Name of nominee  Timothy J. Wilhelm

Community college  Kankakee Community College

Discipline taught  Electrical Technology

Mailing address  100 College Dr.  Kankakee, Il 60901

Telephone # 815-802-8864

E-mail address twilhelm@kcc.edu

Please describe how the nominee meets each of the following criteria:

1. In what ways has this educator demonstrated excellence in teaching?

"Best instructor I've had since kindergarten, and that's only because she was hot!" said one of Tim Wilhelm's students on a recent, student evaluation of instruction. This is a typical sentiment expressed by students every semester. Another frequent comment from students is that Tim makes information memorable. With the intention of transforming information into knowledge, Tim uses his own active learning technique he calls "imaginative discovery." He defines imaginative discovery as step-by-step story-telling (real or made up) describing the revelation of a discovery or the development of an invention. By incorporating the story (sometimes accompanied by an original song), students are more likely to grasp and remember the important concepts. Using stories, songs, humor, demonstrations, and hands-on exercises, Tim works hard to take his students to that "ah ha" moment.

Clearly focused on outcomes and objectives, Tim ends each class with an anonymous self-assessment regarding the day's materials. An example outcome is: Students will be able to describe, in very simple terms, at least three differences (hardware differences and/or operational differences) between a pure grid-tied solar-PV system and a stand-alone solar-PV system. Students self assess from these choices:

- "I got it! Easy as pie! Piece of cake!"
- "I understand the concept. I can do this, with a little head-scratchin'. I just need a little more practice."
- "I'm starting to understand this. I can do it sometimes. I still need a bunch more practice."
- "I don't quite understand the concept. I need more explanation and a better mental grasp before I can do this."
- "Duh-h-h-h...huh??"

Further reinforcing the learning process, the first order of business at the next class session is a robust quiz over the previous session's objectives. Before the quiz, Tim gives the students the opportunity to ask as many questions as they wish, often leading to lengthy and meaningful discussions. Immediately following this time-limited test, students pull out red pens and are guided through grading their own quiz, encouraging even more discussion.

Paul Carlson, Chair of the Business and Technology Divisions, said of Tim, "In the times that I have had the opportunity to observe his teaching, I have been blown away by his enthusiasm toward the topic and toward the students. He has discovered a mantra that works so well with his classes that they are continuously signing up for classes taught by him. This tells me that they get it, they understand his methodology and they appreciate his style."

Tim looks for innovative ways to keep students interested and obtain practical experience. As an example, by donating his design and consultation services as an in-kind contribution, Tim is assisting Tri-Point Junior High School teacher, Scott Saffer, in developing a grant application to install photovoltaic equipment at the Jr. High campus. Tim intends to use this
project as a learning opportunity for his class by having KCC students assist with the
system's installation. In addition, Tim hopes to maximize the learning opportunity by
arranging for a Tri-Point High School science class to also assist in the installation.

2. What has this educator initiated or helped to develop in the area of innovative
programs used in two-year postsecondary institutions?

Tim has been instrumental in developing a renewable energy curriculum at KCC. He was
the primary faculty contributor to two, successful fall 2009 grants related to renewable
energy. The Illinois Clean Energy Community Foundation awarded a $279,600 grant.
The Federal Appropriation grant of $400,000 was awarded to KCC. These grants
included planning, implementation and laboratory equipment for new courses.

He has redesigned the electrical technology program to be more flexible for areas of
specialization. A core set of seven courses in electrical technology is required along with
five general education courses. Following the seven core courses, a student picks an
area of specialization for the final seven or eight courses. The areas of specialization
include Industrial Electrical Technology, Industrial Machinery Maintenance and
Renewable Energy Technology. Each student who completes the program now
graduates with an AAS in electrical Technology with a master certificate within their
specialty.

3. How has this educator served on technical or special committees serving two-year
postsecondary education, and how did this effort affect the college program in the
community, state or nation?

Tim worked with KCC's Dr. Vicki Magee to develop a National Science Foundation (NSF)
planning grant, received by KCC for Project REvamp. By forming and working with both
an Electrical Technology advisory committee and a Renewable Energy Technology
advisory committee, Tim has been able to redesign and revitalize the Electrical
Technology program at KCC (see question 2). Tim's success with program changes,
particularly in the area of renewable energy, has helped make KCC the 'place to be' for
education in this field in Illinois.

Tim's division chair (Paul Carlson) commented: "I would be remiss if I didn't mention all of
the professional development that he has been able to attend by his association with the
National Science Foundation. He has crisscrossed the country, not only taking classes, but
by being the keynote speaker at conferences and seminars dealing with renewable energy.
His passion for his own increase in knowledge is fueled by his drive to serve his students. He
has students climbing around on the roof of the Technology building erecting photo-voltaic
arrays. He has them using computer-based solar mapping devices to identify the sunlight
patterns at various locations on campus. He has even begun the process of purchasing and
building wind turbines on the KCC campus, for student use and KCC sustainability efforts."

