



DA District Administration

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K-12 Education Leadership, Curriculum, Technology & Trends

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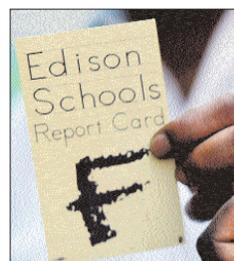
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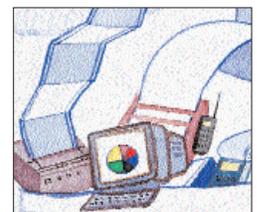
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THE ISTE PROBLEM

Gary Stager and Don Knezek cross swords over the group's national technology standards



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THERE'S SOMETHING ABOUT GARY

Never before, in my three-plus years at this magazine, has one piece inflamed so many readers and generated so much mail. For the few of you who didn't see the column and have yet to write a letter about it, I'm referring to Gary Stager's December topic, "Why Teachers Don't Use Computers," p. 47.

In this column, DISTRICT ADMINISTRATION'S editor-at-large said IT staff were the reason teachers don't use computers in class. In case you missed his point, he added that IT personnel were "control freaks" who made "insane, expensive and miseducative decisions."

Gary's expertise and his ability to discuss issues make his column a substantial part of the magazine. Although he writes controversial columns each month about a variety of topics, this one touched a nerve. (For instance, we didn't get a single letter when, before 9/11, he loosely compared one side in the math wars to the Taliban.) December's column prompted at least 30 letters and proved something we've long suspected: people write longer when they're mad than when they agree with you.

The bulk of letter-writers agreed they didn't like any of his ideas. The commonality was striking: there were mentions of his bitter rant, his pouty rant, his petulant rant, and that he is igno-rant.

My favorite letters weren't the ones that agreed (yes, some did), but from the people who thanked him for caring so much that he formed a strong opinion.

For those people, this issue is a keeper. Beside the letters page where December's IT column is debated, Gary's usual column, Speaking Out, includes a twist. He takes on the International Society for Technology in Education. Instead of waiting a month for responses, we solicited one from Don Knezek, ISTE's chief executive officer.

Finally, Gary has written the first of a semi-regular feature in the magazine. Gary's Mac Advocate page (p. 51) offers some hands-on advice from a Mac user on how districts can use the computers in classrooms. (This section will split time with a similar page with a PC viewpoint.)

Love him or hate him, agree or disagree, we hope everyone feels that Gary's opinions are worth reading, and reacting to.



Love him or hate him, agree or disagree, we hope Gary's opinions are worth reading, and reacting to.

Wayne D'Orio

Wayne D'Orio, Editorial Director



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HOW ABOUT “NATIONAL PENCIL STANDARDS?”

ISTE’s vague standards and a potential exclusionary “seal of alignment” make one wonder whose side the group is on

Some of you may be members of the International Society for Technology in Education. Many of you are not. And that may be where the problem lies.

In a “Hail-Mary” attempt to enhance its visibility and importance, ISTE has embarked on the timeless education tradition of solving a problem that doesn’t exist. Not wishing to be left out during the recent go-go years of “my standards are bigger, meaner and higher than your standards,” ISTE published the National Educational Technology Standards, redundantly referred to as the NETS Standards. This laundry list of “thou shalls” and a rare “thou shall not” apply to students, teachers and administrators. Despite the voluminous nature of these standards (think Manhattan phone book) they offer little that is new and do almost nothing to move educational practice into the 21st century.

These standards are non-specific, imprecise and general in nature. Despite their heft, the NETS are remarkably free of new ideas. They state the obvious and offer little that challenge the status quo or inspire new learning opportunities. One could imagine satisfying the NETS standards without actual computers—perhaps just cardboard keyboards. One gets the impression reading the NETS that the words, “ballpoint pen,” “book” or “library” could be substituted for the ambiguous term, technology.

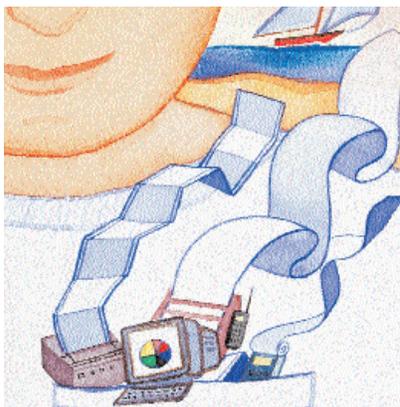
If you disagree and believe these standards are a good idea, you must:

- Proclaim a belief that classroom practice should be guided by the edicts of an anonymous committee far away from actual classrooms.
- Believe standards apply to a body of knowledge. It is debatable that educational technology is an actual discipline. Where are the National Pencil Standards?
- Profess that in order for standards to take root and have an impact on educational practice, they must be applied to a fairly static body of knowledge. One could hardly argue that educational technology, a field that changes regularly, is susceptible to such stasis.

