Participant Profiles and Responses to LIKES Survey

Participant: Ghaleb Abdulla
Title, affiliation: Adjunct faculty at the University of the Pacific
E-mail: abdulla1@llnl.gov

Photo:

1. What do you believe is necessary for the LIKES initiative to succeed?
From looking at the objectives of the LIKES project, I think representatives from disciplines who works with computer scientists would help. Faculty from Biology, physics,
earth sciences etc. will shed give ideas on what is needed computationally to solve the research problems that they are facing.

2. Do you have specific teaching/learning experiences in your background that relate to what LIKES is trying to accomplish? Or experiences from a business setting?
I am an Adjunct faculty at the University of the Pacific and I supervise graduate students during the summer and sometimes I help them overall the duration of their graduate studies. In my job i work with scientists from physics, chemistry, biology, etc.

3. How do you feel that you can best contribute to moving the LIKES initiative forward?
Provide advice and consult on how to develop an effective curriculum that help new graduates to start contributing in the working environment.

Participant: Bob Beck

Title, affiliation: Professor and Chair, Department of Computing Sciences, Villanova University
E-mail: robert.beck@villanova.edu

Photo:

Participant: Ed Carr

Title, affiliation: Adjunct Assistant Professor, Department of Computer Science, North Carolina A & T State University
E-mail: corwith@ncat.edu
1. What do you believe is necessary for the LIKES initiative to succeed?

Identifying how computer science education can be immersed into other disciplines. A deeper understanding of what areas of computer science are important to other academic studies. Discovering other applications of computer science.

2. Do you have specific teaching/learning experiences in your background that relate to what LIKES is trying to accomplish? Or experiences from a business setting?

Hopefully so. I have been working for many years in exploring the overlap between Graph Theory and Computer Science. From my understanding of computational science, most if not all of my course work in Applied Mathematics provides me with a strong background. In determining hamiltonicity of certain graphs, I have used my computer programming skills to generate examples and model hamiltonian construction algorithms. Also in the late 90s, I was a consultant for an industry leader in the area of photogramitry. I helped customize windows servers and workstations to handle the demands of 3D imagery. Spatial Data Consultants specialized in aerail photography, digital surveying and mapping. Other consultant work has been in the area of hospital information technology support. The use of secure remote administration was a key issue.

3. How do you feel that you can best contribute to moving the LIKES initiative forward?

By attending the workshops and participating in conference calls etc.

Participant: Nancy Yen-Wen Cheng

Title, affiliation: Associate Professor, Dept of Architecture, University of Oregon
E-mail: nywc@uoregon.edu

Photo: http://www.uoregon.edu/~design/nywc/gifs/chengphoto-sm.jpg

1. What do you believe is necessary for the LIKES initiative to succeed?

Students need the opportunity to understand how their specialized training links into a larger context. In teaching computing concepts in other fields and identifying the impact of the underlying theory in general, non-computer science majors could develop a broader capacity to use the computing concepts.

For the workshop, we need to identify what is working well and why, then create synergy between initiatives in different disciplines. While I am intrigued by the idea of interdisciplinary collaboration, I know that it takes dialogue and cooperation to develop the trust and understanding for successful teamwork. We need to identify very specific objectives and then devise a game plan for achieving these objectives through manageable steps. Most likely we could develop rapport in small groups – so perhaps each group take responsibility for a single step at a time.

2. Do you have specific teaching/learning experiences in your background that relate to what LIKES is trying to accomplish? Or experiences from a business setting?

I have deep experience in fostering teamwork for Internet collaborations. When teaching at University of Hong Kong (1993-1996), we set up short-term "virtual design studios" for students in partner schools in North America, Europe and Asia. We researched how digital communications could facilitate sharing of design ideas, technical methods and cultural perspectives. Since coming to Oregon in 1996, I have used the Web for both external and internal sharing, linking our students to clients, experts and peers in other schools. Most recently my classes have been using Wikis to share work and critical reflections:

- Architectural design
- Computer Graphics

Through my leadership activities with computer aided architectural design research organizations, I have a perspective on challenges of integrating digital technology into professional education. While our schools and professional offices have interest in adopting new methods, there is an inherent conservatism that comes from low budgets and the large scope and complexity of building design. Developing a stronger dialog between academia, professional practices and the software industry. This could give our students more opportunity to use their skills in action and invigorate domain-specific software development.

