

Focus: **New Technologies In Education**

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EDUCATION » TECHNOLOGY » FAST FORWARD

go learn it

Lou August, Director of the  
Wilderness Technology Alliance,  
challenges students to investigate,  
create and collaborate. P.18

May 2001



the stream of the world has changed its course,  
and with the stream my thoughts have run  
into some cloudy thunderous spring  
that is its mountain source —

W.B. Yeats (1865-1939). "The Hour Glass," "Responsibilities and Other Poems." 1916.

**W**hy did Lou August, director of the Wilderness Technology Alliance (WTA), build a lodge on Mount Rainier, Wash. in 1989 to teach kids to rebuild computers? After all, he did have a successful business in Washington state, building and supplying schools with computer hardware. Kids could have come over after school for a few sessions. But he built a lodge, made an offer and searched for students to scale a mountain and grasp lessons anchored like pitons in a vertical ascent. Just what is it about learning on a mountain?

#### MINDS ON THE MOUNTAIN

Somehow, what Moses discovered on Sinai, what Zeus knew on Olympus, and what scores of monks studied on the temple-mountain of Borobudur would probably not have the same impact if learned on a lawn. And there's one hitch. If you're going to teach something on a mountain, you're going to have to convince someone to come up and learn it. So August built a lodge, made an offer and searched for students. He spent years searching. Not a single school district in Washington would agree to cooperate. "Educational reform was way behind than where it is now," said August. "The idea of a business taking kids out and teaching them technology was heresy, and we almost gave up. But in '95, I happened to meet a guy who was involved in search and rescue for the local forestry service, and he was [also] the technology director for the Tacoma School District. He ended up championing the program, bringing the program to his principal, getting a sign-off, and the program was almost cancelled on its eve, but we finally got it up and running."

BY SUSAN ABDULEZER | PHOTO BY AMANDA KOSTER

# Light of passage







**Digital Directions.** (l-r):  
Sambath Tith, Lou August,  
O.J. and Kerry Sawyer.

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“There needs to be a value experience, a character experience. The only vehicle that can do that without prejudice is the wilderness.” Lou August



What August put in place was a wilderness-technology program — a camp that combines a four-day backpacking expedition followed by an intensive multimedia workshop. At-risk students attend to learn group survival skills, how-to-put-together-a-computer-from-scratch skills, how

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to craft a multimedia project, and how to take a little knowledge down from the mountain and make it grow. August's strategy makes it logical, appropriate, even necessary to hike along Ipsut Creek to Mowich Lake and Spray Falls, all the way to the Lookout, covering a grueling 22 miles (one of many trails) before pressing pixel to desktop and covering as many hours as miles in multimedia training.

"As technology education becomes more accepted throughout our education system, the more it crowds out the values experience through education," said August. "Technology [doesn't teach] anything about values. In fact, it's a vehicle by which really rotten values can be proliferated because computers don't make a values judgment. You see what happened in Columbine. So many of these things that happened are involved in technology. There needs to be a value experience, a character experience. The only vehicle that can do that without prejudice is the wilderness."

The wilderness is not only central to connecting technology with values education in August's vision. The wilderness is what you hike through to get to what you will learn. The wilderness is what you live in while learning.

And the wilderness is what you consider, what you write about and what you communicate about when designing multimedia at camp. And soon the wilderness will be what students think about when they leave camp as WTA extends opportunities beyond the mountain lodge.

**FINGERS ON THE TILL**

Lou August believes that while the WTA will bring values into focus, enterprise will put those values to work. August's own experience as an entrepreneur serving school districts' technology needs in the early '80s (the dawn of computers in classrooms), revealed how wealthier districts' access to personal computers gave their students an enormous advantage in the workplace. Teaching at-risk kids in computer camp and giving them the entrepreneurial means to acquire funds for school technology programs became August's own way of bridging the Digital Divide. The WTA's approach is two-pronged. One focuses on hardware, with a program in refurbishing computers.

The WTA trucks surplus computers out to the schools to have kids refurbish for low-income adults. "We've got Selkirk School for example, in northeast Washington, 100 miles from anywhere, and they're redeploying computers. Their technology program, led by high-school kids in the evenings, is full, and they just started offering it about three weeks ago. They have a plan to have a refurbished computer for every single family in their greater area, even beyond the district, by the end of the semester. This is the way America is going to bridge the Digital Divide. It really works. The atmosphere it creates in schools is unbelievable. I'm hearing story after story of teachers who were previously unmotivated, who suddenly burn the midnight oil. They are so excited with

