

COMMUNITY COLLEGE CORNER

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Funding Opportunities and Resources for Community Colleges



COMMUNITY COLLEGE FACULTY AND ADMINISTRATORS

often have keen insights into the challenges associated

with computing education, insights which frequently suggest opportunities to improve teaching and learning activities, assessment strategies and techniques, student services and other matters related to the computing education environment. However, too often good ideas go unpursued due to a lack of resources. This article highlights a collection of funding opportunities and grant-writing resources specifically available to community colleges and potentially applicable to computing education at secondary and post-secondary levels.

Grants.Gov

Grants.gov (www.grants.gov) is an excellent electronic resource to find and apply for competitive grant opportunities from all federal grant-making agencies. Grants.gov is the single access point for over 1000 grant programs offered by the 26 federal grant-making agencies. The U.S. Department of Health and Human Services is the managing partner for Grants.gov, an initiative that has had a very positive impact on the grant community.

National Science Foundation

The National Science Foundation provides a great many funding opportunities across several domains including computing education. Interested parties can find funding opportunities (www.nsf.gov/funding) via targeted searches.

With an emphasis on two-year colleges, the NSF Advanced Technological Education (ATE) program¹ focuses on the education of technicians for the high-technology fields that drive our nation's economy. The program involves partnerships between academic institutions and employers to promote improvement in the education of science and engineering technicians at the undergraduate and secondary school levels. The ATE program supports curriculum development; professional development of college faculty and secondary school teachers; career pathways to two-year colleges from secondary schools and from two-year colleges to four-year institutions; and other activities. Another goal is articulation between two-year and four-year technology-related programs. The ATE program also invites proposals focusing on research to advance the knowledge base related to technician education.

- **ATE Central** (atecentral.net) is a freely available online portal and collection of materials and services that highlight the work of the ATE projects and centers.

¹ www.nsf.gov/funding/pgm_summ.jsp?pims_id=5464

These NSF-funded initiatives work with educators from two-year colleges to develop and implement ideas for improving the skills of technicians and the educators who teach them. ATE Central is designed to help educators, students, and the general public to learn and use materials from the entire depth and breadth of the Advanced Technological Education program.

- **EvalU-ATE** (evalu-ate.org) promotes the goals of the Advanced Technological Education program by partnering with ATE projects and centers to strengthen the program's evaluation knowledge base, expand the use of exemplary evaluation practices, and support the continuous improvement of technician education throughout the nation.

The NSF Computing Education for the 21st Century (CE21) program² aims to build a computationally savvy 21st century workforce that positions the U.S. to demonstrate a leadership role in the global economy. Innovations in computing and information technology drive our economy, underlie many new advances in science and engineering, and contribute to our national security. The CE21 program focuses special attention on activities targeted at the middle and high school levels (i.e., secondary education) and in early undergraduate education.

The NSF Proposal and Award Policies and Procedures Guide³ and the materials from then NSF workshop on Writing Proposals to Meet NSF's Expectations⁴ offer valuable advice to novice grant writers.

The United States Department of Education

A major responsibility of the U.S. Department of Education (ED) is to administer programs. To help educators, policymakers, and citizens understand these programs, ED publishes each year a Guide to U.S. Department of Education Programs⁵. The ED.gov website also contains informa-

² www.nsf.gov/pubs/2010/nsf10619/nsf10619.pdf

³ www.nsf.gov/pubs/policydocs/pappguide/nsf11001/nsf11_1.pdf

⁴ www.nsf.gov/events/event_summ.jsp?cntn_id=111743&org=DUE

⁵ www2.ed.gov/programs/gtep/gtep.pdf

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tion about ED programs - their purpose, funding, contacts, and more. A variety of related resources can also be found in the grants section of the CFO office⁶.

The United States Department of Energy

Much of the work of the Department of Energy's Office of Science is supported through grants and contractual vehicles. This work is processed through the Office of Science, Office of Grants and Contracts Support⁷, which serves as the principal acquisition, financial assistance (grants and cooperative agreements) and contract/grant management advisor to the Director of Science.

The United States Department of Homeland Security

The Department of Homeland Security (DHS) (www.dhs.gov) provides grant opportunities to states, territories, urban areas and transportation agencies under programs to bolster national preparedness and to protect critical infrastructure. Cybersecurity is of national concern and importance⁸. DHS plays a vital role in countering the increasing number of cyberspace threats, but a shortage of qualified cybersecurity technicians and professionals currently exists.

The United States Department of Labor Employment and Training (ETA)

ETA administers financial assistance programs pursuant to the Workforce Investment Act, administering State formula grant programs for youth, adults, dislocated workers, national emergency grants for workers affected by mass layoffs, plant closures, and disasters; grant programs for workers with disabilities, Indians and Native Americans, and for migrant and seasonal farm workers. ETA also administers grant programs for older American workers, apprenticeship programs, Trade Adjustment Assistance programs, and assistance for research and development of workforce programs.

⁶ www2.ed.gov/about/offices/list/ocfo/grants/grants.html
⁷ science.doe.gov/grants/index.asp
⁸ www.dhs.gov/files/cybersecurity.shtm

In addition, ETA is responsible for the operation and maintenance of a national system of public employment service offices and for the national unemployment insurance program.

