

GETTING THROUGH TO GREENHORNS: DO OLD TRAINING STYLES WORK WITH NEW MINERS?

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ABSTRACT

Some segments of the mining industry, especially underground coal, have seen a large influx of inexperienced miners in recent years. It is anticipated that this trend will reach other mining segments over the next 10 years. This paper discusses the training needs of the younger generation of inexperienced workers who have just entered or are soon to enter the mines. Currently, many trainers are of the so-called Baby Boom generation. Can these different age groups learn to communicate across the generation gap? Even trainers who have been highly effective in the past should reassess their training styles and their classroom materials to determine if they are prepared to meet the needs of these new trainees.

INTRODUCTION

If you've passed your 40th birthday, then you are a generation or more older than the new miners who are showing up in training classes. These trainees are part of Generation X (Xers) and Generation Next (Nexters) and are taking their places in the workforce. Being from a different generation doesn't mean you can't teach new miners to work in safe and healthy ways. But it does mean that you can't expect them to think, look, believe, or behave as you do. You can't even expect them to be like you

were when you were that age. Generation Xers and Nexters have grown up in a world quite different from the one that existed when you were younger. They have been affected by different life experiences. While they will mature, they are not likely to change much in their basic beliefs and attitudes. To train them successfully, you need to understand how these new workers differ from older generations in the workforce.

GENERATIONS IN THE MINES

There are currently people from four generations working in mines in the United States. Zemke et al. (2000) have categorized people into four distinct cohorts based on the years they were born. A cohort can be understood as a group of people sharing common experiences as they pass through life's milestones. They were born at approximately the same time, and started school, became teenagers, entered adulthood, and left the workforce at roughly the same time. The four generational cohorts as defined by Zemke et al. are "Veterans" (birth years 1922-1943), "Baby Boomers" (birth years 1943-1960), "Generations Xers" (birth years 1960-1980), and "Nexters" (birth years 1980-2000). Other researchers may shift the years somewhat or use different titles, but most generally agree that individuals within each cohort share common life experiences and reactions to them. Studying these common threads and generalizations about cohorts can result in a greater understanding of all individuals.

Just as cohorts' life experiences affect their attitudes and beliefs, these experiences shape learning styles and training

needs. Examining cohort learning styles, Martin and Tulgan (2002b) defined the groups with slightly different dates and several different titles than Zemke et al., but agreed that there are four distinct groups and noted that each "has its quirks and preferences." They discussed the training preferences of each cohort as follows.

- Veterans. Years of experience have taught veterans to rely on tried, true, and tested ways of doing things. "When in command, take charge. When in doubt, do what's right." After years of working under command-and-control management, veterans must use their wisdom to face the radical changes in the new workplace.
- Baby Boomers. Boomers paid their dues and climbed the ladder under the old rules and now find themselves operating amidst constant downsizing, restructuring, and reengineering. Boomers still pride themselves on their ability to survive "sink or swim" management, but fewer today are willing to keep up the frenetic pace. Boomer women led the charge for workplace flexibility, and now many Boomers have caught on to the free-agent mindset.
- Generation X. Xers formed the vanguard of the free-agent workforce. Now Xers are growing up and moving into positions of supervisory responsibility and leadership, but they are not

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settling down. Xers remain cautious and they know their security rests in staying on the cutting edge. They're still willing to sidestep rules to get things done smarter, faster, and better.

- **Nexters.** Coming of age during the most expansive economy in the last 30 years, Nexters are the children of the Baby Boomers and the optimistic, upbeat younger siblings of the Gen Xers. The first cohort of truly "global citizens," they are socially conscious and volunteer minded. Nexters have been told that they can do anything...and they believe it. They are poised to be the most demanding generation in history.

Because cohorts are birth-year-based categories, people are lumped together by age. It is therefore tempting to attribute differences to the amount of life experience in each group. But, "the generational clash playing out in the workplace today is not merely a matter of young versus old. This clash pits the old-fashioned expectations, values and practices of stability against the new reality of constant change and the consequent need for agility" (Martin and Tulgan, 2002a).