3. How do you feel that you can best contribute to moving the LIKES initiative forward?

I am interested in developing LIKES collaborations where they coincide with my research and teaching and where they can lead to future funding. I study how tools and methods shape design thinking, with special interest in physical/digital hybrids. I have

been researching [design process with a digital pen and paper system](#) that generates animations. I want to develop my expertise in digital fabrication and parametric design, working more directly with carving or casting materials through computer or hybrid methods. My architectural design teaching includes sustainable design and intentional communities.

After learning more about the LIKES project, I could be more specific about how I could contribute. I appreciate the opportunity to pick everyone's brain for how to go forward.

Participant: Norman Chonacky

Title, affiliation: Research Affiliate, Yale University
E-mail: norman.chonacky@yale.edu
Photo: not provided

1. What do you believe is necessary for the LIKES initiative to succeed?

You wish to do community building with, as one goal: "Formation of new communities for enhancing ... integration (of computing concepts into non-computing disciplines)." In my experience, this requires data about the constituents from which such community will be drawn. These data should be of the type that enable you to understand these constituents - their perspectives, intellectual culture, values, and needs. Suitably designed and administered constituent surveys might provide you with such data.

2. Do you have specific teaching/learning experiences in your background that relate to what LIKES is trying to accomplish? Or experiences from a business setting?

Yes indeed. The most recent experience and probably most relevant to LIKES is the effort of a grass-roots movement of physics educators to move the undergraduate physics curriculum toward a state where computation is an integral part of every physics course. I will be glad to detail these when appropriate in the course of the workshop according to participants' interests. On the other hand, this historical effort is summarized and the latest results described in a manuscript that we have submitted, and has been accepted pending revisions, for publication in the American Journal of Physics - special issue on the theme of computational physics - slated for April 2008 publication. I can make the first draft of a white paper upon which this manuscript is based available as a "pre-print" to those wishing to see it at this time.

3. How do you feel that you can best contribute to moving the LIKES initiative forward?

The projects that our partnership/coalition - Partnership for the Integration of Computation into Undergraduate Physics (**PICUP**) - are now in the process of designing and for which we will seek funding have some natural confluences with LIKES in terms of its goals. To the extent that these will supply part of what LIKES seeks, they might help move your initiative forward.

Participant: Carlos Evia
Title, affiliation: Assistant professor of Professional Writing, English Department, Virginia Tech
E-mail: carlos.evia@vt.edu

1. What do you believe is necessary for the LIKES initiative to succeed?
Real interdisciplinary collaboration beyond. In the liberal arts and humanities, many faculty members are suspicious of projects involving colleagues in fields from science and technology. This is a result of the use of terms like "hard" and "soft" disciplines, and the alleged superiority of academic fields that attract federal money for research. LIKES needs to see all non-Computer Science partners as valuable, and truly embrace collaboration for mutual benefit. If we ignore the differences in perception and expectative, the project will not truly involve key players outside of IT-heavy departments.

2. Do you have specific teaching/learning experiences in your background that relate to what LIKES is trying to accomplish? Or experiences from a business setting?
Yes, my background involves academic and workplace experience in technical documentation, interface design, mass communication, journalism, and web usability. Inside and outside the English department, I try to prepare students for living and working in the knowledge society. Furthermore, my Mexican-American background expands the classroom to a global environment where the knowledge society is not based on one single culture or language.

3. How do you feel that you can best contribute to moving the LIKES initiative forward?
Maintaining a healthy balance between technology and the humanities. Successful professionals in the knowledge society need good technical knowledge as much as they need appropriate communication skills. I can help with that balance at the student, faculty, and administration level.

Participant: Weiguo (Patrick) Fan
Title, affiliation: Associate Professor of Information Systems and Computer Science, Pamplin College of Business, Virginia Tech
E-mail: wfan@vt.edu

1. What do you believe is necessary for the LIKES initiative to succeed?

Having the support from the upper administration and all related deans and dept heads. Having a solid and well-designed curriculum. Publicity.

2. Do you have specific teaching/learning experiences in your background that relate to what LIKES is trying to accomplish? Or experiences from a business setting?

Yes. Teach IS for accounting and business majors. Could be useful for other college students as well.

3. How do you feel that you can best contribute to moving the LIKES initiative forward?

Attend meeting, contribute ideas, design curriculum to fit the students' needs.

