <td>3</td> <td>4</td> <td>5</td> </tr> </table>	1	2	3	4	5
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With respect to being OPEN TO SURPRISE, leaders:	How do I rate myself on these characteristics of the ideal leader?					
♦ are receptive to what comes over the transom.	<table border="1"> <tr> <td>1</td> <td>2</td> <td>3</td> <td>4</td> <td>5</td> </tr> </table>	1	2	3	4	5
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♦ are wired to perceive the unexpected.	<table border="1"> <tr> <td>1</td> <td>2</td> <td>3</td> <td>4</td> <td>5</td> </tr> </table>	1	2	3	4	5
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♦ can scan the environment and identify emerging trends.	<table border="1"> <tr> <td>1</td> <td>2</td> <td>3</td> <td>4</td> <td>5</td> </tr> </table>	1	2	3	4	5
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♦ work consciously to develop diversity of thought.	<table border="1"> <tr> <td>1</td> <td>2</td> <td>3</td> <td>4</td> <td>5</td> </tr> </table>	1	2	3	4	5
1	2	3	4	5		

With respect to SUCCESSFUL INNOVATORS, leaders:	How do I rate myself on these characteristics of the ideal leader?					
♦ are resourceful and resilient.	<table border="1"> <tr> <td>1</td> <td>2</td> <td>3</td> <td>4</td> <td>5</td> </tr> </table>	1	2	3	4	5
1	2	3	4	5		
♦ show a commitment to practical action.	<table border="1"> <tr> <td>1</td> <td>2</td> <td>3</td> <td>4</td> <td>5</td> </tr> </table>	1	2	3	4	5
1	2	3	4	5		
♦ have a high tolerance for complexity and ambiguity.	<table border="1"> <tr> <td>1</td> <td>2</td> <td>3</td> <td>4</td> <td>5</td> </tr> </table>	1	2	3	4	5
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♦ are comfortable working on the margins of established knowledge.	<table border="1"> <tr> <td>1</td> <td>2</td> <td>3</td> <td>4</td> <td>5</td> </tr> </table>	1	2	3	4	5
1	2	3	4	5		



WHAT MATTERS - A PKAL TOOL

CHARACTERISTICS OF THE *IDEAL* ACADEMIC LEADER

With respect to “NO ROOM FOR MAVERICKS?,” leaders:	How do I rate myself on these characteristics of the ideal leader?					
♦ are willing to bring fresh blood into the equation.	<table border="1"> <tr> <td>1</td> <td>2</td> <td>3</td> <td>4</td> <td>5</td> </tr> </table>	1	2	3	4	5
1	2	3	4	5		
♦ recognize those earning the right to be heard.	<table border="1"> <tr> <td>1</td> <td>2</td> <td>3</td> <td>4</td> <td>5</td> </tr> </table>	1	2	3	4	5
1	2	3	4	5		
♦ give other mavericks opportunity and time to blossom.	<table border="1"> <tr> <td>1</td> <td>2</td> <td>3</td> <td>4</td> <td>5</td> </tr> </table>	1	2	3	4	5
1	2	3	4	5		
♦ do not control all important decisions at the top.	<table border="1"> <tr> <td>1</td> <td>2</td> <td>3</td> <td>4</td> <td>5</td> </tr> </table>	1	2	3	4	5
1	2	3	4	5		

With respect to UNDERSTANDING THE OUTSTANDING, to achieve well beyond expectations, leaders:	How do I rate myself on these characteristics of the ideal leader?					
♦ recognize exceptional people and practices should be leveraged.	<table border="1"> <tr> <td>1</td> <td>2</td> <td>3</td> <td>4</td> <td>5</td> </tr> </table>	1	2	3	4	5
1	2	3	4	5		
♦ understand that change can be brought about from within.	<table border="1"> <tr> <td>1</td> <td>2</td> <td>3</td> <td>4</td> <td>5</td> </tr> </table>	1	2	3	4	5
1	2	3	4	5		
♦ identify ways to improve performance and working conditions.	<table border="1"> <tr> <td>1</td> <td>2</td> <td>3</td> <td>4</td> <td>5</td> </tr> </table>	1	2	3	4	5
1	2	3	4	5		
♦ identify and build from positive outliers. ■	<table border="1"> <tr> <td>1</td> <td>2</td> <td>3</td> <td>4</td> <td>5</td> </tr> </table>	1	2	3	4	5
1	2	3	4	5		

WHAT MATTERS - A PKAL TOOL

CHARACTERISTICS OF THE IDEAL ACADEMIC LEADER

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*Note: Selections unavailable online or through the publisher can be found by contacting the PKAL Office.

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SHAPING A FUTURE



SOME WORDS OF WISDOM FOR FACULTY

The importance of reflection is one of the threads through these *Words of Wisdom*. From a wide range of reflective leaders, they offer perspectives on the personal dimension of leadership— both reflection and action. Thinking about how leaders can learn to manage themselves and stay sane in the process, Ronald Heifetz emphasizes the importance of reflection, using the metaphor of learning to dance:

Rather than maintain perspective on the events that surround and involve us, we often get swept up by them. Consider the experience of dancing on a dance floor in contrast with standing on a balcony and watching other people dance.

*Engaged in the dance, it is nearly impossible to get a sense of the patterns made by everyone on the floor. To discern the larger patterns on the dance floor— to see who is dancing with whom, in what groups, in what location, and who is sitting out which kind of dance— we have to stop moving and get to the balcony. (Heifetz, *Leadership without Easy Answers*. The Belknap Press of Harvard University Press. 1994).*

These words of wisdom can catalyze one's reflections and also suggest what might be done upon returning to the dance floor.

- Make time for what matters. Understand career stages. Aim high. Learn to say no. Find the right balance. Enjoy what you do. Know the rules.¹
- It's up to you to carve out your place in the work world and know when to change course...we will have to learn to manage ourselves. We will have to learn to develop ourselves. We will have to place ourselves where we can make the greatest contribution.²
- Planning is important, but a plan without a well-defined goal is virtually useless. Sometimes goals are not as obvious as one might think. An important part of the process is to take some time to consider all possible options.... Determining the final destination is essential to begin contriving a plan that hits the mark.³
- Alice: *Would you tell me, please, which way I ought to go from here?*
Cheshire Cat: *That depends a good deal on where you want to go to.*⁴
- A strategy is a plan to reach a goal cleverly. While it is sometimes possible to reach goals in a muddling and fatalistic way, there are advantages in thinking strategically, in using forethought, and in combining tactics as skillfully as possible... strategic planning is creative problem-solving oriented toward change.⁵
- Like it or not, we must go along from instant to instant, deciding for ourselves. At each moment it is necessary to make up our minds what we are going to do next... every life is obliged, willy-nilly, to justify itself in its own eyes.⁶
- Through reflection comes creativity. This ability to invent, devise, envisage, and improvise is the key to success in all types of scholarly work.⁷
- [A] widely observed trait [of the creative person] may be labeled flexibility. It is perhaps best seen in what has been called the playfulness of the man of originality...⁸

