The Hidden Skills Gap

Critical Thinking in Tomorrow's Workplace

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COMMON SENSE ENTERPRISES, INC

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About the Author

Robert W. Wendover is an award-winning author of ten books who has been researching and writing about workforce trends for more than 30 years. He has written or contributed to more than 300 articles for a wide variety of national publications. His credits include CNN, CNBC, *The Huffington Post, The Atlanta Journal Constitution, The Detroit Free Press, The Florida Sentinel, The Denver Post, The Providence Journal, the Fort Worth Star-Telegram, Entrepreneur, Money* and even *Women's Wear Daily.*

Along with ten years on the faculty of the University of Phoenix, Bob has served as a special advisor to the American Productivity and Quality Center and on a number of corporate and academic studies regarding workforce trends. Since 1988, he has conducted more than 1200 speaking engagements from the towers of Wall Street to the outback of Alaska. He holds degrees in industrial arts, psychology and education. He has earned the designation of Certified Speaking Professional from the National Speakers Association.

Common Sense Enterprises has been teaching employers how to better lead and manage their talent for more than a quarter century. Formerly the Center for Generational Studies, our team has specialized in four specific aspects of the talent equation:

- **Recruitment & Retention of Employees**
- **Managing Cross-Generational Teams**
- **Improving Daily Workplace Decisions**
- **Preparing for the Workforce to Come**

Over the years, our clients have included Citigroup, Deutsche Bank, IBM, KPMG, Discover Card Services, Shell Oil, Lockheed Martin, International Dairy Queen, Kaiser Permanente, CITGO, Chevron USA, the Food Marketing Institute, Searle Pharmaceuticals, Super 8 Motels, Ace Hardware, Major League Baseball, the Professional Golfers Association and a host of other household names, associations, government agencies and educational institutions.

Throughout these efforts, our focus has always been on the client's bottom line. After all, developing top talent produces top returns.

Bridging the Hidden Skills Gap Critical Thinking in Tomorrow's Workplace

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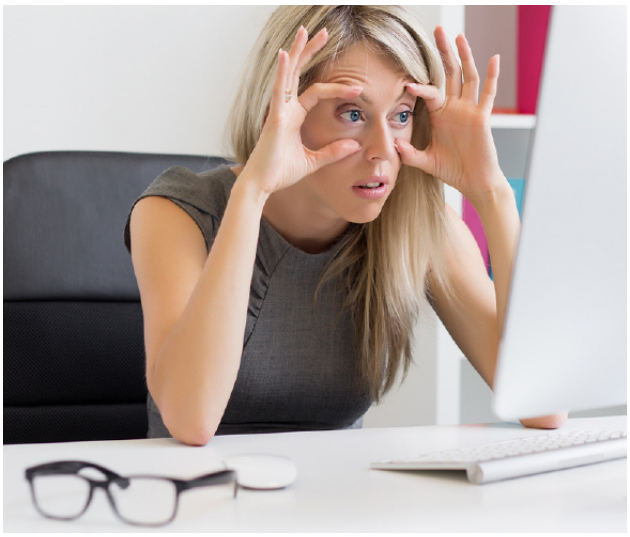
This past year has seen an explosion of media coverage about the skills gap facing US employers, especially in fields requiring specialized training. A recent Harvard Business School survey found that 69% of HR executives feel their inability to attract and retain middle-skills talent frequently affects their firm's performance.[1] A debate rages about the origins of this phenomenon. Some argue it's a failure of our education system. Others claim young people don't want to get their hands dirty. Still others say it's a failure of employers to pay more for those possessing these skills. Then there are those who blame it on the degradation of the work ethic within today's society. Regardless of the causes, the American economy is struggling to recruit the numbers they need to replace retiring Baby Boomers and respond to expanding business needs.

But there's is a hidden skills gap that has been impacting the productivity of *every* organization as well. It's the deficit of critical thinking skills among millions of those now entering the US workforce. Nobel Laureate, Daniel Kahnemann, has called it "an invisible tax on the bottom line."[2] Some emerging workers may rail against this broad a claim. After all, there are millions of young contributors who thrive on the job. In fact, some in this generation are doing amazingly well. But for every one of these contributors, there are a number who struggle to navigate the everyday challenges they confront at work.