Participant: Edward A. Fox
Title, affiliation: Professor, Department of Computer Science, Virginia Tech, PI of LIKES project
E-mail: fox@vt.edu
Photo: http://fox.cs.vt.edu/photos/Fox2002OctLowRes.jpg

1. What do you believe is necessary for the LIKES initiative to succeed?
We need a broad base of support from CS departments around the
nation. They will have to take initiative in helping make sure students
are prepared for the KS. We'll need a strong online community of
discussion, and visibility at key CS and IT conferences, for a number of
years.
2. Do you have specific teaching/learning experiences in your background that relate to what LIKES is trying to accomplish? Or experiences from a business setting?
The courses
  CS4624 Multimedia, Hypertext, and Information Access
   http://collab.dlib.vt.edu/runwiki/wiki.pl?MultiMedia
  CS5604 Information Storage and Retrieval
   http://collab.dlib.vt.edu/runwiki/wiki.pl?InformationStorageRetrieval
  CS6604 Digital Libraries
   http://collab.dlib.vt.edu/runwiki/wiki.pl?DigLib
 have related topics and so I've had teaching experience in this area
that relates.
3. How do you feel that you can best contribute to moving the LIKES initiative forward?
By continuing to work on the NSF LIKES grant and by continuing to
move forward with activities at Virginia Tech. These include my being
willing to assist others with interest in whatever ways seem most
helpful.

Participant: James Frew
Title, affiliation: Associate Professor, Donald Bren School of Environmental Science and Management, University of California, Santa Barbara
E-mail: frew@bren.ucsb.edu
Photo: http://www.bren.ucsb.edu/people/Faculty/james_frew.htm
1. What do you believe is necessary for the LIKES initiative to succeed?

Not sure I can comment on this yet; I need to find out more about what the "LIKES Initiative" is...

2. Do you have specific teaching/learning experiences in your background that relate to what LIKES is trying to accomplish? Or experiences from a business setting?

I have spent decades building and thinking about medium-to-large-scale digital libraries and Earth science data systems; and about 10 years teaching informatics and geocomputation skills to graduate students in a professional degree program.

3. How do you feel that you can best contribute to moving the LIKES initiative forward?

I believe I have a good sense of the difference between what's fun to think about and what actually works, and an appreciation for the particular challenges of teaching computing concepts in a broadly interdisciplinary context.

Participant: Sneha Veeragoudar Harrell

Title, affiliation:
E-mail: om_sneha@berkeley.edu

Photo:
Questions: Not answered.

Participant: Tim Hesterberg

Title, affiliation: Senior Research Scientist Insightful Corp.

E-mail: timh@insightful.com
Photo: http://home.comcast.net/~timhesterberg/TimOct01small.JPG

1. What do you believe is necessary for the LIKES initiative to succeed?

Let me put this in a larger contex. The U.S. is very strong in electronic commerce and digital entertainment, but is loosing ground in manufacturing, engineering, and perhaps in physical sciences.

I work in a statistical software company. We seem to have plenty of job candidates with CS backgrounds, but without the scientific computing background we need.

7

I hope that LIKES will expose undergraduates who are attracted to CS by the possibility of a computer game career, and expose then to CS applications in other disciplines.

2. Do you have specific teaching/learning experiences in your background that relate to what LIKES is trying to accomplish? Or experiences from a business setting?

I worked three years at Pacific Gas and Electric Co, in a cross-disciplinary technical group. We had some great applications of CS, Operations Research, Electrical Engineering, Statistics, and Mathematics, to applications in in electricity and gas -- optimal power flows, transmission capacity, hydroelectric scheduling, rare-event simulation for energy planning, and others.

I taught a "Mathematics Practicum" in which I recruited sizeable problems from local industry and government agencies, and supervised teams of 3-5 students working for a semester on one problem. These involved a combination of Operations Research, Math, Statistics, and CS.

My primary expertise in Statistics is in bootstrap methodology, a computer-intensive approach that substitutes Monte Carlo simulation for classical assumptions and cookbook formulas. This has great potential both in teaching -- helping students understand difficult concepts related to sampling variability -- and practice -- providing more accurate answers than classical approaches and yielding answers where classical approaches are unworkable. For teaching materials and other info see http://www.insightful.com/Hesterberg/bootstrap.

3. How do you feel that you can best contribute to moving the LIKES initiative forward?

I look forward to sharing stories, learing from others, and figuring out what parternships make sense - between those in academia and those of us in industry.

Participant: Matthew Jockers
Title, affiliation: Academic Technology Specialist, Consulting Prof. Stanford Univ. English dept.
E-mail: mjockers@stanford.edu

Photo:
1. Not answered.

