HP Technology for Teaching Grant Initiative

2008 Higher Education Request for Proposals

North America (Canada, Puerto Rico, United States)

Transforming Teaching and Learning in Higher Education

Introduction and goals

With a global economy that interconnects every country around the world, the demand for highly skilled professionals increases. Attracting, retaining and graduating high-quality students in high-tech degree programs is a growing challenge. Innovations in teaching aimed at increasing the success of more students in higher education are urgently needed. Evidence is emerging that the effective use of technology combined with exemplary teaching can positively impact student academic outcomes.

The HP Technology for Teaching Higher Education Grant Initiative aims to be a catalyst for education innovation, supporting the development of mobile technology environments that, at their fullest implementation, will:

- Expand access to high-quality higher education opportunities
- Redesign the higher education environment, enhancing teaching and increasing student success
- Be a catalyst for larger campus initiatives in integrating technology into the learning environment
- Engage thought leaders among faculty who are adopting and implementing these models in their classrooms
- Foster publication, demonstration and presentation opportunities for academic leaders on the application of technology in higher education learning environments
- Contribute to the worldwide "community of practice" of faculty who are using technology in innovative and effective ways

The HP Technology for Teaching Higher Education Grant Initiative is designed to support colleges and universities around the world. In 2008, HP will select approximately 44 campuses from throughout the United States, Puerto Rico, and Canada. This request for proposals is available to all two or four year, public or private, colleges or universities and will be awarded on a competitive basis. Institution eligibility, proposal review considerations, application instructions and key due dates are listed below. Proposals must be submitted online in English, no later than 5:00 p.m. Pacific Time on Thursday, 14 February, 2008.

Description of the grant award

The 2008 HP Technology for Teaching Higher Education Grant award is valued at approximately USD$77,000 and includes the following elements.

- A product bundle for one faculty member and a classroom, valued at approximately USD$57,000 (HP Internet list price)

  Faculty solution:
  - One HP Compaq Notebook/Tablet PC with Microsoft® Vista operating system (see http://h10038.www1.hp.com/taw_detail.asp?fid=171&agencyid=136 for general information)
  - One ultraslim expansion base with DVD-CDRW optical drive
  - One 24" Flat Panel Monitor, keyboard, and optical travel mouse
  - One ultraslim travel battery
  - One executive carrying case

  Classroom solution:
  - Twenty HP Compaq Notebook/Tablet PCs with Microsoft® Vista operating system
  - Twenty ultraslim expansion bases with DVD-CDRW optical drives
  - Twenty ultraslim travel batteries
  - One HP Procurve Wireless Access Point
  - One 20 unit laptop cart
  - One HP Designjet 24" printer, cable, and supplies
  - One HP Photosmart digital camera
  - One multimedia projector

- USD$20,000 cash grant for the principal investigator to use to support the work of the project. This funding can be used to:
  - Cover faculty time to offset the normal course load, or to share with other faculty and/or interns supporting the project
  - Purchase additional project materials
  - Cover the costs of a campus celebration event or reception at the beginning and/or conclusion of the first year of the project
  - Cover miscellaneous travel expenses related to attending the HP Technology for Teaching Worldwide Higher Education conference

    Note: The cash portion of this grant comes to the institution as an unrestricted cash award and cannot be used to finance indirect costs.

- Invitation to attend the annual HP Technology for Teaching Worldwide Higher Education conference in early 2009, a gathering of all recent grant recipients. HP will provide registration, travel and hotel accommodations for a single participant from each institution to attend this event.

Eligibility requirements

This grant program is a competitive, open initiative. To be eligible to apply, a campus must:

- Be an accredited two year or four year, public or private, college or university that is not listed in any government "watch list" for terrorism
- Meet the minimum infrastructure requirements to support the use of the technology
  - Adequate infrastructure (electricity, buildings, Internet access, etc.)