Employers rate just 22% of college graduates as being "well prepared to think critically."



Consider the following:

- At more than half of the 77 American colleges and universities surveyed by The Wall Street Journal, at least one third of seniors were unable to assess the quality of evidence in a document, make a cohesive argument, or interpret data in a table.[3]

- A survey by the American Association of Colleges and Universities revealed that employers rated just 22% of college graduates as being "well prepared to think critically." [4]

- The Council for Aid to Education assessed nearly 32,000 graduating seniors at 169 colleges and universities. It found that 40% did not possess the reasoning skills to manage white-collar work.[5] This includes such tasks as being able to read a scatterplot, construct a cohesive argument or identify a logical fallacy.

- In a Wall Street Journal survey of nearly 900 executives, 92% said soft skills were equally important or more important than technical skills. But 89% said they have a very or somewhat difficult time finding people with the requisite attributes.[6]

- According to a PayScale, Inc. survey of 64,000 managers, 60% said the new graduates they see taking jobs within their organizations do not have the critical thinking and problem solving skills they feel are necessary for the job.[7]

There is less doing in today's workplace and more thinking.

So what does this skills gap look like in the workplace? Here are seven examples, gleaned from recent conversations with managers in a variety of industries.

- The retail clerk who asks his supervisor about every customer question that requires more than minimal discernment.
- The marketing analyst who is great at gathering research, but afraid to express her own recommendations based on that research.
- The city engineer who will only communicate via e-mail and text because he wants "time to formulate answers before responding."
- The young investment analyst who gets both himself and the firm in trouble because he doesn't think before sharing sensitive information.
- The insurance adjuster who's great at resolving routine cases, but procrastinates on situations where there is room for interpretation and dispute.
- The team leader who has tried to make decisions pleasing everyone and now faces universal skepticism and resentment.
- The young auditor who doesn't seem to understand the nuances of communicating with the senior executives in client organizations.

Some of these examples can be corrected with some brief training. But there are others that drive supervisors to distraction because those behaving this way cannot be trusted to work independently. This drains time and energy from other pressing management responsibilities.

Over the past 30 years, the US economy has evolved from one dominated by what economists Henry Siu and Nir Jamovich call routine-manual jobs, to one that is increasingly dominated by non-routine-cognitive jobs. According to their recent study, all US job growth since 2001 has been in non-routine-cognitive jobs.[8] In other words, there is less doing in the workplace and more thinking. As a result, more and more positions require specialized training and skills to complete tasks. The so-called "doing jobs" are being replaced by robotics, artificial intelligence and other forms of technology. If a task can be automated, firms are looking to do so. This includes everything from factory work to fast-food processing.

The consequence of this transition is an increased responsibility on individuals to work independently rather than relying on supervisors for constant direction and guidance. Unfortunately, many struggle to do so. Researchers and policy makers have attributed this critical thinking challenge to a number of factors:

The evolution of family structure and parenting – During the latter part of the 20th Century, the typical composition of US families evolved from an extended model where grandparents and other relations were present in a child's daily life to nuclear families, where related individuals were seen much less frequently. Over the past 40 years, the model has evolved even more into parent-absent and blended families, where messaging about approaches to life may not be consistent. With each of these evolutions, the influence of collective family instruction and discipline has diminished. In the process, children have struggled to pick up the native problem solving skills and strategies for navigate life's daily challenges.

The proliferation of dual-career couples has resulted in two generations of "latch-key kids," where parental contact for many has been in short supply. As a result, these youngsters have turned to friends, the media and other sources for insights on how to navigate challenges they face. On one hand, this has taught some to be more independent. On the other, it has left many floundering for guidance and trying to reconcile conflicting rules and advice. In the process, most have taken an average and adapted to the expectations around them, even though some of these expectations are diametrically opposed in their values, philosophy and practice.

