Hey. It is GREAT to be here with you today. I feel privileged to be among such a multi-disciplinary group of youth and youth workers, students and teachers, sociologists and criminologists, industrialists and philanthropists, administrators and implementers…all dedicated to understanding the impacts of technology and using technology to educate and empower youth.

Over the past seven Internet years (which in America we measure in dog years to denote how fast time flies and how quickly technology changes), I've done more than a dozen dot.com startups and spearheaded one significant CyberYouth initiative. I have seen how technology has changed the way we learn, teach, communicate, work, shop, travel, play. And I can say that, for better AND worse, this technology is here to stay.

And while most people will use today's technology for better -- to gather information, enhance education and communication, advance economy and humanity; some will use it for worse -- to mislead, misinform, malign and more. Some will make the breakthrough while others will build the bomb. And too many will either not gain access at all, or will gain access without the relevant training needed to make technology the enabling, empowering and transformative force it’s meant to be.

I know that you recognize not only technology's promise, but also the orders-of-magnitude power it has in the hands of young people.

I've seen and felt that power first-hand running HEAVEN -- a program that has helped technologically disadvantaged teens gain the access, training, opportunities and optimism they need to succeed and to lead. I have seen the previously poorest performers go on to teach their teachers and become community leaders. And I strongly agree with Nicholas Negroponte of MIT, who says, "If you want to learn technology, get a kid."

Not only have I seen our youth grasp technology like a native language; I have learned most of what I know and love about technology from them.

And I agree with what one student said in summing up our program:
“Computers won’t change the world, people will. But computers are the tools we’ll use.”

However much technology changes our world -- socially, culturally and economically; at school, at home, in community and at work -- the greater task of change is up to us.
And I can’t think of a better way to effect that change than by sharing the sum of our experiences and the best of our tools with today’s youth.

About seven years back, an Apple Computer ad was partially responsible for encouraging me to enter the new media field. “Our children,” it said, “Will grow up in a world that we can only imagine….Technology will take them there.”

In 1997, we launched HEAVEN (www.heavens.org) to bridge the growing “digital divide” between technology haves and have-nots -- especially at the level of youth. Participants in our accredited after-school programs learned from leaders in the fields of research, journalism, technology, science and service. They gained leadership and marketable multimedia skills, and used those skills to publish issue-oriented Web pages on the topics that impassioned them most.

In truth, although America Online and New Line Cinema seeded the program, and industry and community supported it; it was YOUTH who created it -- innovatively and consistently.

Kids conceived and implemented “Shout out What you Care About,” which had them taking digital cameras and recorders to the field -- interviewing celebrities and everyday folk on topics like tolerance and trust, then publishing the results to the Web and polling our online audience for opinion.

They used chat rooms, Instant Messaging and ICQ to campaign for change and engage in issue-oriented improv rap sessions.

They created a new form of “rapping paper,” which was used to raise awareness and funds for an array of causes.

They served as CyberJournalists at events like Congressional Black Caucus and the Digital Divide Summit; visited the sets of television shows with socially responsible themes; took field trips to leading technology, entertainment and finance firms; interviewed folks as diverse as FCC chairman William Kennard, AOL chairman Steve Case and celebrities Martin Sheen, Malik Yoba and others; gained internships and paying jobs at top new media firms; won awards and scholarships; and gave back in significant ways -- performing community service and sharing their skills with people from all walks of life, from the homeless to the political, the pre-school to the aged.

Our youth will need these skills: They will grow up in an era when 80% of all jobs will require technical proficiency and lifelong learning -- and that’s whether they’re working with technology directly or using it on a loading dock or at the gas pump.

**From Digital Divide to Digital Inclusion**

With that much importance placed on technology, what happens when some gain access to it and others do not?
Despite unprecedented worldwide prosperity, the gaps between rich and poor, haves and have-nots, have also grown. And a new divide -- the "digital divide" -- has come to rest on the underlying inequities of race, class, gender, age, education and economics.