4. How has this educator provided leadership in helping to solve challenges to two-
year postsecondary institutions?

As a licensed North American Board of Certified Energy Practitioners (NABCEP) Certified
Solar Photovoltaic Installer, Tim has been instrumental in the expansion of KCC Testing
services. KCC is one of only three NABCEP-approved training and testing sites in Illinois.
Of these three testing and training sites, KCC has the only training program taught by a
NABCEP certified solar professional - Tim.

In summer 2009, Tim had conversations with Dan Harris, Co-Chair of KCC's "Brother-to-
Brother" program – a discussion, support, and mentoring group for African-American male, KCC students. The two have agreed to explore ways in which the members of the "Brother-to-Brother" group might be introduced to the opportunities unfolding through KCC’s NSF-ATE Planning Grant Project. Tim is working to have group members audit one or more class sessions of ELTR 1223, during the Fall 2010 semester.

5. How has this educator been active in developing, organizing, or supporting state and/or national two-year postsecondary education associations?

KCC has informed other member institutions of the South Metropolitan Higher Education Consortium (SMHEC) about its NSF-ATE Planning Grant project. SMHEC is composed of five community colleges and eight universities located in a region immediately south of Chicago. In May 2009 the sustainability task group met with the chief academic officers from the 15 institutions to share ideas and effective practices regarding the integration of sustainability with academics. At that time, KCC’s vice president, Judy Marwick, shared the current and planned activities supported by KCC’s NSF-ATE Planning Grant. Other colleges were very interested in the development of the renewable energy technology curriculum.

The American Association of Community Colleges, in association with EcoAmerica, is working to ‘fast track’ the development of a Sustainable Economy Resource Center which would serve all community colleges. Program goals are to dramatically increase community colleges offering clean energy and sustainability workforce education, raise the bar on quality & infuse sustainability throughout curriculum and ensure more Americans see the economic benefit of solving climate change. The AACC Technical Advisory Committee invited 56 national experts to join the committee in fall 2009. Tim was one of the invited experts. He will assist to vet the website and consult on other initiatives.

Related to the NSF-ATE Planning Grant project, the KCC Administration and Board of Trustees have initiated a process to construct a new building on the KCC campus. During this early, developmental stage, the new facility is being called the "KCC ATE Center." A building-design committee (of which PI Wilhelm is a member) has already been convened. A primary function of this new building will be to house classrooms and laboratories for KCC’s new RE courses, and will also provide facilities for accommodating program dissemination activities – hosting workshops and conferences for public school teachers and representatives of other community colleges who may be interested in replicating what KCC is now developing with the support of its NSF-ATE Planning Grant.

6. What awards or honors has this educator received in recognition of leadership in the college or community?

In addition to the AACC recognition as an industry expert, Tim was selected for a faculty/administrator exchange under the sponsorship of the Illinois Consortium for International Studies and Programs (ICISP). In FY2007, Tim and an administrator from the North Karelia District of Finland completed their exchange. Tim was invited to speak of his experience at KCC's faculty in-service training in August 2007.

Since 2008, Tim has served as the PI for an awarded National Science Foundation grant to develop a Renewable Energy AAS degree and workforce training program.

7. How does this educator keep pace with current theories and practices in the nominee’s discipline?

Tim maintains his "top of the field" knowledge through attendance at conferences, participating in personal training seminars and presenting at conferences. Examples
include hands-on training in both MIG and TIG welding right here at KCC, solar-thermal training at Solar Energy International in Colorado and solar-photovoltaic training at the Florida Solar Energy Center.

Tim also retains his status as a practicing Professional Engineer through his company Wilhelm Engineering. He is the General Manager of Stelle Telephone Company, where he single-handedly operates and maintains the first, totally solar-powered “Class V End Office” in North America. Other duties include operation and maintenance of Stelle Telephone Company’s SMATV (cable TV system) and internet services.

Finally, Tim holds the following accreditations: Registered Professional Engineer in Illinois; Illinois EPA Class “A” Public Water Supply Operator; National Accrediting Board of Certified Energy Practitioners (NABCEP) Certified Solar Photovoltaic Installer; Certified Xantrex Dealer. Tim used KCC’s recent midterm exam week to become a SKALA-Authorized Instructor for Wind Tower Safety and Tower Rescue. He also spent KCC’s recent spring break building custom, photovoltaic training stations in his laboratory.