Regardless of the coping and problem solving skills they've developed, all of these individuals join the workforce over time and are confronted with challenges that many of those around them already know how to handle.

An over-emphasis on assessment over practical application within education – Employers, parents, and the public in general, have become increasingly frustrated with student performance. In response, policy makers have turned to assessment for determining capability at various levels of education. The result has been a proliferation of testing regimens seeking to determine students' academic prowess. But this only measures the

knowledge of content, not the ability to apply it outside the classroom. A recent study from the University of Washington found that less than one-third of graduates said their education taught them how to develop and ask their own questions.[9] Even those who perform at the highest levels, graduate "book smart." Then, in a matter of weeks, they are expected to become "work smart" as they join the workforce. For those who leave school having performed at adequate or less-than-adequate levels, the struggle to adapt can be even more arduous. For this reason, many employers feel saddled with having to teach "common sense" to new hires, especially when the US is close to full employment and applicants are in short supply.

Less than one-third of graduates say their education taught them how to develop and ask their own questions.

The impact of technology and technological dependence – The introduction and proliferation of digital technology has been a mixed blessing for those new to the workforce. On one hand, these "digital natives" have learned to use emerging technology better and faster than any previous generation. On top of this, few if any hesitate to embrace it to reach solutions that may not occur

to “digital immigrants.” On the other hand, the constant use of this technology has resulted in an assumption that most every answer can be found somewhere on-line, even when more nuanced judgment is required. Older individuals learned to navigate these nuances through trial and error. In the process, they developed both problem solving skills and the confidence to use them independently. Many of those coming of age immersed in a digital world, are developing a dependence on digital cues to manage everyday decisions.

They’ve learned the principles of critical thinking, but not how to think critically.

The emphasis on convenience in marketing and media messaging – Some trace this phenomenon back to messages like “you deserve a break today,” from the 1970s. Others blame it on Amazon’s introduction of one-click ordering. Regardless of origin, the result has been an ever-growing public assumption that the hard work and choices will be made by someone else. No one wants to return to the college of hard knocks and manual tasks. But many of those entering today’s workforce, have developed a distorted view of what it takes to make good decisions. As a result, employers face the challenge of orienting young employees to the routine of making tough, independent choices and living with the consequences. Simply telling these emerging contributors to use their common sense, can be an exercise in futility.

The dearth of “first job” opportunities – Over the past thirty years, many of the openings traditionally held by teens and young adults have disappeared or been assumed by others. These include newspaper routes, lawn mowing, snow removal, fast-food work, retail sales, and amusement park staffing. The reasons for this are several, including automation, changing consumer tastes, a burgeoning immigrant

workforce, and parental concern over safety. Regardless of the reason, the upshot has been fewer chances for first-timers to discover the challenges and routines of a work-a-day world. Without these opportunities, millions enter the full-time workforce as complete novices. In fact, more than one survey of emerging workers has found that a number look at their first position upon graduation as a “training job” where they will learn how work works. Employers, of course, are forced to factor this phenomenon into their expectations for new hires.

The evolving beliefs about the role of work in life – The past three decades has seen a shift away from the beliefs about duty and obligation that were hammered into youngsters as they came of age. “You should be thankful to have the job” has given way to “a job is a contract where I am entitled to respect, opportunity, a living wage and a stimulating working work environment.” Lots has been written and said about this transition. But employers find themselves balancing a dichotomy of managing a self-assured workforce that can be more familiar with its rights, than the critical thinking skills to perform jobs effectively.

Inexperience with adversity, failure and trial and error – The result of the elements mentioned above has been inexperience among many with the daily stress, adversity and consequences of both the workplace and life in general. In the process, managers find themselves acting like surrogate parents while managing those adapting to unfamiliar responsibilities, culture and environment. This burden is not in surmountable. But it saps the time and energy of those managing other responsibilities besides daily supervision.