In America, the digital divide is seen as one of the most pressing civic and economic issues of our day -- as critical to our present and future as religious freedom, free education, racial equality and voting rights have been to our past.

This summer, the U.S. Department of Commerce issued "Towards Digital Inclusion," its fourth annual report on the Digital Divide (www.digitaldivide.gov). While it demonstrated a dramatic increase in digital inclusion -- with more than half of all Americans projected to use the Internet in 2001 -- it also pointed out an increasingly wide digital divide, especially at the level of lower-income minorities and disabled citizens.

The global digital divide -- a serious concern, with less than 5% of the world’s population online -- is also considered key to humanity and economy. And Asian industry leaders and government officials recently met to address the widening gap between information "haves" and "have-nots" in this region.

I’m proud to say that, home in the U.S.A. and here in Hong Kong, MUCH has been done to alleviate the digital divide on every level -- from awareness of the issue to improvements in infrastructure, from affordable equipment and access to relevant training, content and employment opportunities.

An unprecedented confluence of governmental and social agencies, school systems, libraries and public and private initiatives have come together to raise awareness and funds and to implement programs that work -- many of them found at www.digitaldividenetwork.org.

As but one example, this summer, HEAVEN merged with fellow non-profit MOUSE (www.mouse.org) to form one strengthened organization and end-to-end digital divide solution -- able to wire and equip schools and community centers and to conduct technology training programs in them.

There are numerous initiatives that help youth use technology to positively shape who and how they are -- in school and in life; at home and at work; as individuals and integral parts of society.

**Programs that Work; Pitfalls to Avoid**

Before I take you on a brief tour of them, I’d also like to address some pitfalls that can befall these programs.

Even as the digital divide and the effective use of technology in education are complex issues, so is the process of finding and implementing solutions.
I am reminded of my search for a working xerox machine in Russia a few years back. Several people proudly claimed to have copiers. But one by one, each machine's fatal flaws were revealed: One lacked toner. Another lacked paper. (Neither of which were available on the open market.) One machine had been broken for months, but no one had the know-how or funds to fix it. Another "seemed" functioning, but kept blowing out fuses in the nearby power supply.

It was a powerful lesson in what could go wrong -- many things, at every step along the way.

And here I hope you’ll learn from our mistakes. Because as Eleanor Roosevelt used to say, “Life’s too short to make them all yourself.”

In America, we had a hard time wiring and equipping our schools for a variety of reasons: Many schools were too poor to afford the wiring and equipment, and/or lacked the infrastructure to accommodate them. And even with programs like E-Rate (www.erate.org), which taxes the U.S. cable and telecommunications industry and uses the proceeds to improve school infrastructure and assure Internet access; and NetDay (www.netday.org), which marshalls equipment donations and volunteer efforts, there were problems of allocation and coordination.

And though we went from having less than 35% of our schools wired in 1994 to nearly 95% today, there's no time or reason to rest on laurels: In many instances, Internet connections are slow, equipment is inadequate and breaks, systems must be upgraded and maintained, and not enough teachers know how to use the technology effectively.

Even the "popularity" of the digital divide issue plagued many programs. Each time President Clinton mentions it in a speech, countless individuals and corporations call -- all wanting to help "now," without necessarily knowing or caring how. And in response to requests for “donated” equipment, many rush to recycle outdated machines -- often stripped of memory, software and all usefulness.

We’ve made significant progress on all fronts: Increasingly, corporations and people donate not just adequate equipment, but also the expertise to install and maintain it. Often, we teach students, who truly do "get" the technology, to maintain the systems and help train the trainers. And we’ve started training programs (www.nycares.org's Partners in Technology program and www.imentor.com are good examples) for individual and corporate volunteers -- many of whom also serve as guest teachers, mentors and program funders.

I hope you’ll ask about these problems and their solutions in the Q & A that follows. But for now, let's look at the all-important issues of online safety, responsibility, respect and freedom -- which I know are of utmost importance to us all.