SHAPING A FUTURE



SOME WORDS OF WISDOM FOR FACULTY

- Leadership is both active and reflective. One has to alternate between participating and observing. Walt Whitman described it as being “both in and out of the game.” Although the principle may be easy to grasp, the practice is not.⁹
- Passion for your purpose comes when you are highly motivated by your work because you believe in its intrinsic worth, and you can use your abilities to maximum effect.¹⁰
- By definition, experts have developed particular ways to think and reason effectively. Understanding expertise is important because it provides insights into the nature of thinking and problem-solving. It is not simply general abilities, such as memory or intelligence, nor the use of general strategies that differentiate experts from novices... experts have acquired extensive knowledge that affects what they notice and how they organize, represent, and interpret information in their environment. This, in turn, affects their abilities to remember, reason, and solve problems.¹¹
- *No matter where you ride, that’s where you are.
Timing has a lot to do with the outcome of the rain dance.
There is a lot more to riding a horse than just sitting in the saddle and letting your feet hang down.
If you find yourself in a hole, the first thing to do is stop digging.
Never miss a good chance to shut up.*¹²

¹ Narum, Jeanne L., *Interviews with NSF Distinguished Teaching Scholars*. Project Kaleidoscope, 2005. <<http://www.pkal.org/collections/DTSInterviews.cfm>>

² Drucker, Peter F., *Managing Oneself*. *Harvard Business Review*, Jan 1, 2005.

³ Reeve, John R., Smith, Marion B., *Planning for Master Planning*. APPA, 1995.

⁴ Carroll, Lewis, *Alice’s Adventures in Wonderland*. MacMillan & Co., 1865.

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⁷ Glassick, Charles E., Mary Taylor Huber & Gene I. Maeroff, *Scholarship Assessed: Evaluation of the Professoriate*. Jossey-Bass Inc., 1997.

⁸ Gardner, John W. *Self-Renewal*. Harper & Row, 1964

⁹ Heifetz, Ronald A., *Leadership Without Easy Answers*. The Belknap Press of Harvard University Press, 1994.

¹⁰ George, Bill, *Authentic Leadership: Rediscovering the Secrets to Creating Lasting Value*. Jossey-Bass, 2003.

¹¹ National Research Council, *How People Learn*. National Academy Press, 1999.

¹² Bender, Texas Bix, *Don’t Squat With Yer Spurs On! A Cowboy’s Guide to Life*. Gibbs Smith, 1992.



Ten Axioms

1. Proposals that are not written and not submitted are not funded.
2. 50% of funded proposals are resubmissions of previously rejected proposals.
3. The smell of a submitted turkey lasts a long time.
4. The old French proverb: “the future belongs to those who build bridges” is true.
5. Deadlines are like taxes; you will have repeated opportunities to give.
6. Few proposal writers take advantage of all the help that is available.
7. Writing the second proposal is easier than writing the first.
8. A good idea will make a difference somehow, even if a grant is not awarded.
9. Proposal writing is like baking bread; you have to give it time to let everything get set. You have to knock the hot air out of it periodically.
10. If you are not in it for the long-term, don’t start. Have the courage to fail.

— Jeanne L. Narum, ICO Director.



Part III: Securing adequate resources

A TIMELINE



FOR PREPARING A COMPETITIVE PROPOSAL

Task	Colleague(s) to Assist	Date In Process	Date Completed
1. Develop a 100-word statement of something to accomplish that makes a difference to the communities of which you are a part.			
2. Outline reasons why this work is important. Answer the “so what” question for yourself.			
3. Reflect on why this is the right time, from the perspective of your professional and personal opportunities and obligations.			
4. Revisit, confirm or clarify idea, in conversations with peers and colleagues, within and beyond campus.			
5. Document your credibility to undertake the project. Answer the “why me” question.			
6. Spell out the specific artifact that will be the evidence that you’ve accomplished what you set out to do.			
7. Detail the resources that will be needed, noting those already in hand and those to be secured— before or during undertaking the project.			
8. Expand on the reason why this is important, developing a statement of need.			
9. Include all of the above, and more, in an evolving project portfolio. Collect relevant papers, data, bibliographies, etc.			
10. Meet with campus colleagues ready to assist: grants officers, faculty development staff, departmental colleagues, etc.			
11. Identify potential internal and external sources of support for the project, confirming target deadline dates.			

A TIMELINE



FOR PREPARING A COMPETITIVE PROPOSAL

Task	Colleague(s) to Assist	Date In Process	Date Completed
12. Develop a multi-stage plan of action (week/ months/year) that results in a competitive (and submitted) proposal.			
<ul style="list-style-type: none"> Connect to, communicate with, everyone on campus who can facilitate the preparation of a competitive proposal. 			
<ul style="list-style-type: none"> Understand all institutional practices and resources that can be leveraged in the work of preparing a competitive proposal. 			
<ul style="list-style-type: none"> Gather information about funding programs, agency staffers, past grantees, etc. about what makes a competitive proposal. 			
<ul style="list-style-type: none"> Revisit portfolio, in particular material referenced above, in 1 – 11. 			
<ul style="list-style-type: none"> Prepare and post a “red-flag” list of things that make a competitive proposal. 			
<ul style="list-style-type: none"> Schedule regular times for the iterative work of drafting, reviewing, editing and rewriting. 			
<ul style="list-style-type: none"> Assemble all attachments. 			
<ul style="list-style-type: none"> Connect to appropriate referees, references, consultants. 			
<ul style="list-style-type: none"> Bake bread and break bread. Time for relaxing and letting the project “rise” before kneading out the hot air. 			
<ul style="list-style-type: none"> Read your drafts with the hat of the reviewer; ask colleagues to do the same. 			
<ul style="list-style-type: none"> Reread guidelines. 			
<ul style="list-style-type: none"> Work with colleagues to cover all institutional bases for proposal submission. 			

A TIMELINE



FOR PREPARING A COMPETITIVE PROPOSAL

Task	Colleague(s) to Assist	Date In Process	Date Completed
13. Outline a multi-stage timeline (month/year) for undertaking and completing the project.			
▪ Review timeline with colleagues.			
▪ Consider the funding that will be needed to undertake and complete the project.			
▪ Address all requirements of the RFP for project outcomes.			
14. Reread guidelines and prepare final proposal; take a deep breath.			
15. Mail and celebrate the mailing; this is a professional accomplishment.			
16. Reread the proposal and make the list of what to do if the response is "yes," or if the response is "no."			
17. Take some time off, and then draft a new three-year agenda for action, building from your present idea as a platform for the future.			



Creativity has come to be a highly prized commodity in our economy— and yet it is not a commodity. Creativity comes from people. Creativity is not a province of a few select geniuses that can get away with breaking the mold because they possess superhuman talents. It is a capacity inherent to varying degrees in virtually all people, which means that creativity can be developed in all organizations.

Creativity must be motivated in a multitude of ways, by employers and by people themselves. Creativity requires an economic environment that can nurture its many forms. Creativity involves distinct kinds of thinking and habits that must be cultivated both in the individual and in the workplace. Even though much about the creative process seems strange and elusive, there does appear to be a consistent method underlying it.

Creative people share certain activities— steps in the creative process. There is no such thing as a recipe for creativity, yet over and over, in the lives of great artists, scientists and thinkers, they:

- challenge assumptions
- recognize patterns
- see in new ways
- make connections
- take risks
- take advantage of chance
- construct networks.