**Supplemental Material**


[http://www.youtube.com/watch?v=qNqQ3re6_ag]


[http://www.nsf.gov/awardsearch/showAward.do?AwardNumber=0802786]


[http://www.youtube.com/watch?v=1MEMvANLdH0]


[http://www.kcc.edu/Community/sustainability/resources/Pages/solarpvlecture.aspx]

**Philosophy of Education**

- *Information* is...
  - something someone tells you, or something you read.

- *Knowledge* is...
  - something you can only garner from personal experience.

- *Education* ...
  - gives the student subject-appropriate information, and...
  - the personal experience necessary to transform that information into knowledge.

- *Teaching* is...
  - a purposeful performing art.
  - a gratifying way to express your enthusiasm for your primary field of interest.
  - the fulfillment of a social obligation to pass on all you’ve learned to the next generation(s).
  - one heckuva lotta fun!
March 8, 2010

Illinois Community College Trustees Association  
410 E. Capitol, Suite 200  
Springfield, IL 62701-1711

RE:  2010 Outstanding Full-Time Faculty Member Award  
Tim Wilhelm, Nominee

It is my pleasure to write this letter in support of Professor Tim Wilhelm as Kankakee Community College's nominee for the 2010 Outstanding Full-Time Faculty Member Award for the Illinois Community College Trustees Association. Professor Wilhelm has been a dedicated faculty member at KCC for over twelve (12) years in our Business and Technology division. More specifically, Tim teaches a number of courses in the Industrial/Electrical program area and is regarded as the true champion and leader for curriculum in our Renewable Energy Program.

Professor Wilhelm continues to develop courses in wind, solar-photovoltaic, and solar-thermal energy. Through his expertise and leadership, Tim is setting the path for green skills needed by our students. In addition to this leadership and expertise, Professor Wilhelm is one of the most highly respected and appreciated staff members of the KCC community by his peers and most importantly, his students.

Tim has a strong commitment to our college's mission and has a genuine interest in the success of his students. Therefore, it is with great pride that Kankakee Community College nominates Professor Tim Wilhelm for the Outstanding Full-Time Faculty Member Award through the Illinois Community College Trustees Association.

Sincerely,

John Avendano, Ph.D.  
President
March 23, 2010

Illinois Community College Trustees Association
Outstanding Full-Time Faculty Member Award Committee
401 E. Capitol, Suite 200
Springfield, IL 62701-1711

Dear Selection Committee,

On behalf of the Kankakee Community College’s (KCC) Faculty Development and Instructional Support Committee, we are extremely pleased to support Tim Wilhelm’s nomination for the ICCTA Outstanding Full-Time Faculty Member Award. Tim is an enthusiastic and innovative instructor who believes that information must be combined with personal experiences in order for students to gain the knowledge necessary to succeed in the students’ chosen field.

The faculty development committee consists of two administrators, one adjunct faculty member and six full-time faculty members from four divisions. We received nominations from full-time faculty, adjunct faculty, division chairs, the dean of instruction and the vice-president of instruction and student services. Of the faculty members considered, Tim best met the criteria of the award.

While we could not include the multitude of positive comments from student evaluations of instruction, Mr. Wilhelm’s division chair confirmed Tim’s excellence in teaching and student enthusiasm for taking courses taught by Tim. His work in the field of engineering and photovoltaic technology has allowed Tim to call on a wealth of industry expert’s knowledge when redesigning the electrical technology program at KCC. In addition, Tim’s work with photovoltaic technology has helped make KCC a leader in sustainability education.

The Faculty Development and Instructional Support Committee members endorse Tim Wilhelm as an exemplary example of a full-time faculty member who contributes to excellence in education and expands the role of community colleges in addressing nation-wide issues.

Donna J. Smith
Director, Instructional Technology, Faculty Development and the Library

Cory Lewis
Professor of Sociology and Anthropology
Humanities & Social Sciences Division

www.kcc.edu
March 8, 2010

Illinois Community College Trustees Association  
410 E. Capitol, Suite 200  
Springfield, IL 62701-1711

RE: 2010 Outstanding Full-Time Faculty Member Award  
Tim Wilhelm, Nominee

This letter is in support of Professor Tim Wilhelm as Kankakee Community College’s nominee for the 2010 Outstanding Full-Time Faculty Member Award for the Illinois Community College Trustees Association. Tim is a dedicated faculty member in the college’s electrical and industrial program, and he exemplifies teaching excellence at KCC. Tim serves as a professional role model for his students and peers. Tim has also been a leader at KCC and the region in Renewable Energy Technology and Sustainability.

Professor Wilhelm has continued to display a strong commitment to the mission of the college and strives to continue to provide educational opportunities to meet the needs of the college community. Kankakee Community College is pleased to nominate Professor Tim Wilhelm for the Outstanding Full-Time Faculty Member Award.

Sincerely,

Hugh VanVoorst  
KCC Board Chair