About Online Safety and Responsibility…
The Internet may be our best teaching and learning tool yet. Many argue that it will transform education as greatly as Gutenberg’s press and the printed bible changed society.
But the Internet can be a distracting and dangerous place. While it is a great equalizer (online, no one knows if you’re a dog), it can also be a pernicious impersonator. Pedophiles have passed themselves off as young girls’ “best buddies” in chat rooms. Message boards are prone to harassment and flaming. Hacking serves as a serious threat to national and world security. Viruses like “LoveBug” have brought businesses to a halt. Private information can be gathered and disseminated without permission. Copyrights and intellectual property are hard, if not impossible, to protect. Both information and misinformation spread at unprecedented speeds and on mind-boggling scales.

Yet, for all its real and perceived dangers, the Internet remains a remarkably safe place, with new measures -- in the form of policies addressed and implemented (www.truste.org is a good example of this) public education programs, filtering and blocking software, fail-safe back-end systems, sophisticated encryption programs and watermarked protection -- ushered in daily.

And even as we teach our children to LOOK before crossing the street and to THINK before talking to strangers, the promise and peril of the Internet ushers in a new and necessary opportunity to discuss issues of safety, respect, privacy and responsibility.

In HEAVEN, we kick off every session -- be it for students or staff -- with an overview of online risks and responsibilities and with sign-off forms that set forth safety, privacy and intellectual property protection rules.

In each instance we ask: How much access should be allowed -- full, restricted or somewhere inbetween? And who should decide -- the government (national, state or local), school systems, librarians, teachers, parents or students themselves?

In most instances (but after quite rigorous debate), participants come to the same place: They want to use the Internet freely, and they agree to use it responsibly.

The American Library Association (www.ala.org/work), the American Civil Liberties Union (www.aclu.org) and the Electronic Frontier Foundation (www.eff.org) are among the many who have come out against censorship and for freedom; with the ALA affirming that the use of filtering software blocks access to constitutionally protected speech. Meantime, the Children’s Online Privacy and Protection Act (www.coppa.org) aims to ensure that our youth are protected without being cosseted.

Of course, a few issues fall in the cross-hairs: Students doing a project for Breast Cancer Awareness Month this October were unable to do adequate online research because New York City’s iGear filtering system -- meant to block access to porn and hate sites -- deemed the word breast “too close to sex.” Still, so many students found their way around the system, that some credit it with teaching them “hactivism” -- a buzzword that implies hacking for the public good.
But constitutions and policies aside, it’s unclear whether the Internet can be censored. By design and construction, the Internet circumvents all obstacles -- breaking down transmitted information into swift bits and strings of 0s and 1s -- and almost always delivering the information intact.

In HEAVEN we have a policy: While we are against government attempts to control our content or access, we affirm our responsibility to safeguard students from harm and to assure a safe site for them. And in Hong Kong, the Education Department’s Information Technology division offers up a good guide to school use of the Internet (www.ited.ed.gov.hk/English/resources/internet_guideline/GuidelinesforSchoolsontheuseofInternet.htm).

It’s an ongoing challenge and debate. But now that we’ve addressed it -- at least cursorily -- let’s look at some programs that work.

**In School, After School, In the Community**

Fortunately, in Hong Kong and the U.S., most of our schools are wired and equipped, and most youth who have access to technology take to it with fluency and voracity. And that’s good, because in today’s fast-paced world -- where technology’s capacity doubles every two years and virtually every worker will need to master and re-master aspects of it -- they’re going to need to love learning and to be lifelong learners.

Multi-media, specifically, speaks their learning language. Not just because we can pump it up with pop culture, but because it is multi-channel, like our own learning processes. A learner can see, hear do, share a specified task -- committing it to multiple memory and experience channels. The students that use vs. abuse these tools are learning deeper thought, tighter logic, better expression. They are seeing their works published on the Web and are using online tools to communicate real-time. Meantime, their literacy rates increase without focusing on them as such. It is an incredible symbiosis of man and machine.