2. Do you have specific teaching/learning experiences in your background that relate to what LIKES is trying to accomplish? Or experiences from a business setting?

Matthew Jockers is an Academic Technology Specialist and Consulting Assistant Professor in the Department of English. He also serves as a Manager of the Academic Technology
Specialist Program. Jockers's work centers on the academic uses of technology for the study and teaching of literature. He holds a doctorate degree in English / Irish-Studies and has been working in Academic Technology and Humanities Computing since 1995.

3. Not answered.

Participant: Judith Kirkpatrick

Title, affiliation: Professor, Kapi'olani Community College, University of Hawai'i
E-mail: kirkpatr@hawaii.edu

Photo:

1. What do you believe is necessary for the LIKES initiative to succeed?

- Follow-up after the 1st conference, with thoughtful summaries, questionnaires, new opportunities and possible publication or dissemination venues for the participants. (For example, if enough of us go to EDUCAUSE, SAKAI, ASSESSMENT CONF., or some other higher-ed technology-oriented conference, we could collaborate on workshops or panels, etc.)
- Opportunity for reflection and a way for you to collect them, i.e. everyone answering a few questions throughout the two days at a wiki or a blog, for example, should be built into sessions.
- C.S. leadership to collaborate and embrace the opportunity to integrate or interrelate their curriculum into the arts and sciences. C.S. leadership needs to figure out a way to recruit talented students who may get an interdisciplinary degree, and offer courses that will complement other majors.

2. Do you have specific teaching/learning experiences in your background that relate to what LIKES is trying to accomplish? Or experiences from a business setting?

FACULTY SUPPORT
Yes. Since, 1996, I've been in the role of supporting faculty to integrate computer technology into curriculum across the disciplines, as a coordinator of our College's Information Technology Emphasis. I have developed several English courses for online delivery. I also have developed a web-based evaluation system that has been used for

anonymous student evaluation of instruction, pre-post student evaluation of technology in distance learning classes, and many other surveys where we have collected data from faculty or students. See: http://moosurvey.kcc.hawaii.edu for samples. I also have supported the development and use of a MOO (multi-user object oreinted) system for synchronous online discussion and instruction. See: http://moo.kcc.hawaii.edu

EPORTFOLIOS
I have been working with a national group that comes together at the Computers and Writing Conference each year since 1992, and actually hosted the conference twice (1997 and 2004). Additionally, I have been working with others on my campus to implement an ePortfolio system (SAKAI/OSP) that is available to all of our students to use as they and their programs decide to use it (2003-current). I am currently working with our science faculty to develop an ePortfolio for their A.S. in Natural Science degree. Our system can be seen at: http://eportfolio.kcc.hawaii.edu Let me know if you'd like guest access by emailing me at kirkpatr@hawaii.edu

SERVICE LEARNING (non-profit business) and making a civic investment in the community . . .
Additionally, since 1999, I have been working with a non-profit to support a technology center where talented college students are able to work in a service learning environment that provides good computer access to a children and a community of 2000 people living at or below the poverty line. While we have been developing the concept and the technology with second-hand donated computers, in the last year we have been awarded $1.6 million to renovate a 4400 sf area for the center and are in the middle of developing the specs for the center.

HIGH SCHOOL OUTREACH
We have been running summer bridge programs for high school juniors and seniors through an NSF grant and have included students building computers from parts and then awarding the computers to the students. We have just received another NSF (STEP) grant to have our students work with promising high school students by building computers after school in the school year and then teaching them either GIS or AUTOCAD.

3. How do you feel that you can best contribute to moving the LIKES initiative forward?

I could best contribute to the LIKES deliverables by helping others with service learning and/or high school outreach programs that present rich experience and life-changing knowledge for the college and the high school students. Additionally, I have a lot of experience in helping faculty integrate computer technology into their curriculum. Our current plan is available at: http://www2.hawaii.edu/~kirkpatr/kite/

Participant: Richard Plant
Title, affiliation: Professor, Plant Sciences, University of California
E-mail: replant@ucdavis.edu
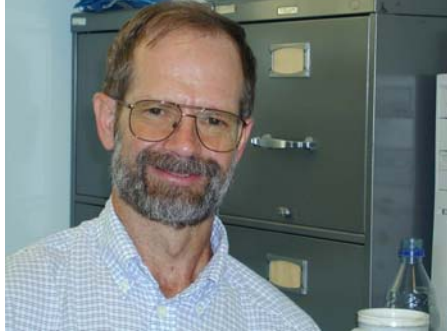
Photo:

1. What do you believe is necessary for the LIKES initiative to succeed?
That depends on how you define success. I would say that it will succeed
if the participants form the beginnings of a network that can effect positive change in the
way topics related to information technology are taught.