**Eric Christiansen: Go Learn it on the Mountain**

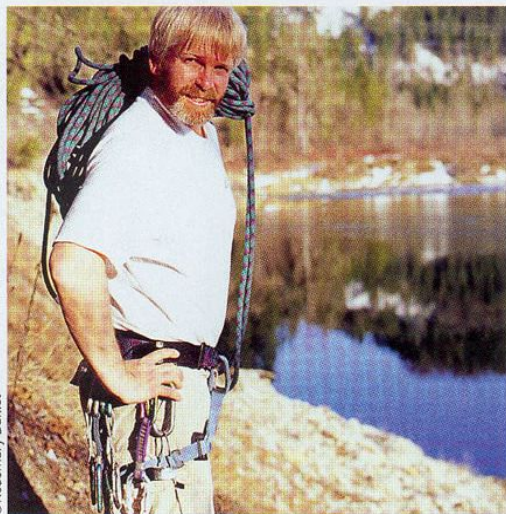
"It was just an amazing experience. They had us working. [At the end of one session] a few of us went down the mountain, back to the families. Four people went back up that night rather than stay with their families. They just felt some draw — they had to get back to the group. It was just an absolutely amazing, emotional experience, and I'm not a touchy-feely guy.

"The first couple of days, they had some people up from Macromedia — absolutely tremendous teachers — they showed us how to use the software. They'd go from about 8 o'clock after breakfast to around noon, we'd break for lunch, then go till dinner, and then we were done. Everybody would go back to the computers and keep hammering at it and, from 1 to 2 a.m., people were still there.

"My focus is on leadership. Right now, I have a great group of inherent leaders who just don't know they are leaders yet. I just want to harvest their potential.

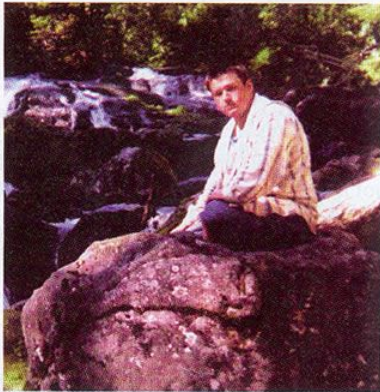
"Lou August is absolutely a guy who can walk into a room and light it up. He is an energetic, giving person. He's the kind of general you would go over the line for. He has such a vision and such a selfless vision, that you jump right on board.

"I now have kids designing Web pages. I have a kid, a freshman, who just made 300 bucks designing a Web page for someone. Not only that, we are starting a class where the kids are going to teach computers to the community. We've already turned down enough to fill the next class if we want. And we've made this a fund-raiser for the tech club."

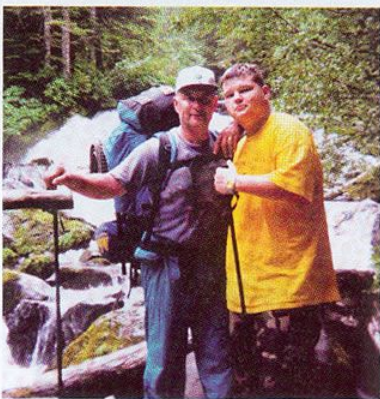


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**Devin Chastain:** "This experience really did help me a lot. I am normally not a physically fit person. I was overweight and just getting worse. The pain nearly brought me to tears on the third day. [But] the hike was the most fun. [Also,] I actually got to put a computer together. That is when I first really realized my interest in electronics. I learned a lot about the inside of computers, and it also gave me a chance to learn by doing, which in my opinion, is the only way to truly teach someone. This camp has helped me in many ways."



**Justin Busby** (pictured with father, Stephen Busby): It's been two years, and for WTA multimedia camp graduate Justin Busby, the bright, snowy scenes on his way through the wilderness on Mount Rainier are still fresh in his mind.

"I didn't really have a lot of interest in computers — that was because I wasn't very good with them. Everything I did back on the trip really paid off. After, I decided I wanted to do something with computers. I got started at Prairie [College, in Wash.], and I love it! It's nice being able to understand new things that are coming out. My mother, for instance, didn't even know what the Internet was until I told her.

"The [Mount Rainier] experience directed me to the technology, and after I went there, I figured out that technology is the wave of the future, and that's

what I wanted to be a part of — something that's going to be growing. And now I am.

"The thing I really liked most about the camp is when we were up at a point where there was all snow. Just being up there so high is somewhere I've never been before. It was amazing just how nice it was up there. Actually, it was the prettiest thing I've ever seen."

this enterprise — making real differences in the lives of people in their community. And that's what this model is doing."

The second prong in August's attack on the Digital Divide is through software development. WTA coaches teachers and students in the ways of capturing small contracts to create Web sites for local businesses. Local businesses are then no longer left out of the digital economy; poor students are no longer left out of the cyberspace scramble; and schools have self-sustaining, self-funded programs.