It would be easy to assign complete responsibility for this phenomenon to those recently entering the workplace, but the underlying truth is more complex. Here are some of the other contributing factors:

Reason versus rules – As the workplace has witnessed an explosion of rules attempting to cover every contingency and situation, employees have both railed against the loss of freedom and acquiesced in an effort to remain "under the radar." The result is less creativity, risk taking and seeking of exceptions, even when the situation calls for a solution outside of policy.

Digital tracking and surveillance – Some have hailed these more exacting measurements. But this can also have a devastating impact on workplace trust. Truck drivers and other on-the-road employees who are monitored every minute of the day, for example, are less likely to make decisions that might be questioned by someone in an office thousands of miles away. In the process, easy resolutions can become bureaucratic obstacles.

Decision overload – The sheer number of steps now required to complete routine tasks such as on-line purchases or completing electronic forms saps the time and attention for more nuanced and significant decisions. (The constant barrage of upselling and "how are we doing?" surveys is enough to drive anyone to distraction.) The result is physical, emotional and mental fatigue.

Demanding customers who feel more empowered than ever before – Customer service snafus that used to be resolved with a personal touch can now go viral, costing millions and harming corporate reputations. Front-line employees can be caught between promises of flawless service and the idiosyncrasies of customer expectations. The result is hesitance to act independently for fear of breaking some arcane policy or disappointing a patron who will not be satisfied.

Companies think they are seeking critical thinkers when they are really looking for problem solvers.

Increasingly transactional and detached communication that allows for avoidance rather than compelling engagement – While digital communication can be more efficient, many now spending hours trading messages about an issue that could have been resolved in a two-minute conversation. Then there are those who prefer digital messaging to "protect" themselves

from misinterpretation with a record of every interaction.

The impact of all these phenomena can be debated endlessly. But improving workplace problem solving and decision making is the task at hand. How to do this? That's the topic for the remainder of this paper.

Bridging the Hidden Skills Gap

Imagine waking up every morning to the challenges of managing individuals who expect specific instructions for every task and hesitate when required to work on their own. That's the demand confronting many supervisors as the workforce continues to evolve. Seasoned managers used to assume that assigned work would be completed independently. While this was never an absolute, most individuals learned to "figure it out." Today's employers report that the frequency of interruptions for answering "common sense" questions has increased dramatically. But we have to clarify what attributes employers are actually seeking.

In a recent article on Gallup.com, staffers Leticia McCadden and Alyssa Brown ask "Do companies want critical thinkers or problem solvers?" In part, they observe, "Academics use a classic model to measure the effectiveness of a critical thinker. How well does a student defend their dissertation or an idea in front of peers and teachers? Was their argument able to withstand the criticism it received? On the other hand, business leaders see the ideal critical thinker as an original, creative and divergent individual."[10] In other words, companies think they are seeking critical thinkers when they are really looking for problem solvers.

Ask your reports to explain how they would approach situations and get them to defend their strategy.

Confusion over terminology aside, employers are looking for people who can think on their feet and are comfortable acting independently. They need to begin, however, by remembering that improving workplace problem solving is essentially a one-on-one exercise. Policy makers have committed billions of taxpayer dollars and reams of legislation in attempts to legislate a solution to this issue. The result has been students who can pass a test on the principles of critical thinking, but not think critically.

Managers and supervisors need to embrace two practices when working to develop the emerging workforce:

1) Polishing their own skills at coaching individual contributors and;

2) Taking the initiative to intervene when they observe instances where problem solving can be improved. Here are five successful strategies we've observed in client workplaces.

1) ***Discuss approaches to problem solving and decision making.*** Ask most people to explain their approach to problem solving and you'll get a blank stare. The truth is, our culture conditions people to be reactive rather than proactive. This may be acceptable for most everyday decisions. But taking a proactive approach to significant decisions

results in a better understanding of context and a clearer sense of the real issue to be resolved. Conduct one-on-one conversations with your reports. Ask them to explain how they would approach the situation and get them to defend their strategy. The goal is not just to build skill but the confidence to act autonomously. Provide a bit of instruction if appropriate, but the focus should remain on their growth. Bring case studies to meetings. Facilitate discussions so those participating can develop an appreciation for different points of view, approaches, resources, and beliefs. After all, there is always more than one way to get to a desired outcome.