If only the same could be said for teachers!!!!

On the whole, teachers may be the most important workforce in the world. Our youth and our future are in their hands. And next to parenting, I think it’s the most important job imaginable.

Unfortunately, today’s teachers are often overextended and underpaid.

And at least in the U.S., they are not usually able to integrate technology into their curriculums and classrooms quickly or fully enough. On top of new technology standards -- set forth by the International Society for Technology in Education (www.iste.org), which has established guidelines for students’ proficiency with computers, the Internet and productivity programs -- teachers are charged with harnessing technology to all other standards -- reading, writing, math, science, social studies, social and emotional intelligence and applied learning among them.
It is an immense task -- one on which so much rests.

Knowing that they cannot adequately prepare students for the information age economy if the teachers themselves are not technologically proficient, the U.S. Department of Education, Hong Kong’s Education and Manpower Bureau and many others have placed a major emphasis on Information Technology Staff Development. (See www.nycenet.edu/oit and www.info.gov.hk/emb/eng/welcome/index.html for examples.)

Even as the Internet is based on “open standards” and a sharing of “source codes,” teachers who have successfully integrated technology share their “secrets” through seminars and on websites (such as Chris Lehmann’s Journal of Technology Education at www.beaconschool.org/~clehmann and Ted Nellen’s extensive CyberLibrary -- http://www.tmellen.com/school/cylib.html). Lesson planning sites are available from such entities as the Association for Supervision and Curriculum Development (www.ascd.org), WebQuest (www.adweb.sdsu.edu/webquest/matrix.html), www.edu-net.com and Hong Kong’s Curriculum Development Council (http://www.cdcenci.hk.linkage.net/cdi/cdc-e.htm).

Major corporations have launched technology-in-education initiatives aimed at teachers, including Bertelsmann’s Media Workshop (www.mediaworkshop.org), which helps educators integrate new media into schools; New York Times’ "Teaching with the Times," (www.nytimes.com/learning), which offers lesson plans linked to daily news; AOL@School (www.school.aol.com) with its extensive lesson plans and free access programs; Intel’s "Teach to the Future" campaign (www.scoilnet.ie/teachtothefuture/faqs.asp); RTHK’s Education Television (www.etv.hk.linkage.net/english/e-index.htm), which provides Hong Kong schools with teaching and reference tools; and City University’s Cyber Youth conference and courses (www.cityu.edu.hk/prj/YSNet/flash/cyber.htm), which pulls so many aspects together.

HEAVEN (www.beaconschool.org/~heaven/teachers.html) has been one of many entities that helps teachers integrate technology more successfully and deeply into their curriculums.

Interestingly, the schools that first contacted us for staff development were ones in which we’d operated student programs. Students became not only our best recruiters, but also our strongest technology trainers (even if the teachers still had a thing or two to teach them in every other subject area). And what’s more, the technology-proficient youth and the technology-dependent staff were able to form lasting and mutually beneficial relationships that also led to a deepening of trust, enjoyment and respect.

And then, our definition of “teachers” opened up even further. The same technology and industry leaders who’ve volunteered to share their skills with students now also share their skills with teachers and administrators. And immense benefits have ensued from getting communities into our schools and schools into our communities.

Today, many schools have websites, which may be used to promote school philosophies and policies, carry calendars, communicate with parents, post syllabus’ and homework assignments, offer homework help, host
student work, and more. The New York City Board of Education is considering starting its own commercially supported Internet Service Provider (www.nycenet.edu/cyberspace/view.htm) to better serve and connect students, parents, teachers and community. And in Hong Kong, STChannels has joined forces with Cable & Wireless HKT to create an education portal (www3.stchannels.net/V2/) -- used by over 150,000 teachers and students -- that promotes life-long learning and enhanced communication among children, parents and teachers.