2. Do you have specific teaching/learning experiences in your background that relate to what LIKES is trying to accomplish? Or experiences from a business setting?
I teach, do research, and advise students in geographic information
systems and geospatial analysis, which is a topic that is at the
intersection between technology, the life sciences, and the social
sciences.

3. How do you feel that you can best contribute to moving the LIKES initiative forward?
Hopefully by drawing on my experience working with non-technologically
oriented students who are trying to learn to effectively use sophisticated computer
software.

Participant: Ryan Richardson
Title, affiliation: Postdoctoral researcher, Department of Computer Science
E-mail: ryanr@vt.edu

1. What do you believe is necessary for the LIKES initiative to succeed?
CS faculty at institutions all over the US need to work with faculty, department heads,
and curriculum committees in other departments to find opportunities to teach CS and IT-
related concepts in courses outside of those offered by CS. With declining enrollment in
CS and IT, but increasing demand for computing-savvy professionals in the workforce,
we need to make sure students learn vital computing concepts whether they are CS/IT
majors or not.

2. Do you have specific teaching/learning experiences in your background that relate to what LIKES is trying to accomplish?
I have taught and been a teaching assistant for several CS courses, including the writing
intensive CS course at VT. Prior to coming to VT, I worked as a contractor writing
database code for a major corporation for 2 years. From this experience, I learned the
importance of working with technical writers who actually understood the underlying
software.

3. How do you feel that you can best contribute to moving the LIKES initiative forward?
By introducing a LIKES-themed set of core courses here at Virginia Tech, and also by seeing that the LIKES workshops attract as vibrant and diverse a group of educators as possible.

Participant: Dickie Selfe
Title, affiliation: Director, CSTW Ohio State University
E-mail: selfe.3@osu.edu
Photo: the one he provided is terrible

1. What do you believe is necessary for the LIKES initiative to succeed?
* Buy-in from department chairs, deans, and advisory boards
* Some funding for curriculum design and extended faculty prof. development institutes
* A willingness to tie CS curriculum to computing publics of all types
* A departmental service that constantly interviews very young to
pre-college computer users about their interests and experiences.

2. Do you have specific teaching/learning experiences in your background that relate to what LIKES is trying to accomplish? Or experiences from a business setting?

I have years of experience with bullets 2, 3, & 4 above.

3. How do you feel that you can best contribute to moving the LIKES initiative forward?

Help design an "institutional change model" for the items above.

Participant: Ellen Spertus
Title, affiliation: Research scientist Google
E-mail: ellen.spertus@gmail.com
Photo: http://spertus.com/ellen/ellen.jpg

1. What do you believe is necessary for the LIKES initiative to succeed?
I don't know.

2. Do you have specific teaching/learning experiences in your background that relate to what LIKES is trying to accomplish? Or experiences from a business setting?

I have been a computer science professor at Mills College since 1998 and a software engineer and research scientist at Google since 2004.

3. How do you feel that you can best contribute to moving the LIKES initiative

forward?

By combining my industry and teaching experience to identify important computer science concepts and how to teach them. (One area that I did not appreciate until gaining industry experience is building massively scalable systems.)

Participant: Jerry Suits

Title, affiliation: Assoc Prof of Chemical Education, Univ of Northern Colorado
E-mail: jerry.suits@unco.edu

Photo:

1. What do you believe is necessary for the LIKES initiative to succeed?
First of all, a common vision based on a crucial need that is shared by most of the participants. In this case, it might be to help students (who represent our future society that is as of yet not fully defined) learn how to make qualitative changes in the way they do things that involves knowledge acquisition, integration, and distribution to everyone who needs that knowledge to solve both practical/applied problems (e.g., economy-based problems) and more theoretical/philosophical problems (e.g., how do we create a more just society that limits population growth and over-consumption of resources). Second, having a vision is necessary but it is not sufficient unless it contains a cohesive conceptual and procedural framework (e.g. participants must agree on terminology-- what a term means, how is it used appropriately, what does it not mean-- close associations that have different meanings). Third, the coherent vision must be implemented within a network that provides appropriate feedback loops to ensure that knowledge is being used in a productive manner.