#### HANDS ON THE LAND

Determined to give a boost to the schools mobilized on the mountain, August, along with the Washington State Education Department and

Macromedia are on the brink of snagging a \$50,000 contract from the Environmental Protection Agency for a project called Hands on the Land. This will enable 10 schools that have already participated in the WTA camp to develop educational Web sites for five federal agencies that the WTA will host. The mission of the project is to connect public education with educational resources in all public lands and historic monuments controlled by the federal government. The list of cooperating agencies reads like the credits of a public television nature series: The National Park Service, Bureau of Land Management, among others. The initial sites chosen for Web development could be chapters in *National Geographic*: Olympic National Park, Wash.; Ever-

glades National Park, Fla.; Campbell Creek Science Center, Alaska, to name a few. "For them to agree to let those be student-led and school-led projects is a huge deal. We love to see that kind of stuff happen," said Pat Brogan, vice president of education and learning at Macromedia.

Hands on the Land has the potential to take the lessons learned on the mountain and spread them coast to coast. The contract requires that they take this national, "so that schools in California can do the Web development for Yosemite National Park. Schools in [New York] can do it for the Adirondack State Park. So this becomes a vehicle by which to transport this model to potentially every school in the country," said August.

The Washington state Office of Superintendent of Public Instruction, WTA and Macromedia are combining efforts to create a project-based curriculum in multimedia to implement Hands on the Land on a statewide level. Project-based means that as part of *learning Web design, you do Web design*. The kids are actually doing the work and actually doing something for the community. This curriculum can also be used to tempt other state education departments into joining the initiative, leveraging the hard work of these three agencies to affect change nationwide.

#### THEORY INTO PRACTICE

August always considers the patterns, the relationships between all these efforts. Self-acceleration — the effect of one activity on another to broaden its impact and expand its own intention for the improvement of the community — is the goal of what August coins "rotational" theory. In this theory, schools can keep up with rapid changes precipitated by technology by producing what they consume: teachers and money.



If schools can produce more than they consume, they can accelerate. The solution is in the students.

In Hands on the Land, the contract provides money to establish a cadre of student Web designers to begin the cycle. The student Web designers learn teamwork and technology skills, then produce Web sites for public lands. Armed with experience and the teachers' help, students procure more contracts for Web development. This creates value in the community, which, in turn, generates financial support and more contracts to the students. The following semester, the students become the teachers, coaching and guiding new Web designers using the project-based multimedia curriculum. They in turn become skilled enough to complete contracts creating value in the community and resources to the school. The cycle continues ...

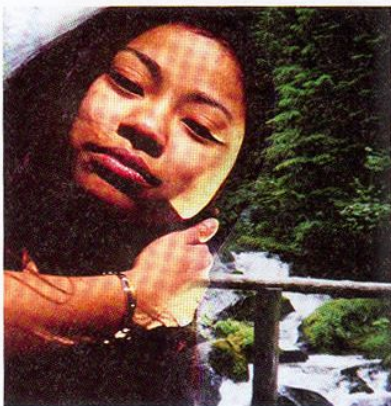
August is the prime "accelerant" at the heart of his rotational theory. Since 1989, he has turned over his own life and the lives of many others, with enormous benefits to kids



and community. Ten years later, the WTA's camp turned a corner. School district after school district signed up to send kids and teachers. Districts with names like Auburn, Battle Ground, Bethel, Burlington-Edison, Chief Leschi, Puyallup and Quillayute; place names and tribal names marching endlessly down the page like begats in the Bible. August, moved by the impact, divested himself of his business and created his nonprofit so that he

could work full-time on this effort.

So, we come back to the question: Why did August build a lodge on a mountain to teach kids about computers? In a letter from camp, August wrote: "Dear Susan, I feel we are all called to do something with our lives. The voice that speaks to us is often inaudible, and at best, faint. It rarely speaks in words, occasionally speaks in remarkable coincidences, and if we're lucky, sometimes speaks in spontaneous thoughts and inspiration. Yet it always speaks in patterns and always requires faith. Something very strange happened to me after my sister was murdered in 1982 during a school internship. The net result of it was that I lost my innermost self. This is my quest to rediscover my new innermost self, through trial and error, one step at a time. The scary thing is that I have no idea where it is going. The nice thing is that I no longer care. Strange answer, but completely true." ■



**Sambath Tith:** "The Mount Rainier hike taught me a lot of endurance and survival skills. I learned that it would be a tough trip and require a lot of training and enduring. I decided I wanted to take on the challenge anyway. The adult leaders turned out to be great. They were very respectful and understanding of us. And the views were some of the most beautiful created on this earth. After countless hours of walking, we finally reached the top. It was beautiful up there. Just looking down at the world made me feel a hundred times taller. I also felt that we had accomplished something major — a great feeling. It was actually exhilarating. That second night, we all stayed up and watched the stars. I was really amazed at how close the sky was, and how many stars were out. It was so, so beautiful. We even saw a bunch of

shooting stars. I couldn't believe it. It was the first time I had ever seen shooting stars. It was amazing. I hope that one day we will all be able to reunite and go up to Mount Rainier once again. I will never forget the experience I shared and received."



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