Plus, some schools are specializing in technology. Paul Robeson High School for Business and Technology posts their mission in their school entranceway (in Brooklyn, NY) and on their Website (www.nycboe.org/nycbeyond2000/projects/published/team_20/home_page.htm): “To prepare our students to use business and technology to achieve their personal best, to fulfill their responsibility to their community and to positively influence the course of events in the 21st Century.” And Hong Kong schools like St. Joan of Arc Secondary, St. Aberdeen Technical School and Yu Chun Keung Memorial School #2 have great programs underway. But schools alone are not the answer: In the U.S., most of the differences kids make, and most of the trouble they get themselves into, occurs outside of school. It is said that students who are not working, in camp or going to school over the summer lose two-thirds of the academic and social progress made over the previous year.

Fortunately, many K-12 institutions are adding after-school, weekend and summer technology programs. Social service agencies like the YMCA, YWCA, 4H and Boys’ and Girls’ Clubs are adding computer clubs and programs. Community Technology Centers (www.ctcnet.org), of which there are more than 400 in the U.S., are the order of the day. And PowerUp (www.powerup.org), which has more than 250 after-school technology programs operating or planned, will expand internationally this year. Even AmeriCorps and PeaceCorps (www.americorps.org) are recruiting volunteers to help run an array of technology programs at home and abroad.

To cite but a few examples of after-school CyberYouth programs that work:

Digital Clubhouse (www.digiclub.org) hosts programs like “Producing the Producers,” in which participants create a Website and portfolio of multimedia productions based on stories from their personal lives. Special interest versions of this program are designed to deal with such populations as the disabled, cancer recoverers, even gangs like the Crips and Bloods, who have used technology to campaign peacefully for their causes.

Plugged In (www.pluggedin.org) has a vibrant education program that has spawned highly creative online conferences, music videos and poetry readings as well as a paying Web publishing business spearheaded by program participants.

Harlem Live (www.harlemlive.org) operates a popular Internet publication written, created, and presented by teens in Harlem and throughout New York City. In the process of teaching technology and journalism skills, the program also fosters understanding through diversity and empowers youth of color to be productive, creative and thoughtful leaders.
In conjunction with the New York Times, MOUSE (www.mouse.org), which recently merged with HEAVEN, hosts The Digital Newspaper Contest -- designed to give high school students the opportunity to learn about creating an online newspaper while developing critical and creative thinking skills. MOUSE has also teamed up with Arthur Andersen to create "Young Women's Tech" -- a project that brings high school girls together with professional women to learn life and technology skills while building an online magazine.

HEAVEN, MOUSE and others operate vibrant internship programs -- not unlike EMB’s vocational training and apprenticeship ordinance initiatives -- that place students at leading technology and media companies. One of the most important things that interns and apprentices learn on the job? It’s not just about skills. It’s equally about the enthusiasm, creativity, and confidence with which they are applied. It’s about loving to learn and learning constantly.

At Home
I also want to emphasize the importance of technology at home. Although schools and workplaces are increasingly wired, home computer ownership and Internet access remain the digital divide’s deepest and most detrimental gap in each of our countries. And interestingly, fear on the part of parents -- or failure to fully grasp the importance of technology in their children’s lives -- remains a more significant factor than either income level or ethnicity.

In the U.S., with the help of computer manufacturer like Microsoft, Compaq, Dell, Gateway and others, there are laptop programs that enable students to take computers home. Programs like Computers for Youth (www.computersforyouth.org) campaign for high-level recycled computers and contribute them to inner-city households along with low-cost access and extensive training.

Even old-aged homes and shelters are being wired. There’s a great story about a homeless man in Seattle who sees Microsoft founder Bill Gates on the street, and approaches him for money. “Sorry, I don’t carry cash,” says Bill. “No problem,” responds the man. “Here’s my URL. The address of my shelter is on the homepage, and you can mail in your contribution.”