— *BEI Consulting*, <http://www.beinc-online.com>. 2009.



SECURING ADEQUATE RESOURCES



THE SEARCH FOR EXTERNAL SUPPORT

Certain qualities associated with a scholar's character are recognized by virtually all higher education institutions as consequential not only for the individual professor but for the entire community of scholars. No statement of professional ethics fails to mention that professors have special responsibilities to their disciplines, their students, their colleagues, and their institutions....

Linking scholarship to personal virtues certainly is not a new idea. For example, Assyriologist Anne Draffkorn Kilmer, of the University of California at Berkeley, said that the oldest known references to scholarship appear as inscriptions on forty-five-hundred year-old Sumerian tablets.

Scholarship in those ancient days referred to the literary culture that students had to master in order to become scribes. The tablets provide sobering admonitions to the young: "Day and night you must concentrate," they say. "You must sit still for scholarship, you must be humble."

— Glassick, Huber, & Maeroff, *op cit.*

Why write proposals for external support? To answer that question, some further questions to ask, in the process of charting your journey:

- what is the relationship between developing and submitting proposals seeking external support and serving one's long-term commitment to students, to one's professional field, and to your campus community?
- what difference can the process of developing and submitting proposals make at the level of the individual faculty member?
- what is a proposal?

Some answers to that last question— a proposal is:

- a chronicle of your wrestling with a significant idea
- a blueprint for your future
- a work of scholarship
- an opportunity to make collegial connections.

1. IDEA: Significant ideas do not come automatically in response to deadline; most scholars who succeed in securing external support take time to play around with an idea, to answer the "so what" question. Do this at odd hours, walking between classes, in talking with students and colleagues, in mowing the lawn. Do this without forcing the idea into some arbitrary form for proposals. Try the idea "on for size."

2. FUTURE: Speaking most idealistically, agencies say they fund careers— not single projects, that their grants are to be an investment in the future. Thus they ask reviewers to determine where the project is going, how it fits into the scholarly agenda of the proposing faculty member. This means, among other things, that figuring out what you would like your resume to look like when the proposed project comes to an end is of value in shaping a competitive proposal. This blueprint can also be seen as a road map, because you are promising to do something by a certain time, and are willing to be held to that timeline.

In thinking about a proposal as a blueprint, realize that there are different opportunities for faculty at different career stages, and that part of the challenge is to take advantage of your work in charting... as a foundation for determining which opportunity is appropriate when. All of this, of course, must recognize that plans change, as context and circumstances change.

SECURING ADEQUATE RESOURCES



THE SEARCH FOR EXTERNAL SUPPORT

3. **SCHOLARSHIP:** The notion of a proposal as a piece of scholarly writing is reinforced by countless proposal-writing guides, as well as by the experiences of colleagues. To achieve a piece of scholarship requires the long-term planning that is being emphasized throughout this handbook.

Some good words of advice from a poetry professor at the University of Virginia, heard on NPR many years ago, “the trouble with aspiring poets is that they try to write their 10th poem before they write their first.” Read good proposals; you will see there is no secret, just clear writing. An NIH publication from almost twenty years ago says it best: *As with a scientific publication, you should present your research logically and clearly, and show that your research is meaningful.*

Finally, a reminder from William Zinsser, in *On Writing Well*:

Simplify, simplify.... Thoreau said it, as we are so often reminded, and no American writer more consistently practiced what he preached.... How can the rest of us achieve such enviable freedom from clutter? The answer is to clear our heads of clutter. Clear thinking becomes clear writing; one cannot exist without the other.

4. **COLLEGIALITY:** Connecting to your on-campus colleagues in the process of proposal writing helps reinforce the activity as a scholarly activity. As you share your nascent idea, your plans for the future, you are making the same kind of internal, pre-proposal connections to scholarly peers as you will be making as you submit the proposal for review at a funding agency.

This touches on the aspect of proposal writing as an exercise in risk-taking. Here Gardner’s words are insightful: *The independence or detachment of the creative individual is at the heart of his capacity to take risks and to expose himself to the probability of criticism from his fellows.*

If on-campus collegial connections are made the process of exploring ideas and developing a proposal, it will be better received by a panel of peers serving as a review panel—each of whom knows what a good proposal smells like—they can almost see it coming. What a good idea, I wish I had thought of that!

At most institutions that apply for research grants [there are] a number of experienced investigators whose constructive criticism would be of considerable value to their colleagues, especially to the beginning investigator.

[We’ve studied] acceptance rates of scientific reports submitted for publication, which documents a greater success rate when authors had their papers exactly appraised by competent colleagues before submission for publication.

The counsel implied here pertains as well to institutions that submit grant applications....

— NIH paper on Research Grant Applications. 1986.

SHAPING STRATEGIES



MAPPING SUPPORTIVE COLLEGIAL CONNECTIONS

GROUP QUALITIES

Collaboration.

This is the cornerstone of an effective group leadership process. While groups can also function in a “leader-follower” or “command and control” mode, we believe that collaboration is a more effective approach because it empowers each individual, engenders trust, and capitalizes on the diverse talents of the group members.

Shared purpose.

This requirement addresses the fundamental goal of the group effort: What are the desired changes or transformation toward which the leadership effort is directed? What needs to be changed and why?

The group’s purpose thus reflects the shared aims and values of the group members. In many respects reaching agreement on a common purpose can be the most difficult challenge for any leadership group, and in the early stages of group functioning a good deal of time and effort may be consumed in pursuit of this goal.



The context for making collegial connections in the process of preparing a competitive proposal can be described from three perspectives: the institutional, the departmental, and the individual.

From the institutional perspective, this means there are people, policies, and practices (and funding) in place to advance explorations of good ideas and to translate those ideas into an agenda for action. This includes data about institutional admissions and graduate rates and about hiring trajectories; templates for developing budgets and assessment plans; and rules of the road for meeting all institutional regulations for grant seeking and management. Finally, it means providing time and space for the sharing by faculty and staff of their ideas—nascent or developed—a time and space to recognize and celebrate that ideas matter.

This means there is wide-spread understanding that building a supportive culture for faculty seeking programmatic and scholarly grants is important because:

- a strong record of external support enhances institutional distinctiveness, makes public that your institution is deemed worthy of investment
- external support makes it possible for creative ideas to flourish, enabling the institution to build and sustain a program of quality
- it challenges campus leaders (top-down/bottom-up) to think “outside-the-box” in shaping the future of individual departments and programs, and of the campus community at-large
- the process of preparing competitive proposals connects faculty, administrators, staff and students around conversations of institutional and national import.

The process can be a means to bringing the community to a greater “sense of citizenship, to shared assumptions about institutional needs, to social action with deeper purpose.” (Giamatti, *A Free and Ordered Space*. 1990.) This can be a time to review and confirm institutional priorities in regard to what the academic program and/or the faculty of the future will be like (e.g., what priority is given at the institutional level to faculty engaging in research with students?).

When campus leaders understand that the process of preparing a competitive proposal is an iterative one, that it is consistent with the process of institutional planning, then the questions that drive proposal preparation become woven into the fabric of the life of the community.