2. Do you have specific teaching/learning experiences in your background that relate to what LIKES is trying to accomplish? Or experiences from a business setting?

YES! For the last 25 years I have been trying to use technology to help students learn chemistry (i.e., first year college chemistry courses) in a more meaningful way. The problem is that many students perceive that chemistry is very difficult because it is multi- dimensional with a vocabulary that rivals a foreign language course, mathematics applied to solve problems based upon chemical principles, understanding of abstract entities and processes at the molecular level, and hands-on laboratory experiences that illustrate chemical principles. I have developed, implemented and evaluated (1)

simulations of chemical phenomena, (2) animations of molecular processes, (3) interactive problem-solving tutorials, (4) computer- interfaced chemistry experiments, and (5) use of "clickers" to engage students in active learning in a lecture setting.

3. How do you feel that you can best contribute to moving the LIKES initiative forward?
As a chemist/chemical educator I need technological tools that provide opportunities for students to interact with chemical phenomena by their decisions needed to establish experimental parameters, and by the feedback they receive from those phenomena (i.e., a database that contains a variety of possible chemicals, their properties and processes). I would like to guide IT developers in a direction that allows more student/user interactivity both at the "script" level and at the user's level (which usually involves seeing animated graphics). Flexibility is a key word. If learning technologies are designed to allow greater user flexibility in exploring a knowledge domain, then students can learn in a much more meaningful manner. Overall, I believe I can be a representative of disciplines that have complex needs for learning technologies.

Participant: David Tauck
Title, affiliation: Associate Professor of Biology, Santa Clara University
E-mail: dtauck@scu.edu
Photo: not provided
1. What do you believe is necessary for the LIKES initiative to succeed?

*Bringing faculty with expertise in computer science and information
technology together with their colleagues in other disciplines may lead to
the creation of more useful pedagogical tools which could then advance the
LIKES initiative. Unless those of us who use educational technology share
our needs with those who create it, the available products may not enhance
our teaching or improve student learning. Similarly, if we are unaware of
current technology we cannot imagine possible applications of available
tools or conceive of ideas for new ones. Dialog between the creators and
users of these tools will help the LIKES initiative to succeed.*

2. Do you have specific teaching/learning experiences in your background that relate to what LIKES is trying to accomplish? Or experiences from a business setting?

*No, however, although I lack skills in computing and information
technology, my academic career has evolved with the personal computer and
internet; I use both daily in my laboratory, classroom, office and home. *

3. How do you feel that you can best contribute to moving the LIKES initiative forward?

Realistically, my only hope of making even the slightest contribution to
moving the LIKES initiative forward is by participating in this workshop and

establishing relationships with colleagues in computer science and information technology. Perhaps this will influence the calculus-based physics textbook for life science students that a colleague and I are writing and thereby indirectly support the LIKES initiative, but that's a long shot.

Participant: Ge Wang

Title, affiliation: Assistant Professor of Music, Stanford University, CCRMA
E-mail: ge@ccrma.stanford.edu
Photo: http://ccrma.stanford.edu/~ge/bio/ge-1e.jpg
1. What do you believe is necessary for the LIKES initiative to succeed?
I feel this great initiative will succeed if participants can truly move forward at their respective institutions and try out ideas fostered at the workshops, and have a productive way to then publish, share, and evaluate the results. Then perhaps another iteration!
2. Do you have specific teaching/learning experiences in your background that relate to what LIKES is trying to accomplish?
Yes! I was a founding developer, co-director, and a principal instructor in the PLOrk: Princeton Laptop Orchestra (I am to start a Stanford Laptop Orchestra as well). This was a special environment where we taught music, composing, programming, and live musical performance in a truly integrated fashion. We've encountered much success in motivating students to learn about computing/programming through music, and vice versa! Have published on this ("Laptop Orchestra as Classroom", Wang, Trueman, Smallwood, Cook, to appear in Computer Music Journal). I am definitely looking to expand this into both traditional CS and Music curriculums.

The laptop orchestra also uses a new programming language for music, called ChucK (http://plork.cs.princeton.edu/), of which I am the chief designer and implementer. My PhD advisor and co-author, Perry Cook, and I designed ChucK to be educational to both students learning to program, and those learning about computer music. We've now offered 4 different courses featuring the laptop orchestra and ChucK as a primary platform for learning. We are continuing to work on the pedagogical aspects of both.