The ISTE standards focus almost entirely on the informational aspects of computing. In fact, the word, “computing”

hardly ever appears. While the NETS focus on the need for students to be good consumers of digital information, they are portrayed as just that, consumers. There is hardly any mention of students as producers of knowledge. One could get the impression that computer science or students learning to and through computer programming had gone the way of churning butter.

The ISTE NETS are unimaginative, unenforceable and unnecessary. The current climate of school homogeneity will use this set of standards as it uses every other—to retard innovation and lower expectations.



ISTE should be an advocate of educators on the frontier of tech innovation, not a group that caters to corporate interests.

VIRTUAL REALITY A recent education article described collaborative teams of pre-K through sixth-grade students partnered with a high-tech firm to build virtual reality games about topics of study. KidPix creations were mapped onto 3-D models so the students could don VR goggles and navigate a 3-D virtual world of their creation. The school’s principal stressed

how the project will “span the entire curriculum.” Pretty cool, huh?

Well, not so fast. When asked for his opinion regarding the project, ISTE CEO Don Knezek said: *“I think the danger in novelty approaches is that you get so excited about the motivational factor that it might leave holes in the overall experience of computer literacy. It’s important for teachers to give students a knowledge base they can apply to other areas and for teachers to assess whether students have really grown.”*

Does anyone actually believe that elementary school students building interdisciplinary virtual reality games would somehow be deficient in computer literacy skills?

THE CURE IS WORSE THAN THE DISEASE On Nov. 12, the society announced a new program, the ISTE Seal of Alignment. According to ISTE, this is an innovative review process to recognize products, services and resources that are in alignment with ISTE’s mission and NETS. This raises the stakes for NETS and attempts to enforce compliance.

For a fee, ISTE will now certify that educational products,

practices and services are ideologically pure. Intel, Microsoft and PBS are inexplicable partners in this program. I find this strategy quite alarming.

Now, a committee, neither elected nor accountable, will try to determine winners and losers in the marketplace and in classrooms. Since technological innovation often results from small companies, the most outstanding products may not be able to afford this seal of approval. This process will advantage wealthy textbook publishers, classroom management systems and other large companies that can afford the price of admission. The pre-application fee is \$1,000 per product. Other costs are unpublished, although ISTE's press release implies that preferential treatment will be afforded ISTE 100 members, major corporations who have already made substantial investments in the organization.

WHAT ABOUT PROTECTION? I pity the imaginative teacher who embraces the use of products that have failed to undergo the time-consuming and expensive ISTE review practice. Such teachers may be prohibited from doing what they believe benefits their students. If ISTE's Seal of Alignment process is successful, state and local policies may forbid the purchase of unaligned products, regardless of their educational value.

One could understand how an industry association could undertake such a venture, but a member organization chartered to serve educators? Shouldn't ISTE protect its members from the over-reaching influence of corporate interests? Whose side is ISTE on?

ISTE FIRES BACK

Accurately, Mr. Stager identified increased ISTE membership among school leaders as key to the society better serving education. Fortunately, our most rapid membership growth is among school administrators who have established a new ISTE special interest group, SIGAdmin.

Objective scrutiny of the national consensus that constitutes NETS yields at least three salient points. The standards are broad targets of excellence, succinctly stated and encouraging local adaptation and innovation. Each set of standards was developed collaboratively with broad stakeholder and practitioner participation; administrator standards were actually developed jointly by 13 education leadership organizations. ISTE devotes massive precious resources—fiscal and human—to facilitate deep understanding and appropriate use of standards and of technology.

As with most powerful tools, standards certainly can be

ISTE could satisfy its mission to “provide an international organization that supports the use of technology in education” by being an advocate for educators on the frontiers of educational innovation.

Why was ISTE silent when the governor of Maine fought so heroically for every child to have a laptop? What is their position on federal censorship legislation? Why doesn't ISTE inform the public that its own standards stating that students should “use telecommunications to collaborate, publish and interact with peers, experts and other audiences” are violated routinely by school districts across America that refuse to allow students e-mail or FTP access?

ISTE could provide a valuable service if it was able to fund and disseminate information about truly compelling models of educational computing. It should celebrate excellence and use its clout to call attention to innovative classroom practices. The ISTE standards could raise the bar by encouraging schools to provide a laptop computer for every child, offer comprehensive computer science and digital media courses in every school district, and use computers in constructive ways across all grade levels.

Risk-taking educators need a courageous membership organization to support their efforts and bring their innovation to the public's attention. ISTE could be such an organization. **D**

Gary Stager, gary@stager.org, is editor-at-large and an adjunct professor at Pepperdine University.

Active membership is critical ... whether you see ISTE as the problem or as part of the solution.

misused. So can reading, virtual reality and editorial comment. We choose to credit the thousands of educators, educational leaders and commercial providers who do “get it” (cnets.iste.org/docs/nets_testimonial.pdf and cnets.iste.org/docs/States_using_NETS.pdf) and therefore use standards appropriately.

I encourage you to explore what ISTE already does in the areas Mr. Stager suggests, especially in dissemination of innovative and promising practices (www.neccsite.org.caret.iste.org, and www.iste.org/publishing). I hope that Mr. Stager joins ISTE, and that you do the same, to continuously improve our service to members and to education in general. As he indicates, active membership is critical ... whether you see ISTE as the problem or as part of the solution.

Thanks to Mr. Stager and DISTRICT ADMINISTRATION for this open discussion. **D**

Don Knezek, dknezek@iste.org, is chief executive officer of the International Society for Technology in Education and co-director of ISTE's NETS Project.

Readers Fire Back at Stager's IT Column

I HAVEN'T SEEN SO

much arrogance and misinformation in one place (Why Teachers Don't Use Computers, By Gary Stager, December 2002, p. 47) since the last Al Gore interview. Because I am one of the "non-educators/information technology staff run amok" Mr. Stager is carping about, I feel compelled to reply. I'll skip over the gross generalizations and whining and address Mr. Stager's specific complaints.

"Non-educators implemented policies prohibiting teachers from downloading and uploading files, regardless of their content."

Many large information system administrators restrict the ability of users to upload or download files from corporate servers for good reasons, none of which Mr. Stager apparently went to the trouble to discover. Perhaps he'd like to hold my teachers' hands while we explain that one of them has deleted the entire subdirectory containing their grades for the semester. He may prefer to spend his evenings disinfecting and removing virus-infected files from the student information server; files that were uploaded by a teacher.

"Shouldn't professional educators be competent computer users after a generation of bribing, begging, cajoling, tricking, threatening, inservicing and coercing?"

One would think so. One would probably be disabused of this assumption by a few weeks in our "non-educator" shoes. Mr. Stager, for instance, is much less sophisticated in the operation of a corporate information infrastructure than he evidently thinks he is. We have nearly 1,000 teachers in our corporation, and a very wide range of competence in computers and in IT generally. While a handful of teachers seem comfortable about using their



computers, most seem barely competent, and a significant fraction are appallingly ignorant. What are we to think of a veteran educator who blanches at the use of the phrase, "right click," and accuses us of falling into computer jargon?

"Why do we have so many support personnel employed by schools? How much do they cost? When will they be unnecessary?"

I don't know what the IT staffing situation is in Mr. Stager's private universe, but elsewhere, including here, there is no surplus of people to do our job. We have over 6,000 computers in our K-12 corporation, 21 networked buildings, and a WAN that connects those buildings through us to the Internet. Many buildings have labs in excess of 50 student computers. Each secondary teacher has a desktop computer, and we are well on the way to furnishing one to each elementary teacher. We maintain about 50 servers in our center and scattered among the other buildings. To support this infrastructure, we have 10 full-time employees, counting an administrative assistant. [The number of expected personnel, using a thorough Web site intelligent about school setups, would be four times that number.]

While he has every right to express his uninformed opinion, we in the education IT support industry reserve the right (from a position of knowledge and experience) to point out how wrong he is. He owes us an apology, but as we are predominantly "non-educators," he probably does not agree. I am not holding my breath.

—Tom Cox, Assistant Director
Center for Information
Technology in Education
Anderson Community School Corp.
Anderson, Indiana

SHAME ON YOU FOR ALLOWING

such an under-researched and over-aggressive personal attack to represent your magazine on such an important issue. The fact is, I agree that IT staff members are often operating far beyond their level of expertise and making decisions that should be made by the instructional staff. The poor coordination between these two important departments is the root of many problems in school districts. What a golden opportunity you have missed not seeing the true story.

Too often it is technology rather than curriculum that drives the policy and money trains. It's a real danger and needs real coverage. Just think how much more benefit an article that stresses the need for this cooperation and provides positive examples of what can be achieved as a result of such a union would be to your readership.

—Ed Morrison
Director

Information Technology Services
Barrow County Schools, Georgia

THE COMPLETE TEXT OF MR.

Stager's article would appear to indicate that he had a very bad day. Certainly something must justify such global generalizations and categorizations of IT staff. The tone of the article was that of a tirade that slammed lots of people who just don't fit his description of IT staff.

In Maine, one of the things that have made a huge difference is the belief in many of our schools that the technology support staff should have a background in education. Many of our IT leaders hold master's degrees in educational technology, not computer science or electrical engineering. The best of them are excellent communicators with their colleagues, and many are paid on the teacher scale.

As for any mushrooming growth in IT staff, that is not the case in Maine. In my system, for example, we will have fewer than 3 full time positions to oversee over 650 computers next year, a staffing level that hasn't changed in over five years.

I was offended by the implication that the situation he experienced for a week justified a total denigration of people in IT positions. I would surely like to know if his comments were based upon a wide base of experience in classrooms around the country or from a local experience.

—John S. Lunt
Technology Coordinator
Freeport Middle School
Freeport, Maine

I TAKE SOME EXCEPTION TO MR.

Stager's column. Sure, with an unlimited budget and teachers with even a quarter of the computer experience he has, I could open our entire network and probably even resign. Unfortunately, in our case, only about 1 percent of our teaching staff could come close to effectively using technology at the level he expects (downloading files, changing IP's).

The few times our network has been open to that extent, chaos ensued. I have to provide a very stable environment for our professional educators or they freak at any unfamiliar prompt or message. I can only hope for a day when our educators take the personal initiative you have to learn and use the technology we provide.

—Brian M. Mowrer, network
administrator/technician
Mishicot School District
Mishicot, Wisconsin

MR. STAGER COMPLAINS ABOUT

filters that restrict downloads "regardless of their content." I wonder how he proposes evaluating that content to ensure that it truly has educational merit. Leave it up to the professional educator because they know best? My experience tells me otherwise. Until I began working in education I had never seen such disregard for basic computer security practices and copyright laws.

—Matthew D. McCarty
executive director,
Technology Services
Clarkston Community Schools
Clarkston, Michigan

NOW SHOWING: Your Students' Imaginations

If you're not making digital movies in your school system, you should be

Digital video may be the killer app for teachers who have avoided using computers in their classrooms. Even to the most technically phobic, making a movie makes sense. The process of video editing mirrors and amplifies the writing process. Classroom movie-making is possible and practical because of major hardware and software innovations, like Firewire and iMovie—both inventions of Apple Computer.

Firewire is the hardware standard for high-speed data transfer between video cameras, computers and storage devices. iMovie is remarkable in its simplicity and power. I recently taught a school principal how to edit a simple iMovie, export the movie and burn it to CD in just a few minutes.

You may be asking, "Can't you edit digital on a PC?" The theoretical answer is yes, but it's like swimming on carpet. iMovie is infinitely more stable and easy-to-use than its PC



By the time you add a Firewire card and video editing software to a PC, you could have bought a Mac.

competitors. These two qualities are critical in classrooms, where time and patience are in short supply.

Administrators should also understand that by the time you add a Firewire card and video editing software to a PC, you will have outspent the cost of a Mac. Even if you are a

"PC school," your policy should be to invest in appropriate technology. If your school has contemplated the construction of a digital media studio to benefit a handful of kids, you might consider buying \$899 iBooks so every child can have a digital media studio in their book bag.

Amazing iMovie add-ons

Apple designed iMovie with an extensible architecture allowing others to add value and power to the program. During the past year, a number of creative companies have published collections of iMovie add-ons. These low-cost packages add incredible transitions, effects and titles to iMovie.

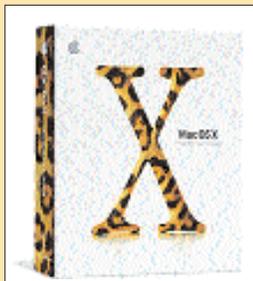
The four Slick packages from GeeThree (www.geethree.com/slick) offer high-quality transitions, special effects and titles. Virtix (www.virtix.com) brings classic-film style cinematic effects, color correction, letterbox formatting, and Ken Burns-style zooms and pans to the party. The Virtix Bravo and Echo Pack contains fun effects like fire, smoke, lasers and lightening as well as "witness protection," an effect that allows you to "blue dot" the face of someone in your video. In some settings privacy requirements make this feature a god-send. eZedia (www.ezedia.ca) specializes in packages that allow picture-in-picture, screen mattes and even chroma-key. Chroma-key is the blue screen technique that helped Superman fly.

SmartSound Movie Maestro (www.sonicdesktop.com) is a remarkable product enabling you to compose royalty-free soundtracks perfectly synched to your digital videos. It's simplicity, power and low-price makes it a must in your digital toolkit. **D**

Jaguar

All educators using Macs should have a free copy of OS 10.2, aka: Jaguar, thanks to Apple's decision to donate the operating system software to educators. The networking, interface, ease-of-use and stability breakthroughs in Jaguar are well documented. Be sure to check out the amazing features for disabled users in the Universal Access system preferences. Text may be automatically read to the sight-impaired or users with low literacy levels. Modifications may be made to how the mouse and keyboard work as well.

The multihoming and groundbreaking Rendezvous technologies foreshadow the future. Turn your Mac on and it automatically knows what printers it can use and sees any network connection, available server, user or other device regardless of how the device is connected—even if that device is a phone or Windows computer. Industry adoption of Rendezvous should allow you to show your iMovie on the classroom television wirelessly in the near future.



Want to share an OS X document with a colleague? Print any document and click on Save-As PDF in the print dialog box. Your document will automatically become an Acrobat file readable on a zillion different computers.

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SPEAKING OUT

Why teachers don't use computers

by Gary Stager

Blocked Web sites, IT staff that exist to hinder staff, and restrictive policies make integrating technology too hard to overcome

I recently spent a week teaching in a wonderful school. The school sits on a gorgeous sprawling campus. The principal is well read and charming. The students were delightful and the teachers generous with their hospitality. Every student has his or her own laptop. I was engaging the children in activities I love, and yet I found the overall experience excruciating. Why? Because of an information technology staff run amok.

The unchecked policies, practices and prior restraint exercised by the school's information technology team made it impossible for me to teach effectively. It seemed as if a surprise lurked behind every mouse click and URL. Despite the school's enormous investment in computers and networking, very little of it actually worked in the ways one would expect.

Non-educators implemented policies prohibiting teachers from downloading and uploading files, regardless of their content. IP settings needed to be changed when a user switched from an Ethernet to wireless connection. The streaming of QuickTime or RealMedia files was prohibited regardless of their educational value. Student work could not be published online because the school's "extranet" has yet to go live. I think extranet is some meglamaniac's synonym for the Internet.

I face similar frustrations at every school I visit—anywhere in the world. I need to beg a network technician for the magical network password, secret IP settings or request an act of Congress to make a presentation. Teachers enrolled in Pepperdine University's prestigious Online Masters in Educational Technology are routinely denied access to their own coursework by ridiculous filters that ban .edu domains.

It is worth noting that none of these obstacles protect children from the real or imagined threat of pedophiles from Turkmenistan or inappropriate Web content. These obstructions are the creation of control freaks eager to maintain authority they neither earn or deserve. The payroll and morale costs are inestimable.

The Looming Crisis

Computer coordinators used to say, "If I do my job, I won't have a job in two years." A decade later there seems to be a dozen non-instructional tech coordinators, directors or managers for each of their predecessors.

Haven't computers become easier to use and more reliable? Shouldn't professional educators be competent computer users after a generation of bribing, begging, cajoling, tricking, threatening, inservicing and coercing? If so, then why do we have so many support personnel employed by schools? How much do they cost? When will they be unnecessary?

Reasonable people may disagree over the role of Web filtering and schools have a finite budget for bandwidth. However, IT personnel are making insane, expensive and miseducative decisions. There is no greater threat to successful classroom computer use than the actions of the staff employed to support that very use.

The Web is not static. Plug-ins are not a cancer, they add functionality. I am grateful that Web browsers were built with an open architecture allowing them to be extensible. This has accelerated the power of the Web in ways unanticipated by its creators.

The power of the Web is in its ability to democratize publishing and offer students the potential for unlimited audience. This is a critical educational rationale derailed by non-educators. Such policies insult professional educators.

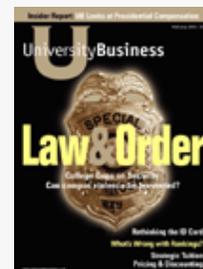
Administrators who give unprecedented budgetary discretion and policy-making control to IT staff are abdicating their responsibilities. School leaders need to summon the courage to face things that plug-in and become conversant in networking issues. They must supervise non-instructional personnel and determine their actual staffing needs. Failure to do so results in an enormous waste of money, teacher dissatisfaction and underutilized



Current Issue



Register Below



University Business for Higher Education

technology.

I have been using computers for more than 25 years. I use and maintain a cross-platform wireless network at home. I write computer manuals, program in several languages and yet needed to call for help every few minutes during my recent teaching stint. The average teacher juggling all of her responsibilities with a desire to use computers in the classroom does not have a prayer.

Gary Stager, gary@stager.org, is editor-at-large and an adjunct professor at Pepperdine University.

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