SHAPING STRATEGIES



MAPPING SUPPORTIVE COLLEGIAL CONNECTIONS

The department is the home for sharing ideas and best practices about what a competitive idea looks like, and about what works with specific funding agencies and lessons learned about what does not. Departmental colleagues can also assist in making connections beyond the campus that are critical to preparing a competitive proposal— either for an individual or a team.

At the departmental/program level, there should be:

- Clear departmental goals that reflect:
 - the current state and the future direction of the discipline, awareness of the backgrounds, learning styles and career aspirations of their students; and the institutional mission and identity.
- Scheduled and non-scheduled time to:
 - encourage faculty to talk about what she or he would like to accomplish in the next few years (to push that dream into an audacious idea).
 - work with colleagues to figure out what is needed to make that happen (time, money, travel to research libraries or professional meetings) make it happen.
 - celebrate the accomplishment of faculty as individuals and as members of leadership teams.
 - listen to colleagues.
 - bring ideas about emerging directions in the field— curricular, pedagogical, research— into discussions about the future of the department.
 - meet with colleagues beyond the department to explore new ways to serve better all students.
- A communal awareness of faculty scholarly pursuits and career trajectories, where she or he is:
 - on the review and tenure timetable and the schedule for sabbatical eligibility
 - in his or her scholarly activity (developing a new course, piloting a new pedagogy, experimenting with new research instrumentation, documenting research “questions that need to be asked” in the field)
 - in connecting to colleagues beyond the department— within and beyond the campus.

Disagreement with respect.

This principle recognizes that differences in viewpoint among individual group members are both inevitable and desirable, but that such differences must be engaged civilly in an atmosphere of mutual respect and trust.

Division of labor.

Any collaborative effort requires that each member of the group make a significant contribution to the overall effort, and that all members be clear not only about their individual responsibilities but also about the responsibilities and contributions of the other individual members.

A learning environment.

The most effective group leadership effort is the one that can serve as a collaborative learning environment for its members. Members come to see the group as a place where they can not only learn about each other, themselves, and the leadership effort, but also acquire the shared knowledge, interpersonal competencies, and technical skills that the group will require to function effectively.

— Astin & Astin, et al., *Leadership Reconsidered: Engaging Higher Education in Social Change*. W.M. Kellogg Foundation, 2000.

SHAPING STRATEGIES



MAPPING SUPPORTIVE COLLEGIAL CONNECTIONS OFF-CAMPUS?

Collegial resources to help me:

shape my goal _____

figure out further opportunities _____

make off-campus connections _____

make certain my writing is interesting _____

SHAPING STRATEGIES



MAPPING SUPPORTIVE COLLEGIAL CONNECTIONS ON-CAMPUS?

Collegial resources to help me:

find time to write the first major draft _____

match budget with project timeline _____

secure required institutional sign-offs _____

celebrate the making of the proposal _____

ADVICE TO PROPOSAL WRITERS



A COMPILATION FROM VARIOUS SOURCES

DO'S & DON'TS FOR APPLICANTS

DO read the application guidelines. Too obvious? Not at all. Too many applicants tend to skim through the opening prose, looking at the first two or three paragraphs, checking the amount of the stipend, then filling out whatever forms there are.

DO write the proposal in as succinct and interesting a style as possible. Somehow the application process manages to bring out the worst in prose style. Faced with writing the description of a research project, writers ordinarily fluid and graceful, manage to come up with turgid, lifeless prose.

Before you submit, **DO** give the proposal to a respected colleague to read and criticize.

DON'T throw around fashionable jargon in the description; write plainly, clearly, and as persuasively as possible.

DON'T be vague about what you have already accomplished or what you propose to do. The comments most often found on the evaluations of applications not recommended for funding are "unfocused" or "vague."

— National Endowment for the Humanities, 1980.

Securing adequate resources requires a clear understanding of what makes a competitive proposal:

- **a great idea**
NSF's guide to proposal writers suggests that a good proposal elicits a "why didn't I think of that!" response from a reviewer. No matter how well-written or carefully planned, a proposal will not be funded without a compelling idea at its core.
- **answers to the "so what?" question**
NEH, a long-ago guide to proposal writers, suggested that this was the key question that needed to be addressed by those preparing proposals for external support.
- **evidence of connections**
The connections must be explicit on many different levels: to the past, present and future of the institution, the department or the career of the individual faculty author. There must be connections to the lives of students; there can be connections to the broader scholarly community and public beyond the campus. There must be connections (intellectual and scholarly) that make sense to the reviewer.
- **an elegant argument**
An NEH program officer once sighed, "No one would think to write a sonnet without reading good sonnets." An NIH program officer likened proposal writing to all other scholarly writing, as it demands the same professional attention and competencies.
- **a reasoned and reasonable argument**
Peers who serve as reviewers know precisely what it will take to undertake a successful project and if, where, and how it will make a difference.

ADVICE TO PROPOSAL WRITERS



A COMPILATION FROM NIH

Development of your ideas is extremely important. You should present your research logically and clearly, and show that your research is meaningful. Describe explicitly your hypothesis and how it will be tested. Be sure that your proposed project has coherent direction; sections are well-coordinated and clearly related to a central focus.

Refer to the literature thoroughly and thoughtfully. Explain what gaps in the literature would be filled by your project. In the past, research proposals have not been funded when applicants seemed to be unaware of relevant published work or when the proposed research or study design had already been tried and judged inadequate.

Where appropriate, include well-designed tables and figures. Formulate titles that are accurate and informative. Try to develop a clear, concise, coherent scientific writing style. A few guidelines provided by NIH that may prove useful:

- using the active voice, which is more direct, less wordy, and less confusing than the passive voice
- keeping related ideas and information together, e.g., putting clauses and phrases as close as possible to the words they modify
- simplifying and shortening overly long and involved sentences and paragraphs
- eliminating redundant and awkward words, phrases, and sentences.

Be sure to allow time for a thorough editing and proofreading of your application. Ironically, many scientists who are extremely precise in their research procedures do not take the same care in writing their application.

A sloppy application with typographical and grammatical mistakes, information omitted, and unclear statements makes a poor first impression on reviewers. They may wonder about the care you will devote to the actual research.

If you cannot meet the deadline comfortably, consider submitting your best effort for the next receipt date.

What makes a strong project? How important is significance, impact, and innovation?

A strong proposal should have potential for significant impact! The research should address an important question or test a significant hypothesis. In addition to basic questions or hypotheses, a strong project might develop cutting edge methods, tools, or reagents to answer that important question and to move biomedical research over existing technical impasses. If all experiments worked, would anyone care about the results? Other scientists should find the results of meritorious proposals interesting, significant, and beneficial.

In a compelling project, the investigator has identified a problem that needs to be done, based on the research literature, the unresolved issues, the gaps in knowledge, and the limitations of current approaches. To get feedback and suggestions early, this applicant will have tested ideas by generating preliminary data and discussed ideas and aims at the outline stage, rather than after the proposal has been written.

— “Most Common Questions about NIH-AREA Grant Applications,” Jean Chin. *Council on Undergraduate Research Quarterly*, March 2004.