3. How do you feel that you can best contribute to moving the LIKES initiative forward?
I'd first like to present our work with the pedagogial aspects of the ChucK audio programming language and the laptop orchestra, to the workshop, and to present our strategies of integrating computing into music, and vice versa - fundamentally using each advantageously to enforce the learing of the other. I look forward to learning what others are doing in their curriculum, and to participating in brainstorming of creative and feasible ideas that we can try as a community in the next 1-2 years.

Participant: Chris Zobel

Title, affiliation: Associate Professor, Dept. of Business Information Technology - Virginia Tech
E-mail: czobel@vt.edu

Photo:

1. What do you believe is necessary for the LIKES initiative to succeed?

The LIKES initiative is about revitalizing computing education - this is a much bigger goal than simply defining new pedagogies, integrating new computing concepts into a few classrooms, and creating a forum in which new ideas about computing education can be discussed. To be effective, I believe the initiative requires long-term active participation and interaction - there needs to be a sustainable community defined around the idea, not just a collection of independent individuals who are each pushing a small corner of the envelope. The community cannot operate in a vacuum, however - an extremely important component of the success of the initiative is the understanding of people outside the community of the value and significance of what the initiative is seeking to provide.

2. Do you have specific teaching/learning experiences in your background that relate to what LIKES is trying to accomplish? Or experiences from a business setting?

Much of the course content in my academic department (Business Information Technology) is associated with the application of computing concepts to problem-solving in a business environment - from an applied standpoint, but with theoretical underpinnings, we seek to teach the students how to use technology to support better decision-making.

3. How do you feel that you can best contribute to moving the LIKES initiative forward?

I would like to help facilitate the growth of the LIKES community - I will be actively participating in the four LIKES Workshops and am very interested in working with others in both industry and academia to collaboratively identify good existing practices in computing education, to innovate new techniques and applications, and to publicize the benefits and results of the community's efforts.

Participant: Mark Howison

Title, affiliation: PhD student, UC Berkeley Graduate School of Education
E-mail: mark.howison@gmail.com

1. What do you believe is necessary for the LIKES initiative to succeed?

Broad engagement of academics and practitioners from computer science, the physical sciences, and the humanities, especially music, digital art and new media.

2. Do you have specific teaching/learning experiences in your background that relate to what LIKES is trying to accomplish? Or experiences from a business setting?

I can think of two specific learning experiences that relate to LIKES' objectives. First, I've recently taken a course on agent-based modeling, as substantiated through the NetLogo programming/modeling environment. By offering a "low threshold, high ceiling" environment for modeling, NetLogo allows users with varying levels of computational literacy to address research questions in a wide range of disciplines, including those typically considered to be non-computing. Second, my readings of James Paul Gee and David Williamson Schaffer's books on the use of video games, and more specifically "epistemic games," as rich learning environments suggest opportunities for radically transforming current educational norms to take better advantage of computing technologies.

3. How do you feel that you can best contribute to moving the LIKES initiative forward?

As a second year graduate student in the learning sciences at UC Berkeley's Graduate School of Education, my research interests lie in designing and evaluating cognitive artifacts and learning environments that foster computational literacy. I see this fitting most closely with the LIKES objective of delivering new pedagogies in computing education.

Participant: Tim Hesterberg
Affiliation: Insightful Corporation
Email: timh@insightful.com

1. What do you believe is necessary for the LIKES initiative to succeed?

Let me put this in a larger context. The U.S. is very strong in electronic commerce and digital entertainment, but is loosing ground in manufacturing, engineering, and perhaps in physical sciences.

I work in a statistical software company. We seem to have plenty of job candidates with CS backgrounds, but without the scientific computing background we need.

I hope that LIKES will expose undergraduates who are attracted to CS by the possibility of a computer game career, and expose then to CS applications in other disciplines.

2. Do you have specific teaching/learning experiences in your background that relate to what LIKES is trying to accomplish? Or experiences from a business setting?

I worked three years at Pacific Gas and Electric Co, in a cross-disciplinary technical group. We had some great applications of CS, Operations Research, Electrical Engineering, Statistics, and Mathematics, to applications in in electricity and gas -- optimal power flows, transmission capacity, hydroelectric scheduling, rare-event simulation for energy planning, and others.

I taught a "Mathematics Practicum" in which I recruited sizable problems from local industry and government agencies, and supervised teams of 3-5 students working for a semester on one problem. These involved a combination of Operations Research, Math, Statistics, and CS.