- Existing or planned high-speed wireless computing environment
- IT resources that will be committed to support the use of the granted equipment

- Not have received an HP Technology for Teaching higher education grant in 2007 or 2006

To be considered for a 2008 HP Technology for Teaching Higher Education Grant, a project proposal must:

- Propose a course redesign project for one or more undergraduate courses, where at least one course is focused on one of the following eligible disciplines:
  - Mathematics
  - Science (physical, environmental, computer)
  - Engineering (electrical, computer, mechanical, environmental, materials)
  - Information Systems / Information Technology
- The proposed project redesigns a course whose credits may be applied toward the completion of a four year bachelor's degree in engineering, science, information systems, or computer science
- Describe a project team that includes at least two faculty members who will be using the technology for teaching
- Have pre-approved the HP "Terms and Conditions" associated with HP grants
- Have administrative support (as stated in the proposal)

Review criteria

To receive an award, a proposal must provide exemplary answers to the questions provided in the HP Request for Proposals. Criteria to be used to evaluate the proposals will include, but will not be limited to:

Primary criteria

- Proposed project is likely to result in sustainable advances in teaching and learning.
- A strong and committed project team consisting of at least two faculty members. Ideally, project teams will include other participants, such as faculty with expertise in educational technology, instructional design, and/or the learning sciences. Proposals that include the active support and participation of a key administrator are encouraged. The principal investigator should be a full time faculty member who has demonstrated institutional and instructional leadership in their discipline and/or their campus.
- Project proposals must:
  - Clearly describe why this project is important - what fundamental teaching and learning issues are being addressed through the project
  - Describe how the granted HP technology (Tablet PC, 24" wide format printer, etc.) will contribute to resolving the teaching and learning issues.
  - Have specific plans for measuring the success of the project in terms of student learning outcomes (improved grades, increased enrollment and retention, improved performance on recognized tests, increased quality of student project etc.), in comparison with baseline data from the years prior to this project
  - Have specific plans for communicating the project outcomes, on campus and beyond
- The project contributes toward the attainment of the institution's vision and plans for broader deployment of mobile technology solutions in the learning environment

Preference will be given to colleges and universities that:

- Serve significant under-represented, low income or otherwise marginalized populations of students

(e.g., women pursuing computer science)

- Propose projects that increase the capacity for engineering departments to offer project-based, engineering experiences for undergraduate students engaged in community service (local or abroad). These programs are sometimes described as "service learning" or "engineering abroad" programs where students experience the relevance and excitement of applying engineering principles to address real societal issues.
- Propose a project that includes using the technology to support a pre-college outreach program aimed at increasing the pipeline of under-represented students pursuing math, science, or engineering (e.g. an on-campus summer program for low-income pre-college students)
- Propose projects to improve undergraduate courses related to environmental engineering

Examples

To review examples of previously funded projects, visit the Higher Education HP Technology for Teaching global gallery of project webpages at www.hp.com/go/hpteach-hied. Additional information is shared on the blog by Jim Vanides, "Teaching Learning and Technology in Higher Education" located at www.hp.com/go/hied-blog.

Grant recipient commitment

This grant of equipment and cash is awarded to the college/university. The HP equipment is the property of that organization, to be used by the principal investigator and team for implementation of the proposed project.

By accepting the grant award, the organization, its directors and staff members make the commitment to:

- Complete the proposed grant project
- Provide the proper IT infrastructure and support to ensure program success, including installation and proper maintenance
- Create a public webpage that describes the project
    - Title, abstract, contacts
    - Project rationale (why this project was chosen; what educational issues it is meant to address)
    - Implementation (changes in pedagogy; use of technology)
    - Impact (on teaching and learning)
    - Brief video vignettes and/or photos that explain the context and impact
- Provide HP with private project update reports twice per school year for two years by responding to an HP web-based survey
    - The number of students impacted
    - The extent to which the project has impacted student learning (on a scale of 0–4), with a description of the evidence collected (open-ended text describing the outcomes measured)
    - The extent to which the project has impacted teaching (on a scale of 0–4), with a description of the evidence collected (open ended text describing the outcomes measured)
    - Unexpected outcomes and other comments
    - Summary statement from key administrators
    - Quotes from students and faculty
    - Suggestions for how HP can enhance this grant initiative
- Participate in a Worldwide HP Mobile Technology conference in early 2009, which includes an informal presentation poster session
- Abide by the HP Terms and Conditions that were accepted during the application process.

