



## WHAT WORKS - A PKAL TOOL

# THE PKAL PLANNING PROCESS

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### Reflects contemporary pedagogical approaches

**Goal: Tackling the work of transforming undergraduate STEM with approaches and tools of STEM professionals.**

Strategies:

- ◆ Assemble a leadership team that includes persons with diverse interests, experiences and expertise, each capable of informing, influencing, shepherding and supporting the process and outcome of the planning.
- ◆ Analyze present circumstances and context, defining the broad nature of the challenges and opportunities facing the community.
- ◆ Identify key questions, shaping an “agenda for action” to answer them that takes advantage of the widest range of available experience, expertise and resources.
- ◆ Move from analysis to action.
- ◆ Reconvene regularly, sharing emerging answers, insights and resources of potential value; revisit the questions, agenda for action and process.
- ◆ Communicate clearly, broadly and often, building wide-spread ownership in the process and the outcome of the planning.

### Centers on student learning

**Goal: Serving a vision that all 21<sup>st</sup> century undergraduates move from campus to the world beyond the campus well-equipped with deep understanding about contemporary scientific and technological issues and with the skills, capacities, and willingness to use that understanding in addressing those issues as citizens and in the workplace.**

Strategies:

- ◆ Understand who your students are, what they bring to and gain from their current STEM learning experiences, their learning potential and career aspirations.
- ◆ Translate research on how people learn (HPL) into critical questions to be addressed in the planning process on your campus.
- ◆ Examine each part of the institutional infrastructure to determine if and how it contributes to strengthening student learning in STEM fields.
- ◆ Focus on the future, on the world in which your students will live and work upon graduation, as well as on the changing student demographics in our country.

**Jeanne L. Narum**  
Director  
Project Kaleidoscope

This planning tool emerged from the 2004-2007 PKAL Leadership Initiative (LI) an NSF-funded initiative.

The intent of this initiative was to nurture campus-based leadership teams tackling the interesting and challenging work of building and sustaining robust STEM learning environments for undergraduate students.



# THE PKAL PLANNING PROCESS

## Develops leaders and an institutional culture of leadership.

**Goal:** Generating a visible and evolving cadre of persons in positional and non-positional leadership taking responsibility for shaping an institutional vision and achieving a culture in which that vision can be realized.

Strategies:

- ◆ Understand both the leadership culture of your community and the current and anticipated roles and responsibilities of your community with opportunity and responsibility to foster meaningful and lasting change.
- ◆ Translate leadership theories into the critical questions about the role of leaders and the culture of leadership within your community that must be addressed in the process of change.
- ◆ Examine where and how policies, programs and practices of your community reflect intentionality in identifying, nurturing and celebrating the work of transformative leadership.
- ◆ Build an infrastructure for sustaining a culture of leadership within your community over the long-term.

## Focuses on *what works*

**Goal:** Building a collaborating, problem-solving community within and beyond individual colleges/universities/disciplinary societies/stakeholder institutions that are taking leadership responsibility for meaningful and sustainable transformation of undergraduate STEM at the local and national level.

Strategies:

- ◆ Understand current and anticipated challenges and opportunities affecting the work of those responsible for ensuring a robust 21<sup>st</sup> century STEM learning environment for undergraduates in American classrooms and labs.
- ◆ Investigate the work of pioneering individuals and institutions meeting those challenges and capitalizing on those opportunities.
- ◆ Distill their experience to determine what works (how, why and for whom); then translating resulting data and information into theoretical guidelines and practical tools that serve the broader STEM community of innovators and adapters.
- ◆ Orchestrate a coordinated set of activities to inform the broader STEM community about how to begin, implement, and assess a process of change that: focuses on what works; engages leaders within an institutional culture of leadership; tackles change initiatives with approaches and tools of STEM professionals; and centers on student learning. ■