This clash could also be playing out in training rooms among various trainees with different perspectives or between the trainer and some of his or her trainees. Managing those differences will lead to more effective training. Additionally, understanding how differences in learning styles affect integration of knowledge from the classroom with workplace skills and practices is key to developing the new generation of workers.

First, however, the perspectives and experiences of each generation must be determined before addressing how differences in learning styles might affect the way a trainer approaches teaching.

GENERATION X

Gen Xers have been in the mining workforce for years. They were hired one or two at a time and integrated into experienced work crews. Since there were few new employees hired at any one mine at any one time, the training needs of this new cohort didn't attract much attention. Their training started in traditional classrooms and continued as they worked side-by-side with and under the watchful eye of Veterans and Boomers. This informal apprentice model seemingly worked even though little special effort was given to developing the training skills of experienced miners. Gen Xers were comfortable with this model because they responded well to a learning environment where they got involved in a task, made mistakes, and received feedback.

Whether or not this model will effectively prepare Gen X miners for the next phase of their careers remains to be seen. These employees, now in their 20's and 30's, are seeking and being put into increasingly responsible positions. Until recently, access to these roles had been impeded by the large number of Baby Boomers in positions of authority. Furthermore, during the lean years of the 1990's, few Gen Xers were being trained to fulfill leadership positions. As the Veterans and Boomers start looking toward retirement, there is a potential for crises in leadership that will call, in part, for a training solution.

NEXTERS

Just as Gen Xers are trying on new roles as leaders, they will soon become the experienced miners in the eyes of the Nexters. Members of the Nexter cohort are graduating from high school, technical schools, and colleges. They face very different job prospects than Gen Xers did. Within the time of Nexters' careers, it is anticipated that a large number of Baby Boomers will reach retirement age and leave the workforce. Since there are fewer Xers available in the population to occupy the positions of retiring Baby Boomers, there should be jobs left for the Nexter cohort.

Some segments of the mining industry, especially underground coal, are already opening their doors to large numbers of these young inexperienced workers. As retiring Veterans and Baby Boomers are replaced by young Nexters, it is likely that this cohort will enter the workplace more quickly than one or two at a time. Introductory miner training programs will have to be examined with this factor in mind.

The informal apprenticeship model used for integrating Gen Xer's into the workforce will not work if there are many inexperienced miners working with only a few mentors. Research suggests that Nexter workers need more structure and focused attention in the workplace than the preceding Xer cohort (Training Mag.com, 1999). While the mentoring framework can be successfully used with the Nexter cohort, it needs to be formalized within new miner training programs to be most effective. Even if the number of new workers is spread across shifts and crews, more experienced workers will be needed to act as mentors or trainers than in the past. This could lead to inconsistent training across a mine if training content and strategies are left to each individual experienced worker. To introduce this cohort to the mining workforce effectively, how they are to be trained must be considered, as well as how to train the trainers.

VETERANS AND BABY BOOMERS AS COACHES AND MENTORS

As noted above, experienced miners play very important roles in the work lives of new miners. Workers from the Veteran and Baby Boomer cohorts are the people who will have their work habits, both good and bad, taken as models by young miners still learning the ropes. Older workers are experts at their jobs, and some undoubtedly have developed into excellent teachers of their crafts. Capturing the knowledge and skill of these experienced workers is one of the mining industry's major

challenges. Matching the right experienced workers with new employees can have consequences for many years because today's newly hired Nexters are tomorrow's mine managers. Many Veteran and Baby Boomer miners will find passing on their knowledge and skills to be highly rewarding. Some may even delay leaving the industry if they find fulfillment in a mentor/trainer type of role. Training can be provided to assist them as they develop into these roles.

