



WHAT MATTERS - ABOUT PKAL

PROJECT KALEIDOSCOPE: MISSION, VISION & GOALS

I. PKAL MISSION

Project Kaleidoscope (PKAL) is one of the leading advocates in the United States for what works in building and sustaining strong undergraduate programs in the fields of science, technology, engineering and mathematics (STEM). PKAL is an informal alliance taking responsibility for shaping undergraduate STEM learning environments that attract undergraduate students to STEM fields, inspiring them to persist and succeed by giving them personal experience with the joy of discovery and an awareness of the influence of science and technology in their world.

II. PKAL VISION

PKAL's vision is of a future in which individual colleges and universities see themselves as part of a larger community, one that is facing similar challenges and opportunities and is committed to ensuring that all American undergraduates have access to robust learning experiences in STEM fields. And, that this community takes its responsibilities as leader seriously, setting visions, explaining and communicating, taking risks, etc. in working to realize that vision.

III. PKAL GOALS, STRATEGIES, ACTIONS

GOAL 1: *To keep the focus on the future, determining what kind of undergraduate STEM community will continue to serve the national interest now and for years to come and ensuring that such an undergraduate STEM community flourishes.*

STRATEGY (a): *to keep antenna alert to the "pioneers" at the cutting edge, those working at the edges of what is and already exploring what might be, and spotlight their efforts*

- ♦ build networks of contacts in all communities of stakeholders; appoint "PKAL scouts" to find these people; establish strong and representative advisory groups
- ♦ gather and tell stories of risk-takers, out-of-the box thinkers in PKAL seminars, meetings, and through PKAL publications
- ♦ provide a venue (real and electronic) for conversations among these pioneers.

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, performe, 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.

— José Ortega Y Gasset. *Mission of the University*. Norton, 1930.



PROJECT KALEIDOSCOPE: MISSION, VISION & GOALS

STRATEGY (b): *to keep the focus on the kaleidoscopic approach to transforming the undergraduate learning environment, encouraging college and university leaders to do so also*

- ♦ spotlight the work of leading institutions (programs, societies, etc.) that are at the point of scaling-up and institutionalizing what works for their community, work that can serve as models for adapting by others
- ♦ orchestrate all PKAL activities to have critical perspectives at the table (presidents, deans, faculty at all career stages, development officers; architects; public officials; etc.)...in essence practicing what we preach
- ♦ examine each aspect of each issue, project, institution to be spotlighted, analyzing and understanding what works from the perspective of the wide-ranging decisions made at the institutional level about developing/evaluating curricula, faculty, facilities, budgets, etc.

STRATEGY (c): *to advance public awareness and understanding of the contribution that a robust undergraduate STEM community makes to the national interest*

- ♦ prepare templates for advocacy pieces that can be used at the local, regional and national effort
- ♦ assemble in one place, for easy access by advocates, data and materials that document and reinforce claims about the contribution
- ♦ develop a communication plan, within and beyond PKAL, that becomes the “water on the rock” process of advancing public awareness and understanding.

GOAL 2: *To be a primary source of resources (ideas, people, connections) that inform the work of individuals, departments, institutions and other stakeholders committed to the continuing effort of building and sustaining strong undergraduate STEM communities, locally and nationally, and lead them to productive action.*

STRATEGY (a): *to orchestrate face-to-face meetings for discussing critical issues to be addressed by STEM leaders and crafting agendas for action*

- ♦ support national, regional and topical networks of individuals and groups with common objectives
- ♦ organize national meetings on specific topics that engage and inform both national leaders and the public about issues and actions to be taken
- ♦ host a significant number of seminars and other events each year that serve as a venue for institutional teams to connect their institutional dreams to larger national initiatives, and ultimately, to a specific plan of action
- ♦ distill and disseminate best ideas and key lessons learned from those meetings.

Commitment to both teaching and scholarship combine in the undergraduate setting to provide first-rate education for students in science and mathematics. With that commitment, responsibilities become opportunities; without it, they become onerous obligations.

Committed faculty members teach to increase their students’ “hands-on” connections to the sciences and mathematics. Faculty view their own activity as professionals always with an eye to the impact such activity can have on their teaching.

Successful faculty are those who understand that undergraduate students play an important role in the intellectual community of learners. Learning is not a uni-directional endeavor, but one in which faculty learn new ways of looking at old questions from the students they teach.

Fresh student perspectives infuse faculty with new insights into the scientific endeavor and promote a shared approach to understanding scientific questions. A positive “esprit de corps” between undergraduate students and faculty helps students aspire to career goals in science and mathematics.

— from PKAL Volume I: *What Works-Building Natural Science Communities*. 1991

PROJECT KALEIDOSCOPE: MISSION, VISION & GOALS

STRATEGY (b): *establish an electronic presence for PKAL for the distribution and discussion of critical issues to be addressed by STEM leaders into the future*

- ♦ continue to develop and expand PKAL Volume IV, capturing materials from PKAL and other relevant activities
- ♦ figure out how to leverage the expertise and interest of peer organizations in sharing materials and in facilitating electronic conversations (i.e., SCUP)
- ♦ focus on making new hires and engaging advisory committees to ensure the high quality of PKAL electronic publications.

STRATEGY (c): *to spotlight and build connections between and to the work of all stakeholders engaged in research and other activities that influence the quality and character of America's undergraduate STEM community, now and into the future*

- ♦ discover and disseminate the work of rising faculty leaders, including the PKAL F21 community
- ♦ continue developing PKAL print publications that inform and enhance the work of all stakeholders
- ♦ tell stories of individual and institutional leaders (in events, print and electronic media) that inspire and inform the work of the larger community.

GOAL 3: *To identify, nurture and sustain a leadership cadre for undergraduate STEM that has a visibility at the local, regional and national level, that understands the changing context for the work of STEM leaders (internal and external to the campus) and is committed for the long-term.*

STRATEGY (a): *to link the theory on leadership to the practice of leadership within STEM communities*

- ♦ reshape the PKAL F21 community into an organization that better reflects current opportunities for 21st century STEM leaders
- ♦ interview and capture insights on leadership from leaders in diverse spheres of leadership responsibility, and integrate them into all PKAL activities.

STRATEGY (b): *to facilitate informed discussions of current and rising leaders about the future to shape their understanding of personal and institutional responsibilities of leadership*

- ♦ collaborate with disciplinary and other peer organizations in infusing leadership development into their regular agenda
- ♦ develop templates for individual presentations and short (½ day; one day), weekend and longer sessions on developing leaders for undergraduate STEM
- ♦ make available (print/web) a wide range of resources on what leadership in undergraduate STEM means and how to become a confident and contributing leader.

STRATEGY (c): *to keep PKAL as a learning organization, itself understanding and shaping the future*

- ♦ examine how advances in science (STEM) are and will be affecting the work of STEM leaders
- ♦ bring together “think-tank” leaders to explore and distill new challenges and opportunities, i.e., the PKAL roundtables on the future. ■