How to apply

If you feel you meet the eligibility requirements and are willing and able to fulfill the grant recipient commitments associated with this grant, please prepare your answers to the questions below. Proposals must provide answers, in English, to the questions below. Additional content and attachments will not be accepted. The online application system will open in January, 2008. In the web-based system you will be asked to enter responses to the questions below directly into fields in the order shown. You may want to first compose your responses to these questions in a text file, then cut and paste the responses into the corresponding fields of the online grant application. Use plain ASCII text only (no special characters, please!) Starting in early January 2008, visit www.hp.com/go/hpteach to submit your proposal online.

Deadline: 14 February 2008, 5:00 pm Pacific Time

Required elements of your proposal

Institutional environment

1. **Technology vision (150 words maximum)** Describe the campus' vision of the role of technology in teaching and learning. Please include the specific vision or technology strategic plan for the department, if one exists. If the campus has a strategic initiative on the role of mobile computing, please elaborate.

Project details

2. **Project name** A brief title for your project.
3. **Project executive summary (200 words maximum)** Provide a high-level overview of your project in an executive summary. Describe how students will benefit from the course redesign and the application of mobile technology.
4. **Focus on learning (300 words maximum)** Describe the primary student learning issues that the project will address through changes in teaching. Respond to the question: Why is this project important to students and instructors?
5. **Goals, objectives and outcomes (500 words maximum)** Provide the overall project goal(s). Under each goal provide objectives that are specific and measurable. Objectives focused on student learning outcomes are a critical element. Describe how each of the objectives will be measured and documented. Describe how success in meeting the objectives will be determined, including what you will use as a comparison group against which you can compare the effectiveness of the proposed course redesign. For guidance on measuring student outcomes, you may want to read materials available at http://www.abet.org/assessment.shtml and the SRI "Measuring Learning" guidebook, available at http://ctl.sri.com/projects/displayProject.jsp?Nick=hpguide.
6. **Technology integration (400 words maximum)** Describe how the granted HP products will be used to support the goals of the project and how the learning environment will be changed as a result of the introduction of the new technology. Respond to the question: How will this project change what faculty and students do in the teaching/learning environment? Describe how the HP products will contribute to resolving the fundamental instructional and learning problem previously described. Specifically describe how the unique on-screen "inking" capability of a tablet pc will be used and

how wide-format printing will support your instructional goals;

7. **Project timeline (200 words maximum)** Provide a timeline for project completion with periodic milestone identified. The project timeline should commence when the hardware is delivered and continue for 24 months (two academic years).

Project context

8. **Course impacted (100 words maximum)** Describe the course or courses that will be redesigned for this project; include course number and the department in which the course(s) reside.
9. **Course redesign (200 words maximum)** Describe how the course, curriculum and/or teaching will be altered to take advantage of the technology.
10. **Course discipline** The proposed course redesign project affects courses in the following disciplines (check all that apply) ☐ Mathematics ☐ Science (physical, environmental, or computer sciences) ☐ Engineering (electrical, mechanical, materials, computer) ☐ Environmental engineering ☐ Information Systems / IT ☐ Other (explain)
11. **Faculty (25 words maximum)** How many professors/faculty will be directly involved in this project?
12. **Students (25 words maximum)** Approximately how many students will be impacted during the first full year of this pilot project implementation?
13. **Extra Consideration (optional)** The proposed project includes the following elements (check all that apply, and describe): ☐ Serves a significant number of under-represented / marginalized students; ☐ Engages engineering students in projects that serve the community; ☐ Plan includes pre-college outreach; ☐ Proposal is directly related to environmental engineering;

    Please describe each element that you may have checked.