TRAINING STRATEGIES FOR YOUNG MINERS

A lot is being said about how to train Gen X and Nexter workers (Caudron, 1997; Salopek, 2000; Tulgan, 2000; Corley, 1999; Cannon, 1991; Wagshal, 1997; Wyld, 1994; Zemke et al., 2000). Frequently, however, the stories and articles focus on students who hope to become employees of accounting firms, banks, or computer firms. This targeting of future white collar employees by researchers is nothing new. Over a decade ago, a report on young workers stated, "Although studies of college students are abundant in social science research, research on young people who do not attend college and on young people beyond college age is scarce" (William I Grant Foundation Commission on Work, Family, and Citizenship, 1988, *in* Arnett, 2000). While the literature contains valuable information about the Gen X and Nexter cohorts, applying such information to young and future miners should be done with care.

A key point that is repeated over and again in the literature is the importance of computer-based learning to young workers. However, little research seems to be available to confirm whether or not this is true of young blue-collar employees. There is no doubt that Nexters, as a cohort, are much more computer literate than any generation before them. They have been using computers in all sorts of settings, including education, and are likely to be comfortable with this medium. This does not necessarily mean, however, that all Nexters' training should be delivered in this manner. Additional research into generational training preferences has found that Nexters prefer training that allows them to work in groups to complete an activity. In the case of Gen X workers, they prefer to work on skill building on their own in a more nontraditional training setting.

NIOSH researchers have started exploring the issue of training preferences for workers of all generations. In the summer of 2001, 88 miners at an underground coal mine and who were identified as part of the Gen X or Nexter cohorts were asked to choose three training strategies they most enjoyed. The workers chose training strategies from the list below.

- | | |
|---|-----------------------------|
| - Computer-based | - Lecture (teacher talking) |
| - Watching videos | - Group activities |
| - Hands-on practice in classroom or lab | - Quiet reading |
| - Class discussion | - Games |
| - Practice at worksite | - Simulation or drill |

Miners were also asked to choose three training methods they thought were best to help them learn something new.

Analysis of the resulting data argued against the claim that Generation X and Nexter workers preferred computer-based

training and may surprise some experts on training young workers. The top three methods chosen as most enjoyed were "Hands-on practice in classroom or lab" (42.9%), "Practice at worksite" (41.7%), and "Watching videos" (32.1%). Computer-based instruction was not a top choice given by younger miners; only 15.5% chose computer-based instruction as the training method they liked best. Even fewer younger workers (3.6%) choose computer-based training as the method they preferred when learning a new skill or idea.

Instead, they showed an overwhelming preference for training that would allow them to try the new skill. When learning a new skill or idea, they preferred "Hands-on practice in classroom or lab" (61.9%), "Practice at worksite" (48.8%), and "Simulation or drill" (41.7%).

This isn't to say that other strategies should never be used, but training that incorporates supervised practice in new skills is highly important to these young miners.

Given their preference for hands-on practice, it stands to reason that Gen Xers and Nexters will respond to experienced miners who are willing to show them how to do the job. They will accept instruction from individuals whom they believe have the knowledge and skills they need. But for this type of relationship to be built, experienced miners must be open to answering a lot of questions and to finding ways to provide guidance as the younger person learns. A potential obstacle to building these relationships is discussed in an article directed at the roofing industry.

To effectively motivate those in Generation X, you must realize Gen Xers prefer to learn through mentoring and coaching. They want the information, skills, and competencies of people with more experience. A Gen Xer typically will think, "Why should I have to learn something the hard way when my experienced manager already knows it?"

Mentoring and coaching Gen Xers is a difficult obstacle for the construction industry to surmount. Because construction is an industry in which "paying your dues" and "learning the hard way" have become the norm, the mindset will have to change for the roofing industry to attract and retain top-quality Gen Xers (Alafat et al., 2001).

Introducing miners of the new cohorts to the workplace simply cannot be done "as we've always done it." Instead, the best training strategy for these individuals must be determined. One trainer described the experience of training younger workers as follows.