Office of Disability Employment Policy

The Office of Disability Employment Policy awards competitive grants establishing short-term pilot and technical assistance projects designed to identify, develop, test, evaluate, and disseminate policies to increase employment by expanding access to training, education, employment supports, assistive and systems technology, integrated employment, entrepreneurial development, and small business opportunities for adults and youth with disabilities. Current pilot projects focus on customized employment, Olmstead populations, and innovative demonstration youth grants, among others. Solicitations for grant applications are published in the Federal Register and announced at www.dol.gov/odep. ODEP grants are awarded by the OASAM grant office⁹.

Veterans' Employment and Training (VETS)

This agency provides special employment and training assistance for veterans through the Disabled Veterans' Outreach Program (DVOP) Solicitation for Grant Applications¹⁰; the Local Veterans' Employment Representative Program (LVER)¹¹; Veterans' Workforce Investment Program (VWIP)¹²; elaws Advisor on veterans' employment and reemployment rights¹³; and the Homeless Veterans Reintegration Project (HVRP)¹⁴. VETS grants are awarded by the OASAM grant office¹⁵.

The Lumina Foundation for Education

The major goal of the Lumina Foundation (www.luminafoundation.org) is to increase the proportion of Americans with high-

⁹ www.dol.gov/oasam/grants/grants-oasam.htm
¹⁰ www.dol.gov/vets/grants/grants/main.htm
¹¹ www.dol.gov/vets/grants/grants/main.htm
¹² www.dol.gov/vets/grants/grants/main.htm
¹³ www.dol.gov/elaws/vets/vetpref/choice.htm
¹⁴ www.dol.gov/vets/grants/grant2/main.htm
¹⁵ www.dol.gov/oasam/grants/grants-oasam.htm

quality degrees and credentials to 60 percent by the year 2025. This achievement will represent an increase of 23 million graduates above current levels of production. The Lumina Foundation believes that education provides the basis for individual opportunity, economic vitality and social stability. With its partners, Lumina strives to meet workforce demands and close gaps in attainment for groups not historically well-served by higher education. Searching this private foundation's electronic database of past grants is quick and easy¹⁶.

The Bill and Melinda Gates Foundation

America's economic prosperity depends on its ability to prepare all young people for college, career, and life, and community colleges are instrumental in providing these opportunities. Every year, they educate and train more than 6.2 million students, from recent high school graduates to retirees aiming to learn a new language or skill. The multiple missions of community colleges and their funding sources make it difficult for them to focus on completion. Because community colleges are flexible, affordable, and accessible institutions of higher education that enroll the largest number of low-income students, the Bill and Melinda Gates Foundation (www.gatesfoundation.org) is targeting efforts on student completion rates. Read more about "Community Colleges in America"¹⁷ and "Improving Community Colleges"¹⁸. Searching this foundation's online database of past grants is available¹⁹.

American Association of Community Colleges

Founded in 1920, the American Association of Community Colleges (AACC) (www.aacc.nche.edu) has, over the past four decades, become the leading proponent and the national "voice for community colleges". Today, the association

¹⁶ www.luminafoundation.org/grants/database/
¹⁷ www.gatesfoundation.org/postsecondaryeducation/Pages/community-colleges.aspx
¹⁸ www.gatesfoundation.org/postsecondaryeducation/Pages/improving-community-colleges.aspx
¹⁹ www.gatesfoundation.org/grants/Pages/search.aspx

represents almost 1,200 two-year, associate degree-granting institutions and more than 11 million students. These colleges are the largest and fastest-growing sector of U.S. higher education, enrolling close to half (46 percent) of all U.S. undergraduate students. AACC makes available a wide collection of resources regarding the community college sector.

The Community College Research Center at Columbia University

The Community College Research Center (CCRC) at Columbia University (ccrc.tc.columbia.edu) is the leading independent authority on the nation's more than 1,200 two-year colleges. Since its inception, CCRC's consortium of researchers has strategically assessed the problems and performances of community colleges. Its mission is to conduct research on the major issues affecting community colleges in the United States and to contribute to the development of practice and policy

that expands access to higher education and promotes success for all students. CCRC's extensive body of research provides a strong foundation on which to build new policies and initiatives to improve the outcomes of these institutions so integral to the higher education system, employment landscape, and national economy.

The Office of Community College Research and Leadership at the University of Illinois

The mission of the Office of Community College Research and Leadership (OCCRL) at the University of Illinois (occrll.illinois.edu) is to use research and evaluation methods to improve policies, programs and practices to enhance community college education and transition to college for diverse learners. One of their 2011 publications is "The Applied Baccalaureate: What We Know, What We Learned, and What We Need to Know."

Conclusion

For further grant proposal ideas, see [Digitally Enhancing America's Community Colleges: Strategic Opportunities for Computing Education](#), a joint ACM-NSF report of twenty challenges and associated opportunities for computing education in the 21st century. The electronic version of this twenty-four page report is available from www.acmccecc.org/summitreport. Printed copies are also available by completing the online request form at www.acmccecc.org/contactus/.



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Associate-Degree Computing Curricula

Overview Report

<http://www.acmtyc.org/curricula.cfm>



Information Systems

<http://www.acmtyc.org/WebReports/ISreport/>



Computer Engineering

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