WRITING A COMPETITIVE PROPOSAL



BEFORE YOU WRITE

If a grant application is poorly conceived, loosely defined, illogically organized, or sloppily developed, the reviewer will have difficulty evaluating the objectives, methods, and anticipated value of the proposed project.... Writing a clear, sound proposal takes time and effort; hastiness is disastrous.

— Lois DeBakey, *Grants Magazine*.
Volume 1, No. 1, March 1978 (used with permission).

Familiarity with unpublished material is simply knowledge of the research activities and accomplishments of other investigators in your field; it is achieved through personal interactions in the “invisible college” to which most successful researchers belong.

— Adapted from George Eaves. NIH, 1983.

Thinking through your project clearly and thoroughly before beginning to write a proposal is crucial. Expert reviewers readily detect the tentative tone and evasive language of an application prepared prematurely or hastily. The time you spend on preliminary reading, thinking, and planning will compensate you fully, not only during the writing of the proposal but during its evaluation as well.

Drafting the proposal will be far easier, and your application will be far more convincing if you understand the project more thoroughly, with all its implications. The first principle of persuasive exposition is to have a clear and thorough knowledge of your subject and of the project you wish to pursue.

Fix firmly in your mind your ultimate objective: to convince the reviewers that you have the critical faculties to identify a need or a gap in knowledge and that you possess the creative imagination, reasoning ability, and dedication to devise and implement a method of filling that need or gap.

“Think like a wise man but communicate in the language of the people.” No better advice can be given the petitioner for funds, for rational thinking and clear, simple language are requisites of an effective proposal.

The principle is to “...avoid mixing the process of composing with the process of revising; draft the proposal concentrating on the coherent presentation of ideas rather than interrupt the flow of ideas to polish and refine as you go along.”

The way you write your proposal will disclose your ability to think clearly and to express those thoughts in simple, cogent terms.

— Lois DeBakey, *Grants Magazine*. Volume 1, No. 1, March 1978 (used with permission).

Too often aspiring poets try to write their 10th poem before they have written poems one through nine.

— Henry Taylor, Pulitzer Prize Poet

WRITING A COMPETITIVE PROPOSAL



AS YOU WRITE

As with a scientific publication, you should present your research logically and clearly, and show that your research is meaningful. Explicitly describe your hypotheses and how they will be tested. Be sure that your proposed project has a coherent direction, that the various sections are well-coordinated and are clearly related to a central focus.

Ironically, many scientists who are extremely precise in their research procedures do not take the same care in presenting their research. A sloppy application with typographical errors makes a poor first impression on reviewers. They may wonder about the care you will devote to the actual research.

— *NIH Publication #13*, August 1987.

1. Write about people, things, and facts.
2. Write as you talk.
3. Use the first person.
4. Put yourself in the reader's place.
5. Forestall misunderstandings.
6. Plan a beginning, middle, and end.
7. Go from the rule to the exception, from the familiar to the new.
8. Use verbs rather than nouns.
9. Use the active voice and a personal subject.
10. Specify. Use illustrations, cases, examples.
11. Start a new sentence for new ideas. Keep sentences short.
12. Keep your paragraphs short.
13. Make your writing interesting to look at and easy to read.

— Rudolf Felesch, *How to write, Speak, and Think More Effectively*. NY Harper and Brothers, 1960.

Once you have completed the second draft, put it aside for a few days. Then reread it several times, each time with a different set of criteria in mind, beginning with the larger matters (accuracy, clarity, logical development and coherence), then turning to syntax and diction (grammatical integrity, precision, conciseness, punctuation), and finally general readability. Then, proofread the final typescript carefully, and make sure that all references cited have been verified.

— Lois DeBakey, *Grants Magazine*. Volume 1, No. 1, March 1978 (used with permission).

Do not assume that reviewers will “know what you mean.” Describe in detail the experimental design and procedures to be used to accomplish the specific aims of your project. While you may safely assume the reviewers are experts in the field and familiar with current methodology, they will not make the same assumption about you.

Thus, it is not sufficient merely to state, for example, “a variety of viruses will be grown in cells using standard in vitro tissue culture techniques.” The reviewers will want to know which viruses, which cells, and which techniques, as well as the rationale for using the particular virus-cell system and exactly how the techniques will be used.

The burden of proof is on you to show, through a clear, succinct, yet detailed explanation, that you understand and are capable of handling the research methodology.

— from *Helpful Hints: Preparing an NIH Research Grant Application*, George Eaves. 1989.

WRITING A COMPETITIVE PROPOSAL



ADVICE FROM FIPSE

With respect to how much and what kind of preliminary data are necessary, reviewers want to determine whether the applicant and collaborators, if any, have the appropriate and necessary expertise and whether the reagents and methods proposed are in hand.

The kind of preliminary data required depends a lot on the questions or hypotheses you are posing. If you are planning to determine the mechanism of a membrane protein, for example, you should have this protein cloned, expressed in sufficient amounts for the studies, and purified in functional states.

If you are searching for an unknown factor, you should have reagents, screens, and assays in hand. Experience with other factors would be helpful. If you find that you really need a lot more preliminary data than you have time or funds for to start the project, perhaps your questions need modifying and backing up.

If you need preliminary results from one or two crucial and obvious experiments to support your hypothesis and to make your proposal stronger, just do it!

— “Most Common Questions about NIH-AREA Grant Applications,” Jean Chin. *Council on Undergraduate Research Quarterly*, March 2004.

Before...

1. Innovate— and if you can't think of anything brand new, do something unexpected. This is your angle; now feature it.
2. Do your homework. Find your niche. What are others doing about this issue? Show that you know, and place your project within this context.
3. Build a team. Mix things up. Build and cross bridges— among departments, disciplines and schools. Between academia and business. Between schools and colleges. Include students and administrators.

Be generous: share work and ownership. Appoint an advisory committee of famous people in your field--to get a head start on dissemination— but don't give them much work to do, and you won't need to pay them very much.

4. Find the right funding agency. Know agency interests, culture, and style. Submit applications to more than one agency (but, of course, don't accept multiple grants supporting the same activities).
5. Use the phone. Call a program officer, briefly summarize your idea, and prepare specific questions. Take the program officers' advice very seriously, but exercise your own best judgment. Some agencies are more directive than others.

During...

6. Use a journalistic writing style. Use the “W” words of journalism: Who, what, when, where, why and how. Also use bullets, lists, outlines, diagrams, tables. Don't obsess on any topic, even if it is important.

Make it interesting; let every sentence do a job. Assume that your reviewer is reading in bed, falling asleep— which is very likely true.

7. Follow guidelines to the letter. Keep them before you as you write (but don't quote them back to the agency).

Match headings in the proposal to headings in the guidelines so the reader doesn't have to hunt for needed information. Use “signposts”: I am about to explain why... I have just argued that...

WRITING A COMPETITIVE PROPOSAL



ADVICE FROM FIPSE

8. Build in continuation, evaluation, and dissemination. Factory-installed, not an add-on and not postponed to the last year. Continuation plans are an indicator of institutional commitment. Evaluation should be independent and objective, but doesn't need to meet standards of the *Journal of Psychometrics*— use common sense.