I knew that I was finally old when I muttered the words that I swore I would never say: "Kids these days...they don't know how good they've really got it!" Regardless of whether you feel this way, or whether you sympathize with the plight of the so-

called slacker generation, you must understand ONE thing: What you feel does not matter! Your focus need NOT be on how to change these post-baby-boomers (aged 34 and younger), but rather, how to understand them (Dunne, 2000).

SUMMARY

During America's gold rush, many people "took to the hills" in search of their fortunes. The experienced miners called those obviously new to the trade greenhorns. There are many stories about their exploits and adventures. One can be found in various forms, but generally goes like this telling from 1939.

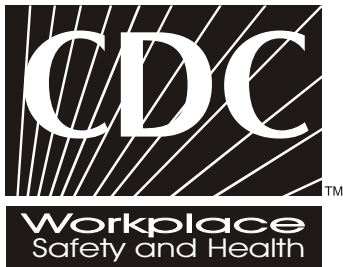
Another time a greenhorn came into a small mining town looking for a mine. The boys after giving him the "once over" decided he was looking for shade. They told him that under a large tree near the camp would be a good place to start digging. The most pleasant part of the digging would be all the nice shade he would have from the tree. I'll be damned! The

Greenhorn dug there, went down about seven or eight feet and he struck it rich. He took the odd-looking stuff that he had found and asked a fellow in the camp if that wasn't gold. Poor guy, he didn't know gold from brass. To him rock was rock. Well, the boys told him it was gold. Hell, there wasn't anything else to do. He sold the mine for \$70,000. Can you beat it? (Haight, 1939).

Like the "greenhorn" in the different versions of this story, your inexperienced employees may become successful miners in spite of bad advice, but they are much more likely to become valuable additions to the mining industry with quality training targeted for their learning styles and needs.

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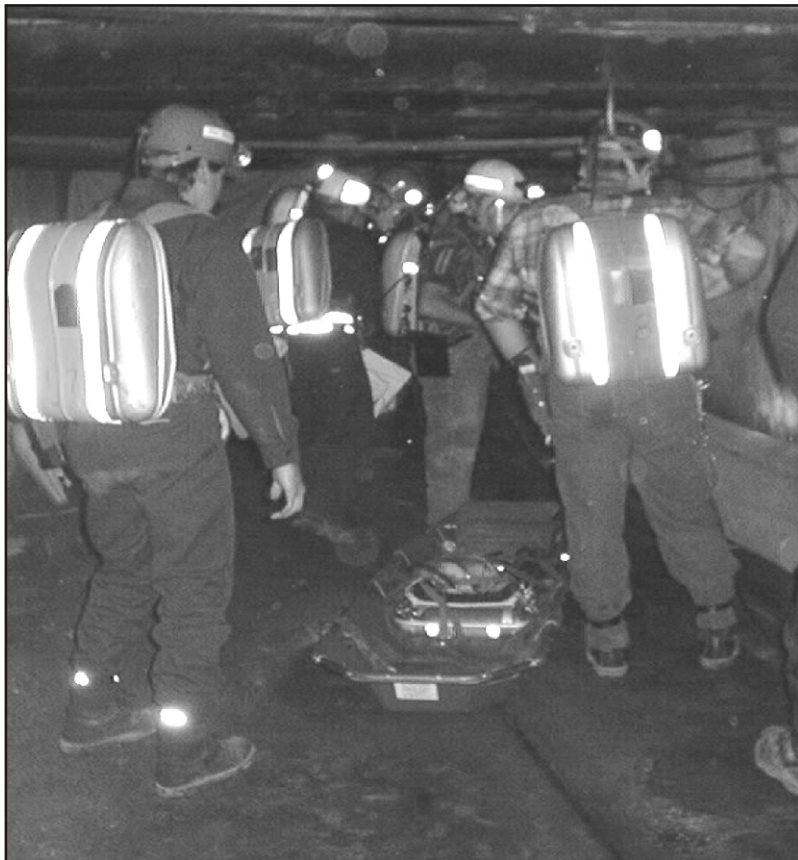
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Strategies For Improving Miners' Training

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