My primary expertise in Statistics is in bootstrap methodology, a computer-intensive approach that substitutes Monte Carlo simulation for classical assumptions and cookbook formulas. This has great potential both in teaching -- helping students understand difficult concepts related to sampling variability -- and practice -- providing more accurate answers than classical approaches and yielding answers where classical approaches are unworkable. For teaching materials and other info see http://www.insightful.com/Hesterberg/bootstrap.

3. How do you feel that you can best contribute to moving the LIKES initiative forward?

I look forward to sharing stories, learning from others, and figuring out what partnerships make sense - between those in academia and those of us in industry.

Participant: Mialisa Moline
Affiliation: Department of English, University of Wisconsin - River Falls
Email: mialisa.moline@uwrf.edu

1. What do you believe is necessary for the LIKES initiative to succeed?

I believe that open collaboration between faculty must take place for the initiative to succeed. Participants need to clearly understand exactly what knowledge industry seeks in new hires and what it is that students currently lack in order to formulate a clear plan for building that knowledge in willing students.

2. Do you have specific teaching/learning experiences in your background that relate to what LIKES is trying to accomplish? Or experiences from a business setting?

I teach the importance of audience and applying a user-centered approach to online communication. I have experience in building tacit knowledge through graduate coursework and teaching online. I have learned, while working in industry, that significant gaps exist in motivating employees to build new knowledge. I have also learned (while teaching at the university) that the attitudes of students toward learning is still too passive. Getting large numbers of people to accept and embrace change is difficult at best.

3. How do you feel that you can best contribute to moving the LIKES initiative forward?
I will contribute to the LIKES initiative in any way I can. I believe my humanist perspective, my emphasis on active learning, and my enthusiasm for the architecture of knowledge will be my most valuable contributions.

Participant: Steven D. Sheetz
Title, affiliation: Associate Professor of Information Systems and Director of the Center for Global e-Commerce, Pamplin College of Business, Virginia Tech
E-mail: sheetz@vt.edu

1. What do you believe is necessary for the LIKES initiative to succeed?

The most important thing is for faculty across the disciplines of the core curricula to embrace the concept of enhancing the learning of core content by integrating relevant computing concepts. Similarly, the willingness of computing faculty to contribute to the development of students beyond their majors is required for the development of modules and materials to teach the computing concepts.

2. Do you have specific teaching/learning experiences in your background that relate to what LIKES is trying to accomplish? Or experiences from a business setting?

Yes. I have studied the ability of students to learn computing concepts in the form of OO programming techniques and have taught for a decade in the Interactive Marketing Institute to bring knowledge of database concepts to marketing professionals. In addition, I teach in the MIT India program that teaches people with professional experience in related fields, e.g., engineering and finance, IS concepts.

3. How do you feel that you can best contribute to moving the LIKES initiative forward?

I will contribute by developing modules through student projects in undergraduate and graduate classes, participating in the LIKES workshops, and defining a LIKES core curriculum relevant for students nationwide.

Participant: Wingyan Chung
Title and Affiliation: Assistant Professor, Department of OMIS, Leavey School of Business, Santa Clara University
Email: wchung@scu.edu

1. What do you believe is necessary for the LIKES initiative to succeed?

I believe the following conditions are necessary for the LIKES initiative to succeed: (1) A broad participation from different disciplines and institutions, (2) A deep discussion among participants on various issues related to LIKES mission, and (3) Concrete demonstrations, deliverables, or testimonies showing the impacts of new ideas, pedagogies, and/or new curriculum that result from the initiative.

2. Do you have specific teaching/learning experiences in your background that relate to what LIKES is trying to accomplish? Or experiences from a business setting?

My relevant teaching/learning experiences are as follows: (1) I have more than 10 years of teaching experience at graduate, undergraduate, and high-school levels that provide me a broad perspectives related the LIKES project; (2) I have been a certified teacher and obtained a post-graduate certificate in business and accounting education (PC Ed). The training I obtained from the PC Ed program help me to understand the education needs of my field. (3) I have curriculum development experiences in the Hong Kong Education Department for about three years (on a part-time basis) and in The University of Texas at El Paso.

3. How do you feel that you can best contribute to moving the LIKES initiative forward?

I believe by organizing the LIKES workshops, participating in the project activities, and contributing ideas and actions to integrating IT and computing into business education will help to move the LIKES initiative forward.