What would you want to know about the success of an idea before you would consider adopting it? Evaluate “politically”— i.e., with an eye toward later publicity. What would you want to see in headlines? Note the difference between passive and active dissemination. (The first disseminates admiration, not innovation.)

9. Watch the bottom line. Share costs. Know how to cut costs without hurting the project: request replacement salaries instead of released time, charge actual instead of estimated benefits, follow agency recommendations on indirect costs.
10. Leverage funds. Solicit funds from third parties, contingent on grant funding. This can be done in advance (to beef up cost share and make proposal more attractive), as well as after project is funded.
11. Get a sharp (toothed) reader. Best: someone unfamiliar with your field, your project. Not an editor/proofreader. Have them read final draft without taking notes. Then ask them to tell you— from memory— what the project will do, how it will do it, why it is significant, and how it is different. Rewrite proposal if these answers aren't clear and correct, or they don't flow effortlessly.
12. Write the abstract last. Put in your key innovation. Write 3 versions: one page (first page of proposal, whether requested or not), one paragraph (if requested), and one line, the proposal title— which you should think of as a mini-abstract (descriptive and intriguing).

Don't repeat abstract or proposal text. Prepare for the possibility that some sleepy reviewer might read only the abstract.

— *Fund for the Improvement of Postsecondary Education— Funding Your Best Ideas: A 12-Step Program*. Joan Straumanis, Former FIPSE Program Officer, 1998.

OTHER GOOD ADVICE

- Request reviews. Use the phone to ask agency staff why the project was or was not funded. If you are rejected, you can always try again.
- If you get funded, let your agency help you. Brainstorming. Troubleshooting. Running interference with administration. Leveraging funds. Making you famous.
- Help your institution, department, etc.

— *Fund for the Improvement of Postsecondary Education— Funding Your Best Ideas: A 12-Step Program*. Joan Straumanis, Former FIPSE Program Officer, 1998.

WRITING A COMPETITIVE PROPOSAL



WRITING AS SCHOLARSHIP

A good proposal is always readable, well-organized, grammatically correct, and understandable.

Be explicit in your narrative about how the program will make an improvement. This narrative must contain specifics including details of experiments and/or applications, both to show that planning has been done and to help reviewers understand why the particular application you propose is better than other ideas. You and your colleagues should think through several iterations of the definition of the project.

The narrative should be specific about the proposed activities. Reviewers want details of the project's organization, the course content, laboratory and other inquiry-based experiments, and participant activities, both to show that groundwork has been laid and to help them understand why the particular ideas you propose are better than others.

— Excerpted from *NSF 98-91: A Guide for Proposal Writing*. <http://www.nsf.gov/pubs/1998/nsf9891/nsf9891.pdf>

The qualities of an “ideal” prose should include the following:

1. Clarity: which has two aspects:

- conciseness, or as much brevity as is compatible with the function of efficient communication
- perspicuousness, which is clarity sustained over the larger units of expression: the paragraph, thesis, or book.

2. Adequacy: of vocabulary, choice of words, and sometimes of images, that are suitable to the tone and intention of the writer.

3. Pleasantness: all aspects of style which increase the efficiency, pace, and “memorability” of communication, by doing away with the negative factors that...are impediments to the even progress of reading.... Under this heading, we may include:

- a consistent system of punctuation, related to the intrinsic logic of the prose sentences and to the conventions of the time
- variation in constructions and sentence lengths to avoid monotony
- the agreeableness of sound, an ear for “the other harmony of prose;” insofar as this pleasure is compatible with the overriding conditions of clarity and adequacy.

Note: There are no short-cuts to the achievement of an adequate prose style. As with all other skills, it can only be achieved by practice; and like them it rusts, or atrophies, without practice.

The essentials are time for meditation, practice, the cultivation of control, and individual criticism and correction of what is written.

— from *Science in Writing*, T. R. Helm. Macmillan, 1961.

WRITING A COMPETITIVE PROPOSAL



THE FIRST DRAFT

1. GOAL: What do I have to accomplish?
2. NEED/OPPORTUNITY: Why does this have to be done now or why can this be done now?
3. CONTEXT & CREDIBILITY: How does this project relate to external realities?
4. PLAN OF ACTION: What are the steps through which I/we intend to accomplish these goals?
5. RESOURCES: What will be required in people, time, expertise, to move ahead successfully?
6. EVALUATION: How will I be able to determine if my goals have been met?
7. DISSEMINATION: Who needs to know about this work, and how will they know?

POST-DECISION FROM THE FUNDING AGENCY



QUESTIONS IF THE DECISION IS NO

Question:	Yes	No
<p>Did I provide all the information requested, in the order and manner it was requested? Does the format for my proposal give a clear outline for the reviewer to use to locate my responses to the requested information?</p> <ul style="list-style-type: none"> ▪ anything missing, too vague? ▪ logical sequence of activities? 		
<p>Is there logic between the budget, the timetable, and the activities outlined in the narrative? Could the budget be read as a summary of my request?</p>		
<p>Did I make it clear that I knew what others were doing in related areas? Did I make it clear how my project built upon/differed from those endeavors?</p>		
<p>Would an intelligent lay person understand what I propose to do, or would it take someone with specialized experience and expertise to understand my proposal?</p>		
<p>Have I assumed that this is such a wonderful idea that no one could turn me down? If I were making decisions about funding projects, would this have the highest priority (at least in its present state)?</p>		
<p>Did I make it clear what the tangible result would be at the end of the grant period?</p> <ul style="list-style-type: none"> ▪ to whom will this make a difference? ▪ how will anyone know what I have accomplished? ▪ did I have indications of support from the right people? 		
<p>Did the submitted proposal itself demonstrate the quality of my work?</p> <ul style="list-style-type: none"> ▪ no errors in grammar, facts, mathematics, etc.? ▪ consistent style, format? ▪ no inflated rhetoric? ▪ was the outline, table of contents, citations of attachments adequate? 		
<p>Is this so important to do that I will proceed anyway? Are there other potential sources of funds?</p>		
<p>Do I need to make some further professional contacts; do I need to move one step farther along on this project before I can submit a competitive application?</p>		
<p>Did I request verbatim reviewer comments? Did I analyze those carefully?</p>		

POST-DECISION FROM THE FUNDING AGENCY



QUESTIONS IF THE DECISION IS YES

Question:	Yes	No
Am I certain all the internal arrangements are in place? <ul style="list-style-type: none"> ▪ budget/accounting/stewardship? ▪ release time? ▪ lab space/equipment? ▪ reporting deadlines posted with assignments made? 		
Do I understand all policies and procedures for grants management— on my campus and at the agency?		
Did I request verbatim reviewer comments? Did I analyze those carefully?		
Do I remember what I promised I would do? <ul style="list-style-type: none"> ▪ stewardship of time and money ▪ connections to professional/educational organizations ▪ journal articles/books 		
Do I have access to all the resources I need to move ahead expeditiously with this endeavor?		
Do the right people know that the award has been made? <ul style="list-style-type: none"> ▪ professional contacts outside the college ▪ colleagues on your campus (including the PR people) 		
Has a note of thank-you been sent? To whom?		
Have I already thought what my next step might be so that this project leads logically to the next project?		
Do I have a “tickler file” in place to be in contact with the funding agency in regular, significant ways?		
What might go wrong? <ul style="list-style-type: none"> ▪ understanding the institutional context ▪ understanding the societal context ▪ understanding the disciplinary/professional context ▪ other? 		