Sharing best practices

14. **Project visibility (200 words maximum)** Provide a plan for developing visibility both on the campus and in the greater academic community. Plan may include publication of the project and its impact, presentations, and/or demonstrations at academic or industry events, etc.

Team

15. Please provide the following contact details:

    Principal investigator(s) Name, title, discipline, address, phone, fax, e-mail. Please note: The person listed as the principal investigator will become HP's primary point of contact for this grant.

    Additional team members Name, title, role on project, e-mail address.

Administrative support and approval

16. **Key administrator** Name, title, discipline, address, phone, fax, e-mail.
17. **Statement of support** from key administrator. Initial and ongoing project success depends on the active support and involvement of campus leaders. Please indicate what type of support (financial or otherwise), leadership and involvement will be provided by the administrator. Indicate what campus funding, services, or matching resources will be committed to this project, should it be selected; also indicate what support will be provided to ensure the long-term success of the project, beyond the two year grant period.

18. **Approval of terms and conditions** Do you, as an authorized campus administrator, approve the HP terms and conditions? To be considered for a grant, an authorized campus administrator must accept the HP terms and conditions of gift prior concurrent with the submission of the proposal. You may access the Grant Terms and Conditions at www.hp.com/go/hpteach.
19. **Privacy terms and conditions** Please confirm that you understand HP's data privacy policies (http://www.hp.com/hpinfo/globalcitizenship/privacy/masterpolicy.html), and agree that the information your school has provided may be used by HP to send you information related to this grant application and other HP Philanthropy related programs.

Institution information

20. **Institution name** Legal name, mailing address, phone, fax
21. **Institution mission** statement Describe the mission of the institution
22. **Institution tax ID number** Tax number appropriate for your country. (For example, in the U.S. this is a 9-digit number formatted XX-XXXXXXX)
23. **Tax exempt** ☐ Yes ☐ No
    If tax exempt, please describe why; HP may request documented evidence
24. **Shipping instructions** Shipping contact's name, phone, fax, e-mail, shipping address for equipment delivery. (A physical address, capable of receiving two or three pallets of equipment, is required; no P.O. boxes, please!)

Deadline for submission
14 February 2008, 5:00 p.m. Pacific Time

Proposals must be submitted in English online at the URL provided by HP when you register your intent to apply.

Notification of recipients

HP will make award announcements no later than May 1, 2008, and post a list of schools that have been funded at the HP Technology for Teaching website at www.hp.com/go/hpteach. All applicants will be notified of their status via e-mail by May 1, 2008. Please contact your system network administrator to take steps to ensure that e-mail messages from HPTechnologyForTeaching@hp.com are not impacted by your spam filter.

About HP

HP is committed to being a leader in global citizenship. We are proud of our efforts as global stewards, helping to reduce environmental impacts, raise standards in HP's global supply chain and increase access to information technology worldwide. We conduct our business with uncompromising integrity and strive to live up to every one of our commitments to our customers, partners, employees and shareholders. Furthermore, we believe that global citizenship is good business. We embrace our responsibility to society by being an economic, intellectual and social asset to each country and community in which we operate.

HP focuses on simplifying technology experiences for all of its customers – from individual consumers to the largest businesses. With a portfolio that spans printing, personal computing, software, services and IT

infrastructure, HP is among the world's largest IT companies, with revenue totaling $100.5 billion for the four fiscal quarters ended July 31, 2007. More information about HP (NYSE: HPQ) is available at http://www.hp.com.

For further information

Visit the HP Technology for Teaching Grant website at www.hp.com/go/hpteach. If your questions are not addressed in the Frequently Asked Questions area, you are welcome to submit your own question through the online form available on that web page.

Examples of previously funded higher education projects from around the world are available at www.hp.com/go/hpteach-hied. You may also subscribe to our blog, "Teaching, Learning, and Technology in Higher Education" www.hp.com/go/hied-blog for descriptions of emerging best practices and pointers to other relevant information.