

PERALTA COMMUNITY COLLEGE DISTRICT  
**Board of Trustees Agenda Report**  
**For the Trustee Meeting Date of September 13, 2011**

ITEM # 26

ITEM TITLE: *(Please define the subject; e.g., change order – Berkeley City College)*

Consider approval of application procedures for a proposal to the National Science Foundation Advanced Technology Education (ATE) Initiative requesting \$5,000,000 for a four-year Center grant.

**SPECIFIC BOARD ACTION REQUESTED:**

Laney College proposes to submit a proposal to serve as a National Science Foundation Advanced Technology Education (ATE) Center. The amount to be requested is \$5,000, 000 for a four-year grant. The mission of the proposed **Building Efficiency for a Sustainable Tomorrow (BEST) Center** at Laney College is to support the transition to high performance green buildings by creating a national forum on building efficiency issues and serving as a centralized resource on technician education, research, technology, and industry collaboration. Laney submitted a NSF Center grant proposal last year, was not funded, but strongly encouraged to reapply.

**ITEM SUMMARY:** (PLEASE DISCUSS THIS ITEM)

The mission of Laney College's **Building Efficiency for a Sustainable Tomorrow (BEST) Center** is to support the transition to high performance green buildings by creating a national forum on building efficiency issues and serving as a centralized resource on technician education, research, technology, and industry collaboration.

Project team members at Laney include: PI (Peter Crabtree), project manager (team oversight, grant administration), outreach coordinator (manages national instructor network and professional development activities), curriculum coordinator/faculty on release (documents and compiles program model, curriculum, and lab resources), staff service specialist, web consultant, and communications consultant to complete the following tasks:

- **Objective 1:** To create a national clearinghouse for the documentation and dissemination of building technician educational resources, including programs models, curriculum, course materials, and laboratory designs and specifications. Deliverables include
  - An interactive web-site with model program, curriculum, and course-level resource materials, center-sponsored research and links to other research, and a national directory of building technician education programs, for use by community college faculty and other key stakeholders.
  - Interactive webinars on key topics
  - A forum for threaded conversations and discussions, e-newsletter and e-updates, virtual laboratory tours, virtual lectures/demos on special topics, announcements of upcoming events
- **Objective 2:** To provide professional development opportunities and technical assistance for a national network of community college building technician educators. Deliverables include:
  - Annual week-long Summer Institute at Laney College
  - Annual two-day Winter Workshops at Laney
  - Minimum of four webinars per year
  - Site visits

- Objective 3: To support building technician curriculum alignment and articulation between high schools, two-year colleges, and four-year universities. Deliverables include:
  - High school STEM program outreach conducted through national community college partner network
    - Sample online curriculum modules, lesson plans, and classroom laboratory tools for teaching energy efficiency in buildings available on web site
    - Webinars for high school science teachers
  - Two-year and four-year college outreach conducted through national community college partner network and four-year university network
  - Community college-university program articulation models and best practices available on web site
    - Webinars for two and four-year faculty and administrators and articulation officers
  
- Objective 4: To showcase cutting-edge research and energy management tools from Lawrence Berkeley National Laboratory (LBNL), Pacific Northwest National Laboratory (PNNL), and research universities.
  - Disseminate information about products and services developed by research universities to a national network of community college building technician educators.
  - Host PNNL building efficiency train-the-trainers session for HVAC instructors
  
- Objective 5: To convene industry partners and other key stakeholders to support high-quality technician education programs at community colleges across the country.
  - Provide technical assistance, as needed, to community colleges in the national network to help them build quality industry advisory boards
  - Industry-created training modules and new laboratory learning tools integrated into the classroom in partner community college programs.

**SOURCE OF FUNDS (AND FISCAL/BUDGETARY IMPACT):**

NATIONAL SCIENCE FOUNDATION – CATEGORICAL FUNDS – NO FISCAL IMPACT

**BACKGROUND/ANALYSIS:**

The Laney College Environmental Control Technology (ECT) program is currently operating in an extension year of an NSF grant titled Educating Technicians for Building Automation and Sustainability. The program has received excellent reviews from the external evaluator and has been encouraged to develop a National Center as a next step. Laney applied for a Center grant last year, was not funded, but given valuable feedback and highly encouraged to reapply including an augmentation of \$99,000 to the existing grant. No other national NSF center for the education and training of building technicians exists. The Center will leverage Laney's faculty and administrative expertise, recognition, and leadership developed as part of the previous and currently funded NSF project grants, as well as numerous other green jobs-related activities. For example, this past year Laney hosted a highly successful national winter seminar for HVAC and building automation instructors, a national webinar on HVAC technician credentialing, launched a national online network of building performance instructors, and is hosting a session on building operator education and training at an international conference. These activities have firmly positioned Laney as a national leader in this field and prime candidate for NSF Center funding.

**DOCUMENT PREPARED BY:**

Prepared by: Dr. Elnora Webb, President, Laney College Date: 9/1/2011

**DOCUMENT PRESENTED AND APPROVED BY:**

Presented and approved by: Dr. Debbie Budd, Vice Chancellor of Educational Services  
Date: 9/1/2011

**FINANCE DEPARTMENT REVIEW**

Finance review required  Finance review *not* required

If Finance review is required, determination is:  Approved  Not Approved

If not approved, please give reason: \_\_\_\_\_

Signature: Ron Gerhard, electronically by re Date: 9/8/11  
Ron Gerhard, Chief Financial Officer

**GENERAL COUNSEL (Legality and Format/adherence to Education Codes):**

Legal review required  Legal review *not* required

If Legal review is required, determination is:  Approved  Not Approved

Signature: \_\_\_\_\_ Date: \_\_\_\_\_  
Thuy T. Nguyen, General Counsel

**CHANCELLOR'S OFFICE APPROVAL**

Approved, and Place on Agenda  Not Approved, but Place on Agenda

Signature: Wise E. Allen Date: 9/8/11  
Wise E. Allen, Chancellor