SHAPING A MEANINGFUL CAREER



FINAL WORDS OF WISDOM

Like any profession, undergraduate teaching offers several ways to become engaged in the job. For undergraduate teachers, four areas of possible engagement are key....

There is no question that *educating students* is the core challenge of the teaching profession. An engaged teacher enjoys and finds meaning in this central task, mediating between the students whose learning is the goal and the set of questions that animate the domain of knowledge. A profession becomes a vocation when those doing it believe that its challenges matter, and when the work connects them to what they value most.

The challenge of *preserving and advancing knowledge* provides a second form of engagement for college teachers. In this case, they are rewarded by knowing that through them something of value survives as a living part of the culture.... It is obviously not the case that devotion to one's discipline has to conflict with doing good work as a teacher. Indeed, a teacher indifferent to his area of study is unlikely to engage students.

Serving the needs of the institution is an important element in any profession....When professionals find a place in an organization that shares their values, a sense of vocation is more likely to flourish. A clearly defined institutional mission provides a compelling compass for action and a basis for judging if one is doing good work. The presence of such a mission is a sign that an ethos genuinely exists within the institution— an ethic that expresses the defining spirit and values of the community.

The fourth area of engagement for teachers involves *serving the needs of the broader society*. Many teachers hold values that shape their educational goals. This kind of engagement can be consistent with one's professional commitments but lie outside one's daily job....

Teachers become engaged in their work to the extent that they find enjoyable challenges in one or more of these areas, and to the extent that they find that those challenges are in line with their values.

— Jeanne Nakamura and Mihaly Csikszentmihalyi, "Engagement in a profession: the case of undergraduate teaching."
Dedalus Summer 2005, American Academy of Arts & Sciences.

Part III: Addendum

LINKING INSTITUTIONAL & FACULTY FUTURES



WHAT DEANS CAN DO

The fact must be faced that colleges and universities are in a competitive world and that seeking an advantage is the first principle of strategic planning. Such an advantage can be based on having a desirable location, on a certain person or group of persons, on the historical traditions... or on other particular strengths developed over the years.

Any institution has such strengths on which to build and has characteristics that only a few can match. The aim of strategic planning is to [identify your] strategic position.

— *Richard Cyert, 1983 NACUBO Annual Meeting.*

- Chart the institutional vision/strategic plan in a way that connects easily to proposal-writing (what do we want to do: GOAL; why do we want to do it: NEED; how will we go about it: ACTIVITIES; etc).
- Link dreams of individual faculty and departments to the institutional vision, understanding that agencies will be looking for this connection.
- Be aware that funding agencies require much of the same information and materials that deans ask for on a regular basis (“What are your goals for student learning/for your life as teacher/scholar? What is needed to achieve those goals? What difference would this make?”).
- Have policies and procedures for seeking internal grant support duplicate those that are used by external funding agencies, to give faculty opportunity to learn how to do it right.
- Know enough about external funding possibilities to be able to respond to a new idea with, “well, let’s see; have you thought about...?”
- Know enough about external funding possibilities to discover creative (unexpected/inspired) ways to achieve deanly/institutional goals.
- Keep faculty in touch with what is happening in other settings (“how will this project build on the work of others; fill gaps in what is known...?”)
- Consider how individual faculty should be thinking about proposal writing (connecting to sabbaticals, etc.— helping each to become more competitive and to develop a rhythm for professional growth that makes personal and institutional sense).

LINKING INSTITUTIONAL & FACULTY FUTURES



WHAT DEVELOPMENT OFFICERS CAN DO

- Know the institutional proposal-writing history and traditions.
- Know all about priorities and policies of potential funding sources.
- Have a three-year timetable for seeking support that complements the institutional strategic plan.
- Meet regularly with the president, senior officers for academic affairs, and institutional advancement.
- Work closely with other administrators (budget officers, institutional researchers, etc.).
- Have an on-campus network of people who make things happen (and perhaps off-campus also).
- Have antennae out at all times to explore and discover opportunities for proposal writing and funding possibilities.
- Take final responsibility that submitted proposals reflect institutional priorities, have been developed consonant with institutional policies, and are not “turkeys.”
- Have systems in place to respond quickly if the decision is “yes.”
- Know what steps to take if the decision is “no.”
- Organize the celebrations at the point of proposal submission/decision made.

All too often, a leadership team thinking about new directions fails to think through and put in motion a communications plan as an integral prelude to and part of the anticipated change.

Developing a thoughtful communications plan and carrying it out effectively are vital aspects of any successful significant change. Communication, with different levels of intensity and of varying breadth and scope, must occur as the process proceeds.

— From the *Project Kaleidoscope Handbook for Department Chairs, Volume IV: What works, what matters, what lasts*, 2005.

RESOURCES



SELECTED REVIEWER COMMENTS— GENERAL

1. “It would have helped to have an annotated bibliography, or to have major scholarship discussed within the proposal. I had no sense as to how this project related to work done by others.”
2. “With a sharper focus on the more doable parts of the proposed research, as well as some more homework about what others are doing, this could turn into a fundable project. Is it possible to limit the scope without sacrificing the integrative approach? Would shortening the time period to be covered be a better way to limit the project?”
3. “This project is not only scientifically valid and timely, but is ideally suited to undergraduate research students. The intellectual challenge of the chemistry involved is a very important teaching tool.”
4. “Some of the evaluators were not persuaded by the argument on the need for a translation of... They could not envisage an audience beyond specialists in the aforementioned areas.”

NATIONAL SCIENCE FOUNDATION		PROPOSAL REVIEW FORM		OMB NO: 3145-0060 NSF FORM 1 (10/98)
PROPOSAL NO:	INSTITUTION:			
PRINCIPAL INVESTIGATOR:	NSF PROGRAM:			
PROPOSAL TITLE:				
<p>*Criterion 1: What is the intellectual merit of the proposed activity?</p> <p>*Criterion 2: What are the broader impacts of the proposed activity?</p> <p>Please attach a separate sheet(s) with your evaluation of this proposal with respect to each of the above criteria per instructions on the previous page. Your specific comments on the proposal's strengths and weaknesses are critical. Do not share, copy, quote or otherwise use or disclose material from this proposal. Destroy it after you complete your review.</p> <p>Summary Statement: (Include comments on the relative importance of the two criteria in assigning your rating. Continue on an additional page, if necessary.)</p>				
<p>Overall Rating (check one):</p> <p><input type="checkbox"/> Excellent: Outstanding proposal in all respects; deserves highest priority for support.</p> <p><input type="checkbox"/> Very Good: High quality proposal in nearly all respects; should be supported if at all possible.</p> <p><input type="checkbox"/> Good: A quality proposal worthy of support.</p> <p><input type="checkbox"/> Fair: Proposal lacking in one or more critical aspects; key issues need to be addressed.</p> <p><input type="checkbox"/> Poor: Proposal has serious deficiencies.</p>				
YOUR IDENTITY WILL BE KEPT CONFIDENTIAL				
<p>NSF keeps reviews and your identity as a reviewer of specific proposals confidential to the maximum extent possible. We will, however, send the Principal Investigator(s) a copy of this review without your name and affiliation.</p>				
REVIEWER'S SIGNATURE:		REVIEWER'S NAME AND ADDRESS (TYPED):		
OTHER SUGGESTED REVIEWERS (OPTIONAL)		FASTLANE PIN:		
PLEASE RETURN BY:				