But who do you think is doing the most to bridge the digital divide at home? Again, it’s our kids!!! Kids who come home from schools and libraries and after-school programs turned on by the technology and what they can do with it. Kids who ask for that technology, and in some instances, raise money to contribute towards it. Kids and who teach their parents how to use the technology once they’ve got it.

We often ask the youth who participate in HEAVEN for feedback. A few years’ back, they proposed getting their parents more involved. So we wove in full-family computing on several levels -- from addressing Internet safety and privacy issues to celebrating student successes.
And though I don’t run HEAVEN anymore, I still get calls from kids and parents, which makes me feel privileged, awed and humbled beyond belief.

**In Closing, Some Concrete Examples….

I’d like to close with a few concrete examples of what this might mean for our youth and their futures.

There’s the story of Kevin Brown, now a college student and music industry intern; but two years’ back, perhaps the shyest kid in our program. Like many inner-city black males, his Website focused on police brutality. He used the Web to research his topic, reach out to experts, and to become an expert. At one point, our group took a field trip to the TV set of “New York Undercover” to interview actor/activist Malik Yoba, who campaigns heavily for justice and against hate. As part of the interview, Kevin asked: “What kind of advice can you give young, Harlem teens like me? How do we keep from getting shot, much less make a difference?”

“Man,” Malik said. “I got shot at 15. I know violence. I wish I had a magic wand. But you do! You’ve got passion, this program, a Website….And you’ve got me. I’ll stick with you!”

Later, we did an online auditorium event with Malik and online chats with police, the police commissioner and fellow students. An MTV documentary, “Driving while Black” was partially inspired by the project.

But it went deeper than that… After the interview, Kevin’s mom called to say that he was standing straighter and speaking more. “That’s not enough,” said Malik. “I think the kid needs glasses, he squints too much. I’ll take him to my eye doctor.” But it wasn’t necessary: The squinting had stemmed more from cynicism than from anything physical. And it stopped.

There’s Gabriel Almanzar, who interned at the Hebrew Home for the Aged, not only helping out with that agency’s technology infrastructure, but also using technology to bond with and preserve the stories of elderly residents.

And Michael Popo, who was so loved at his new media internship, that he’s been written into Jupiter Communications’ organization chart, and now teaches staffers how to more effectively surf the Web and do html. He was a CyberJournalist covering Congressional Black Congress, and in reporting on that gathering he said. “Who would have thought that a group of government officials, educators and business people would have included a group of teenagers in a high-level meeting and taken the time to listen to our views on technology and education? But they did. And we all learned.”

Likewise, Eric Gordon used the skills from our program to help found “Act Your Rage” -- monthly poetry raves that peacefully and creatively protest police brutality. He and his friends often use ICQ and chat rooms for issue-oriented improv rap sessions. Eric is now on a partial college scholarship to the New School, where he is double majoring in technology and community organizing. And I often see him on the streets handing out flyers and
campaigning for causes. It was Eric who said, “Computers won't change the world, people will. But computers are the tool we'll use.”

These kids constantly remind me of the most essential technology -- the human heart and the human brain -- and of what we can do when we marry our true intelligence to the manifold tools at hand.

Today’s CyberYouth -- standing at the intersection of technology and humanity -- are our future.

And while they’ll use technology to do things and go places we can only imagine, we can at least give them the tools, training and opportunities to make of it more that we ever dreamed.

In the process, we’ll be better teachers, learners, parents, students, scientists, sociologists, psychologists, people…living in a more intelligent and connected world.

I cannot thank you enough for participating in something this promising and important.

I am happy to answer your questions. And I’d be thrilled to learn more about your programs, your youth, your hopes and plans.

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Biography:
Ms. Wendy Dubit is the founder and president of Vergant Media, a consulting firm specialising in brand building, business development and content creation. She is also the founder and president of HEAVEN, a non-profit organisation which uses new media to benefit society and bridge the digital divide. Wendy worked with America Online and hosted numerous NetCasts and radio shows. She also writes on issues related to lifestyle and entrepreneurialism, and speaks on a variety of technology and business issues.