Back to School...

In Search of Higher Education

Lynda McDaniel

As those haunting dreams of failing an exam start to fade, older Americans are heading back to school. As many as 50% of enrolled students are now classified as “those returning to education,” according to research at the University of Missouri-Rolla.

This trend makes perfect sense to Guruprasad Madhavan, who, following basic engineering training in instrumentation and control systems and graduate training in biomedical engineering, is now pursuing both an MBA in healthcare management and a PhD in biomedical engineering from the State University of New York in Binghamton.

“Lifelong learning does not mean ‘recurrent’ training, but a constant relationship with education,” he says. “We should seek advanced education out of a love and passion for knowledge and not just for a chance to succeed or to be rich.”

Madhavan represents a growing number of medical technology professionals who are pursuing higher education, from bachelor degrees to MBAs, Masters, and PhDs. They return for a variety of reasons: Employers demand higher skill levels for advancement. Technological developments dictate ever-changing qualifications. And individuals, especially after a number of years on the job, raise the bar on their personal goals.

Jeff Maxwell had been a biomed for five years and a CBET for two years when he went back to school for his Bachelor of Arts degree in organizational administration at the University of Wisconsin-Milwaukee.

“There are two pinnacles within the electronics industry: biomedical and defense work. I had done both within seven years of receiving my associate’s degree in electronics,” he says. “I knew that I had many years of work ahead of me, and I wanted to do more challenging work. Anyone can find a problem with preventive maintenance and verification checks, as I have, but only through education can someone do something to make it better.”

A better understanding of the financial aspects of his organization drew Jonathan Hill to pursue an MBA. “As you advance in your career, you need a good solid educational background,” explains Hill, who has more than two decades experience in the field and currently serves as director of clinical engineering at Bayhealth Medical Center in Delaware. “If employers see that you have taken the steps to improve your educational level, they feel more comfortable allowing you to take a higher position.”

Lynda McDaniel is a freelance writer based in Seattle, WA.
Increased Marketability

With more education, job applicants find their marketability is unquestionably improved. Patrick Lynch, who has been a biomedical for 30 years, says his MBA opened many new opportunities during a recent job search, which resulted in his accepting the position of regional director of clinical engineering at TriMedx, Inc. in Indianapolis.

“With my advanced degree, combined with clinical engineering certification, BMET certification, and my past experience, I have the knowledge base to qualify for many different jobs—not just in the biomedical maintenance fields, but equipment planning, materials management, consulting, and many others,” he says.

“Employers who don’t have technical backgrounds tend to shy away from people with only technical degrees. An advanced business degree shows them that you can walk both sides of the fence and converse with ease with C-level people, such as chief executive officers, chief operating officers, chief financial officers, and chief information officers.”

Hill uses his MBA training to guide managerial responsibilities such as return on investment for new purchases, cost analysis for current processes and equipment, as well as building business plans for new ventures. And Maxwell is looking forward to bringing improved communication to a field better known for technical expertise than eloquent English.

“Like it or not, we are judged by what we say and write, and a person who can communicate effectively has a competitive advantage,” he says. “The people in charge of a hospital have no clue what a biomedical does every day, but an effective communicator can make a vice president notice a problem or situation.”

Find Time and Establish a Support System

There is no question that advanced education is valuable, but how do these students find time to make it happen? In addition to class schedules, homework, exams, and tuition expenses, most have families, demanding full-time positions, and a need to sleep every once in a while. Hill and Lynch report that their employers were very supportive, both with reimbursement for tuition and flexible schedules, if needed. Maxwell, who now works full-time at Komatsu

How to Head Back to School and Live to Enjoy the Benefits

Nobody says it’s easy, but everybody says it’s worth it. Here are some tips for success from these veteran back-to-schoolers.

- Pursue subjects that will make you happy at work on a day-to-day basis.
- Discuss your plans with your spouse or significant other. Also discuss plans with your supervisor and co-workers because you may be gone during the day.
- Start slow and work the schooling into your lifestyle gradually. Get your feet wet before you jump in—you don’t want to drown your first time out.
- Write your class schedule in ink in your calendar. Make everything else fit in around it.
- Get high-speed Internet access at home; buy a cable modem.
- Periodically assess your core values, competencies, long-term goals, and reflect upon your accomplishments, strengths, and areas where you need to improve.
- Talk to mentors, updating them with activities and seeking help, when needed.
- Find a “go-to” person with whom you can talk and be yourself without being judged or criticized.
- Choose a school that supports working adults with online, weekend, and night classes.
- Balance your time between yourself, family, fun and school. If you don’t, you’ll burn out and not finish.
- Don’t calculate your graduation date—if you know that you won’t graduate for four more years, you’ll get discouraged. Focus on this semester, this class.
- Stick with it. Sometimes you have to take courses you don’t enjoy. Consider them a means to an end.
- Celebrate your successes within yourself—you might find that your life is more balanced than you thought!
Mining Systems in Peoria, IL, enjoys the benefits of a flexible schedule, but he found the reimbursement process at the hospital where he worked before wasn’t worth the “tremendous amount of bother.” He now pays personally for his education.

Today, some advanced degrees can be earned online, a real boon to busy workers. Maxwell appreciated the online courses—with a few reservations. “I have found that the sciences such as mathematics, economics, and chemistry are best taken in person. But overall, my experience with online courses has been extraordinary.”

Lynch, who admits he’s never experienced online education, preferred traditional classes, in spite of traveling three days a week on his job and having a wife and two daughters at home. “Call me old school, but I still harbor a belief that anything other than traditional classes somehow shortcuts the education process, which, at the graduate level, emphasizes teamwork, group activities, and collaboration.”

Madhavan agrees. “Participants move through the program in a team approach that allows for the sharing of diverse perspectives and instills the ability to communicate, take initiative, and effectively motivate others, which I believe are requirements to succeed and lead in the real world.”

The decision to return to school requires personal insight, financial considerations, and familial cooperation. It takes all that plus something extra—the energy of a maverick, the zeal of an entrepreneur, and sometimes the vision of a mentor. “My company president/CEO called me into his office and complimented me on some accomplishment,” Madhavan recalls. “He advised me to work toward becoming my own boss and consider getting a business degree simultaneously while I worked on my PhD. I said to him, ‘I am not aware of many people who have done this whom I can follow as examples.’ He instantly responded, ‘Be your own example!’”