RESOURCES



SELECTED REVIEWER COMMENTS— NSF: WHAT WORKS

5. “Faculty expertise is fine; formal education in area, publications are congruent with proposal; obviously the PI is up to date regarding the goals of undergraduate education.”
6. “The thorough preparation for the realistic use of the proposal equipment makes this proposal stand out.”
7. “The faculty appears to be well on their way to preparing laboratory exercises that are on the cutting edge of today’s technology.”
8. “FUND IT! The development plan is exceptionally well presented and integrated into a research education program with a lot of excellent institutional support and recognition.”
9. “The curricular project has been well planned and thoroughly piloted. There is a realistic development plan, the equipment requested is appropriate to and adequate for the project and institutional support for the project is very strong. The faculty have already begun disseminating the results of their pilot project.”
10. “This is an extremely well thought out and researched plan. I am very impressed with all aspects of the Calculus proposal. It is exciting and deserves funding. Everything is in place but the computers. The DE and Lin Alg portions are less developed, but I’m willing to buy into them based on the track record of the PI’s. Four out of seven faculty are involved, the model math program has been spread to the local high school.

The university faculty spent a summer remodeling a classroom for a lab. The pedagogical basis is impeccable. The implementation process is well planned. My only reservation is the proliferation of software packages: True Basic Calc, Mathematica, Mac Math, Matlab, TrueBasic; five packages for nine courses. Is it necessary to put this burden on students? And are Mac Quadra’s really justified? But overall, an excellent project.”

11. “The faculty are capable and have clearly demonstrated the requisite expertise and commitment to implement this project. They clearly have institutional support. They have an awareness of the current educational issues. They have been careful to investigate currently available materials and try out those which seem most suitable.

They have made use of available computer resources first to be sure that their program was effective before seeking more expensive equipment. They have proposed a well-thought out implementation plan. The Calculus in Context materials and the software packages are appropriate. The dissemination plan is strong especially with the teacher training in the local high schools.”

12. “I am impressed by everything which has been done and by the careful and prudent manner in which they have proceeded at every step of the way.”

RESOURCES



SELECTED REVIEWER COMMENTS— NSF: WHAT DOES NOT WORK

13. NO PROOF OF INFORMED AND REALISTIC PLANNING
 - “As for the budget, it is much too ambitious and overblown. They could do the same for almost half the funds requested.”
 - “...specific details are lacking which would allow evaluation of effectiveness of the plan...Teaching strategies should have been discussed...An outline should be included giving plans for each of the disciplines that are involved... Samples of proposed lessons are not included.”
 - “Unclear why groups of seven students are used: seems like it may be too large a group, some students may just ‘roost.’ How will test groups be chosen? Is your nonrandom selection process biasing the study? How will students for traditional groups be chosen?”
 - “What skills will be introduced, how and at what levels? While faculty expertise is clear and the college will support curricular development, the college needs also to provide for faculty/computer center time to configure the lab facility.”
 - “It is difficult to assess several aspects. What is the content of the course? What are the minimum goals of the open-ended learning mode? How will the assessment of what students are gaining be made? It is good to have them learn ‘process,’ but at some level they need a basic array of facts or contents from which to build.”
14. PLAN IS NOT A LOGICAL STEP TO TAKE AT THIS TIME
 - “Seems an equipment replacement either for something that is already sufficient, or something which is too sophisticated. Resubmit with more details of needs for this machine for use in undergraduate program.”
 - “Few statisticians would recommend that undergraduate majors in the social or biological sciences begin their study of statistics with statistical theory.”
 - “It is not clear who is going to do what. Are the faculty supported by this grant proposal developing the modules or are mechanisms being set up to make it easy for ordinary faculty to instantly create lessons to meet the individual demands for a particular class?”
 - “If students are weak in statistics, perhaps greater emphasis should be placed on an introductory statistics course.”
 - “...absolutely no indication of how this would improve [the institution], let alone improve science education.”
5. PROJECT WILL NOT LEAD TO OUTSIDE APPLICATIONS
 - “...this could not serve as a national model. A program that is a national model should be readily exportable. There should be reasonable expectation that this program could be incorporated into any curriculum without respect to financial status of the institution or student.”
 - “A big question is whether this will be a model. It could, but in a labor intensive approach that will work best in a small school, not in one with 900 students or so.”
 - “This approach is not completely novel— it has been used in physics and something similar has been developed [elsewhere].”

RESOURCES



SELECTED REVIEWER COMMENTS— NEH FELLOWSHIP & SUMMER STIPENDS

16. “This is an excellent, well-conceived proposal on a very timely project. He clearly describes his choice of research topic, materials and approaches and the interpretive issues he will address. The proposal shows outstanding promise of a major contribution to his field, one that will appeal to both a scholarly and lay audience.”

17. “Particularly compelling is the juxtaposition of issues of historic and contemporary American life... and his comparative analysis of regional differences. The study is in the final stages and the applicant can justly claim a solid track record.”

18. “I do not find this a very clear or convincing proposal. Neither the methodology or research materials seem impressive.”

19. “Your proposal was found by the reviewers to be both interesting and worthwhile. However, there were several concerns: one was that you had not differentiated your work from that of the major scholar in the field and that you had not indicated how you would build from or contribute to his work or of others in your field.

In the final analysis, because of these and other doubts, the decision was that other proposals offered potential of greater importance to the field of political science. Perhaps the above summary of the reviewer discussion [omitted to preserve anonymity] will be of help to your work and to future applications you may consider to NEH.”

20. “The applicant’s study is sufficiently well along that it could probably be completed without NEH aid, if funds are short. (It should be noted that she has spent the past year in Italy) the project itself is certainly a worthy one, and is clearly outlined here, although we are left to wonder a bit about its most important divergence(s), if any, from the completed dissertation.”

21. “This is a very solid proposal, one that aims at extending the applicant’s dissertation research to put his subject in a more national perspective. The subject is certainly interesting, timely, and significant. The proposal— if a bit too jargonish— is nevertheless clear.”



Workshop Evaluation/Feedback Form

Event Date:

Location:

Please indicate your level of agreement with the statements below.

5 – Strongly Agree 4 – Agree 3 – Neither Agree nor Disagree 2 – Disagree 1 – Strongly Disagree

	5	4	3	2	1
I was intellectually engaged with the ideas presented.					
I was intellectually engaged throughout the activities.					
I feel that my time was well spent.					
The workshop presenter was highly qualified in the field.					
The workshop presenter held my interest throughout the session.					
The workshop presenter was well prepared.					
I would like to attend another event on this topic.					
I increased my knowledge/understanding of the topic.					

How will you use the information, knowledge, or skills gained from this workshop?

What was the most beneficial part of the workshop?

Other comments: