



// IN THE NEWS //

# The Skills Fallout

**Can the graying nuclear science and engineering industry handle a renewed demand for its skills and knowledge?**

By Josephine Rossi

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As the United States and the world struggle to find efficient and environmentally friendly fuel and power sources, President Bush's push toward nuclear energy may not get off the ground.

A detailed report from the American Nuclear Society paints an alarming portrait of an industry desperate to find, train, and retain a new generation of workers.

After the disasters at Three Mile Island in 1979 and Chernobyl in 1986, hiring of nuclear-educated workers lagged and enrollment in nuclear science and engineering (NSE) programs floundered.

Similarly, the number of research and test reactors, which provide critical hands-on experience and training to workers, dropped from 63 to 27 facilities in the last 25 years.

As a result, experts predict that the nearly one-third of today's nuclear workforce, due to retire in the next five to 10 years, cannot be replaced by qualified graduates. The shortage is further compounded by the fact that more industry-related jobs—such as those dealing with homeland security, medicine and cancer treatments, and food safety—have been created in recent years, and the number of NSE university programs and faculty members have dropped through the late 1990s.

## Hope

Because of the grim statistics, some schools, organizations, and government agencies are taking action, however.

The U.S. Department of Energy, the Nuclear Regulatory Commission, the Department of Homeland Security, and other agencies have or are in the process of establishing NSE fellowships, scholarships, and research programs to lure students.

In addition, employers are enticing potential workers with higher wages. Starting salaries for nuclear engineers with a bachelor's degree have jumped to more than \$51,000 (and more than \$58,000 for those with a master's) according to recent data from the U.S. Bureau of Labor Statistics. Other companies are ramping up their recruitment campaigns on college campuses and career fairs.

But industry organizations and power plants are looking to the current workforce to help attrition levels, too.

Because employee skill sets have become extremely focused, most U.S. nuclear power plants encourage job rotation and cross-training of staff. For example, senior licensed reactor operators may take on management responsibilities in areas outside of operations, such as maintenance and work control. This approach uses experienced staff to impart the necessary experience and skills. It also extends the tenure of some

veterans who would otherwise leave the workforce.

Industry groups also have developed knowledge-transfer methods to do more with less. The Institute of Nuclear Power Operations is partially staffed by employees from other plants as part of a two-year exchange. These workers lend their skills to the organization and bring their newly acquired knowledge back to their home plants where they share it with their co-workers.

Some, such as the First Energy Nuclear Operating Company (FENOC), are developing relationships with local colleges to facilitate the specific training needed to keep the industry afloat. Through a partnership with Lakeland Community College in Kirkland, Ohio, the FENOC prepares students for work in its plants with a specialized two-year degree.

But these are just the beginning in a long series of efforts needed to keep up with labor demands. Whether or not the United States adopts nuclear energy as a significant source of power, workers must maintain the plants that currently supply 20 percent of the nation's electricity. If and how well the country does it will depend largely on how well it educates and trains its workers.

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# Nuke Notes:

**Half of the nuclear energy industry employees are more than 47 years old, and less than 8 percent are younger than 32.**

**In 1980, there were 65 nuclear engineering departments actively operating in U.S. universities; now there are 29.**

**More than two-thirds of current U.S. nuclear engineering faculty are 45 years or older, and the rate of new faculty hiring declined by more than 10 percent through the late 1990s.**

**Demand for nuclear engineers will be about 150 percent of supply through the end of this decade.**

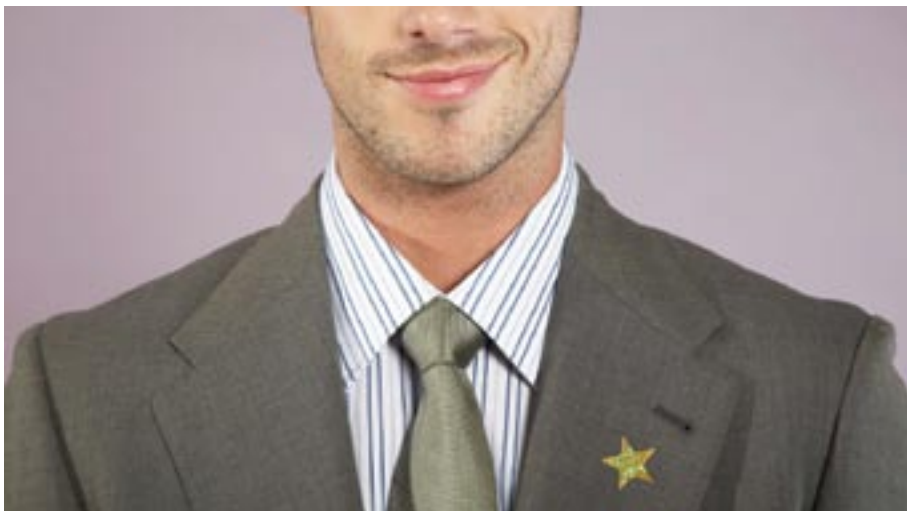
Sources: The Nuclear Energy Institute and The American Nuclear Society

**Experts predict that the nearly one-third of today's nuclear workforce, due to retire in the next five to 10 years, cannot be replaced by qualified graduates.**

# Check Your Ego

## for Workplace Success

By Mathew Hayward



How is it that some executives are able to remain supremely confident without succumbing to ego-driven hubris, while others are overconfident in ways that lead to their downfall?

Today's business pages are filled with stories of top executives who pushed the envelope, let their egos get in the way, and no longer have their jobs.

We all know that checking our ego is essential in business. But, how exactly should we do that in ways that confer lasting business success? Here are four common sources of false confidence that lead to exaggerated self-confidence and ideas for managing them effectively:

★ **We get too full of ourselves.** When we have an inflated view of our achievements and capabilities, we are easily seduced by the approval and applause of others and we're going to make mistakes assessing our own work and take on more than we can handle. Before acting, consider what motivates you: Is it a shortcut to wealth or the need to do a great job?

★ **We get in our own way.** Excessive pride can cause us to make decisions without first bouncing them off a trusted advisor. We must find people who can help us make tough calls, especially by candidly telling us when our judgment is mistaken.

★ **We kid ourselves about our situation.**

We need feedback from our customers, co-workers, and other departments. If we don't get it, there's a good chance we'll make bad business decisions, such as developing a product no one wants or approaching an important buyer without understanding his quirks. The key is to establish a systematic approach for gathering the information you need—and to be committed to act on it.

★ **We fail to manage tomorrow today.**

Even when it seems that we've done everything right, it's still possible to make decisions with unintended consequences, even if those consequences can be foreseen ahead of time. There is a profound difference between planning by forecasting, which makes us more confident without improving our capabilities; and planning by doing, which enables us to get feedback on the consequences of our actions. Playing out the consequences of major decisions, being primed to act on the evidence of problems, and having a realistic backup plan in place are essential.

*Mathew Hayward is a consultant and assistant professor at the University of Colorado Boulder. He also is the author of the recently released book, *Ego Check*, on which this article is based.*

## TALENT RETENTION: Ongoing Issue for Asia-Pacific Region

ISR, a global employee research and consulting firm, announced that companies throughout the Asia-Pacific region have substantial challenges in retaining their most talented employees.

Five of the largest Asia-Pacific economies—Australia, China, Malaysia, Singapore, and Thailand—were included in the company's study, which involved more than 3,000 employees who were classified as "top talent."

The study revealed that the region is full of "talent-at-risk" staff, and Malaysia has the largest proportion—47 percent—of employees that define themselves as either disillusioned or actively disengaged. Singapore ranked second with 40 percent, followed by Australia, China, and Thailand with approximately 30 percent.

"The majority of 'talent-at-risk' staff in the Asia-Pacific region reported that they would leave as soon as they have an acceptable new job offer," notes Patrick Kulesa, global research director for ISR. "This means that the risk to current employers is immediate and must be addressed."

ISR also found that 88 percent of at-risk staff in China indicated they would leave their current positions, while 92 percent of Australia's and 95 percent of Singapore's talent-at-risk employees planned to leave. According to the company, these findings reflect the massive economic growth that the region has experienced in the past few years. Employees generally—and top talent particularly—have the freedom to choose their employer and expect to work for employers that will nurture their talent and allow them to share in the organization's success.

In its 2006 Economic Policy Report, issued in November 2006, the Asia-Pacific Economic Cooperation predicts that labor migration issues in four of the countries cited in the ISR study will drive a host of education, training, and labor reforms, and impinge on these economies in 2007. These findings further illustrate the importance of proactive talent retention strategies for businesses in the region.

**MORE/** [www.isrinsight.com/](http://www.isrinsight.com/)





# WOMEN TAKING ADVANTAGE OF Flex Benefits

Contrary to reports that imply that women are leaving the workforce in droves, a new study of professional women finds that the great majority are negotiating flexible work arrangements and fetching higher salaries.

More than 90 percent of the women surveyed have used some kind of flexible work arrangements during their careers; and 88 percent of those did so to remain employed full time. The women also said their incomes were no different than those of women who did not use such arrangements. More than 85 percent were responsible for at least half of their household incomes.

The online survey was conducted by the Simmons School of Management in collaboration with Hewlett-Packard. More than 400 middle- and senior-level professional women in the United States who have an average of 20 years work experience in business and not-for-profits participated. They were surveyed to determine to what extent women were leaving the workforce, why they make their career decisions, and how they manage work-life balance.

The women reported negotiating flexible work arrangements—such as telecommuting, flexible hours, and limitations on traveling or evening work—at various points in their careers.

Only 18 percent of those women voluntarily stopped working.

“It’s a myth—based on a handful of anecdotes in the popular press about white, high-income women—that women are opting out of the workforce in large numbers,” says Mary Shapiro, the study’s lead author.

“Overwhelmingly, the women in our study said they must work, both to support themselves and to provide a significant percentage of their household incomes,” she says. “But they have been smart and creative: They have negotiated flexible arrangements as a strategic and powerful way to remain in the workforce, to bring balance to their lives, and to still enjoy financial success.”

Noting that more than 60 percent of the women surveyed said they would be more loyal and “go the extra mile” for an organization that offered flexible work arrangements, Shapiro says that organizations can benefit significantly by encouraging the use of such benefits by both women and men.

“There’s a workforce shortage on the horizon,” she says, “and flexible work arrangements may be the main strategy to attract and retain essential talent.”

**MORE/** [www.simmons.edu/som](http://www.simmons.edu/som)

Photo by Corbis

## Clothes Make the...



## PROMOTION

Here’s an excuse to spruce up your spring wardrobe.

Ninety-three percent of managers recently polled by OfficeTeam say that how employees dress at work influences their chances of earning a promotion. Furthermore, one-third says that attire “significantly” affects advancement prospects.

**MORE/** [www.officeteam.com](http://www.officeteam.com)

Photo by Getty Images



## Practitioner Concerns About Using Simulations

Effectiveness . . . . .	51.5%
Cost . . . . .	46.3%
Content quality . . . . .	36.7%
Employees’ perception (not learning) . . . . .	22.7%
Management’s perception (not work) . . . . .	17.5%
Other . . . . .	7.9%

Source: The 2006 Simulations Survey of Learning Circuits and E-Learning News readers.

Photo by Getty Images

# GET A GRIP ON EMAIL GLUT



## FEELING OVERLOADED BY YOUR INBOX?

You're not alone. Employees spend more than 40 percent of their workday on email—and they consider one-third of that time to be wasted.

Email efficiency and etiquette expert Mike Song offers these 10 tips to get fewer emails, write better messages, and file and find information faster.

**SEND LESS.** The best way to get less is to send less. How? Don't use the "Reply to All" and "Cc" features, or group distribution lists. By targeting your emails, you will be more efficient and effective.

**QUIT BOOMERANGING.** Send five emails, and you get three replies—even if most of those replies aren't necessary. Put a lid on this "boomerang effect" by eliminating just one out of five outgoing messages. You'll instantly shrink your volume by at least 10 percent and save time on needless back-and-forth exchanges.

**STOP—THEN SEND.** Before sending every email, stop and ask yourself if the message is really helpful—timely, topical, and targeted—or if you're just pushing out lots of your own junk.

## BE POLITE—WITH CONDITIONS.

Not every email requires a reply—especially just to say "thanks." Make an agreement with your key contacts to reserve thank-you emails for extraordinary efforts. You can even adopt a shorthand for your subject lines. Acronyms such as NRN (No Reply Needed) or NTN (No Thanks Needed) ensure every message counts.

## SCHEDULE LIVE CONVERSATIONS.

Just because email is the easiest channel doesn't mean it's the best. Before sending a message that invites a long back-and-forth discussion, schedule a live conversation. You'll find a synchronous connection can be shorter and sweeter.

## STRENGTHEN SUBJECT LINES.

Weak subject lines confuse recipients and make it hard to locate emails later. Use one-word categories, such as "request" or "confirmation," along with relevant information such as dates, times, and locations. You'll add clarity and context to every exchange.

**SCULPT YOUR BODIES.** People scan emails, so start each message with a one-line greeting of no more than eight words. Then, split the body of the email into three distinct sections: "action" (summarizing your purpose), "background" (presenting your key points), and "close" (clarifying the next steps).

**COACH OTHERS.** Offer your frequent senders a few really good tips—or suffer through their bad emails. You'll find a little coaching can go a long way toward helping everyone win.

**STORE PURPOSEFULLY.** Raise the bar on what you choose to store. Ask yourself: What are the odds I'll need this information later? Could I get this just as easily from the web? Is this important to my mission—really? You'll store less and find more this way.

**FILE SMART.** Chances are, you've got a large number of overlapping email folders. That means "stuff from the boss" could hold anything from a performance review to a movie review. Create a limited number of mutually exclusive folders that are based on content—not sender, software, or some other criteria. Use subfolders, too, and label everything carefully. You'll file and find information faster—and feel no fear next time the boss asks for that performance review.

// INFO GRAPH //

# United States Cuts Training a (Tax) Break

Looking to maximize the value of your training? With April 17 just around the corner, investigate whether your state offers tax incentives to encourage organizational training. For the employers that claim them, these credits can substantially reduce state income tax liability.

The structure and scope of this year's credits vary among the 14 states that currently offer

tax incentives for employee training. Some credits target specific industries, while others focus on basic skills development. The value of the credits also fluctuates significantly—from several hundred to several thousand dollars per employee per year.

For more information, log on to the websites listed below.



Photo by Corbis

<u>State</u>	<u>Program Name</u>	<u>Website</u>
Alabama	Basic Skills Educational Program	<a href="http://www.alabamainteractive.org/alabamainteractive_shell/Welcome.do?url=http://www.ador.state.al.us/Taxincentives/index.html">http://www.alabamainteractive.org/alabamainteractive_shell/Welcome.do?url=http://www.ador.state.al.us/Taxincentives/index.html</a>
Arkansas	Existing Workforce Training Act Tax Credit	<a href="http://www.arkansas.gov/dfa/excise_tax_v2/et_tc_incentives.html">http://www.arkansas.gov/dfa/excise_tax_v2/et_tc_incentives.html</a>
Colorado	Enterprise Zone Qualified Job Training Program Investment Credit	<a href="http://www.revenue.state.co.us/fyi/html/income31.html">http://www.revenue.state.co.us/fyi/html/income31.html</a>
Connecticut	Human Capital Investment Credit	<a href="http://www.ct.gov/drs/lib/drs/publications/pubsip/2004/ip04-20.pdf">http://www.ct.gov/drs/lib/drs/publications/pubsip/2004/ip04-20.pdf</a>
Georgia	Retraining Tax Credit	<a href="http://www.georgiaquickstart.org/econdev/retrain.html">http://www.georgiaquickstart.org/econdev/retrain.html</a>
Kansas	High Performance Incentive Program-Training and Education Tax Credit	<a href="http://www.kansascommerce.com/Customers/Businesses/Services/BusinessResources.aspx?rscl=995384467592&amp;tval=40">http://www.kansascommerce.com/Customers/Businesses/Services/BusinessResources.aspx?rscl=995384467592&amp;tval=40</a>
Kentucky	Skills Training Investment Credit Act	<a href="http://www.thinkkentucky.com/bssc/BSSC_STIC.aspx">http://www.thinkkentucky.com/bssc/BSSC_STIC.aspx</a>
Louisiana	Basic Skills Training Tax Credit	<a href="http://www.revenue.louisiana.gov/mis/wthcalculator/calchelp1.htm">http://www.revenue.louisiana.gov/mis/wthcalculator/calchelp1.htm</a>
Mississippi	Skills Training Tax Credit Program	<a href="http://www.mississippi.org/UserFiles/File/Skills%20Training%20Tax%20Credit.pdf">http://www.mississippi.org/UserFiles/File/Skills%20Training%20Tax%20Credit.pdf</a>
New York	High-Tech Training Credit	<a href="http://www.nystar.state.ny.us/Assets/pdfs/taxincentives.pdf">http://www.nystar.state.ny.us/Assets/pdfs/taxincentives.pdf</a>
Ohio	Training Tax Credit	<a href="https://ottc.odjfs.state.oh.us/info/index.asp">https://ottc.odjfs.state.oh.us/info/index.asp</a>
Rhode Island	Job Training Tax Credit	<a href="http://www.rihric.com/hRICTaxCredits.htm#RI%20Jobs%20Training%20Tax%20Credit">http://www.rihric.com/hRICTaxCredits.htm#RI%20Jobs%20Training%20Tax%20Credit</a>
Virginia	Worker Retraining Tax Credit	<a href="http://www.tax.virginia.gov/site.cfm?alias=TaxCredit3#worker">http://www.tax.virginia.gov/site.cfm?alias=TaxCredit3#worker</a>
Washington	Washington Customized Training Program	<a href="http://www.sbctc.ctc.edu/workforce/ctp.asp">http://www.sbctc.ctc.edu/workforce/ctp.asp</a>

Source: ASTD Policy and Public Leadership

// TRENDS //

## Discontent in the Middle

Middle managers around the world are frustrated and unsatisfied, according to an annual survey by Accenture.

Sixty-one percent of the more than 1,400 middle managers in North America, Europe, and Asia surveyed said they are neither extremely nor very satisfied with working at their current organizations. Furthermore, 20 percent are specifically dissatisfied, and 30 percent described their organizations as “mis-managed.” Managers in the United States, Spain, Germany, and Australia, however, generally are more satisfied.

When asked to indicate the most frustrating aspects of their jobs, the greatest

number of respondents—44 percent—said their salaries are “insufficient.” About the same number (43 percent) said they do all of the work, but receive none of the credit. Thirty-five percent reported that trying to balance work and personal time frustrates them, and the same number are frustrated because they have no clear career path.

In addition, only about one-third reported that their companies were good or excellent at managing compensation and flexible work arrangements, helping them communicate bad news, or offering prospects for advancement.

“Senior managers have an untapped opportunity to engage their middle managers,” says Peter Cheese, managing director of Accenture’s human performance practice. “Low levels of engagement in such a critical segment of the workforce will affect performance and achievement of strategic goals. As the pressure on key skills and talent increases, those companies that manage this population of workers best will create sustainable competitive advantage and be the high performers of the future.”

**MORE/** [www.accenture.com](http://www.accenture.com)