The best decision makers in any environment improve the performance around them by taking time to coach and nurture individuals.

2) ***Coach on context.*** The one thing many of us miss in making decisions is the big picture. This can be everything from the decision's backstory or the political environment within the organization to some weird bias the boss has about this particular situation. Make context an ongoing part of the conversation when discussing approaches to decisions. This will engender a broader sense of understanding of the factors that impact daily choices. It will also produce a sense of anticipation about how to strategize. It's impossible to create a checklist for making sure all contextual bases are covered. But you might try a one-on-one exercise such as, "Here is a situation that needs to be resolved. What elements should concerned us we attempt to make a decision?" Contextual factors are fluid and those you supervise should accept that. Look for opportunities to introduce the influence of context into every discussion about making decisions. You'll know your people have gotten the message when they bring it up first.

3) ***Employ "think-alouds."*** For many, it is easier to ask the boss for direction than to expend the effort trying to figure something out. In the process, the decision also becomes the boss' responsibility should it not work out as hoped or planned. A think-aloud is a simple process of asking a questioner to work though the problem in front of you. He or she may resist at first since no one likes "performing" in front of the boss. If you persist, however, you will get a chance to observe how this person approaches problem solving and that problem in particular. It also gives you a chance to establish rapport as you work together as a team to come up with a resolution. (You, of course, are mostly listening while that person is doing the problem solving.) Finally, you'll both enjoy the results when the "light bulb" goes off and a solution is discovered. Persist at doing this with everyone. Over time, those who report to you will accept that they are responsible for solving everyday issues without consulting you each time. This will not only inspire confidence, it will reduce the "parade" in your office.

4) ***Compel autonomy.*** We all need a "kick in the pants" at times to get us past our fear of uncertainty. In the workplace, it is generally up to a supervisor to do that kicking. If this is done with good intentions, the discomfort will be momentary but essential. A few encouraging words like, "You can do this," or "You certainly have the skills and confidence to make this

decision," may be all it takes to get people to develop confidence in themselves. Any good decision maker knows that comfort with autonomy is the result of taking incremental actions, learning from the consequences and growing from there. Few people will take this initiative, however, unless they are first compelled to do so.

5) ***Conduct periodic post-mortems.*** In today's pressed-for-time workplace, few of us take the time to reflect on the outcomes of decisions we've made. But this should be an essential part of development for those new to the workforce. Grab the occasional coffee to follow up on recent decisions. This will help those involved begin to identify patterns and insights they can use to improve problem solving going forward. If you choose to make these meetings more formal, you might ask them to select one or two decisions they've made in the past 30 days and track the results. Decisions do not have answers. They result in outcomes and it is critical that those who report to you continue to evaluate the decisions they make to improve performance and confidence in their work. After all, decision making only gets better with time and practice.

Once again, the strategies above should be initiated with individual contributors. Lumping them together into a class for people who "need it" will result in wasted effort. The best decision makers in any environment improve the performance around them by taking time to coach and nurture individuals. This human touch makes all the difference.

Measuring the Outcome

How do you measure the outcome of efforts to bridge this problem-solving skills gap? It's impossible to create an empirical methodology. No one can claim to improve decision making by a certain percentage. But you can measure outcomes in other ways. For example:

- One firm improved year-over-year customer retention by monitoring rates before and after they provided one-on-one conflict resolution coaching to their service people.

- An insurance company improved the consistency of their claim adjustments by having adjustors meet regularly to compare estimates on similar cases.

- An industrial service company reduced average appointment time by identifying the 20 most commonly missed diagnoses technicians make and provided uniform coaching on how to spot them. This allowed the firm to make better use of technician hours.

"You should be thankful to have the job" has given way to "A job is a contract where I am entitled to respect, opportunity, a living wage and a stimulating working work environment."

Consider what methodology you can use to measure the outcome of decision coaching within your organization. Here are the five essential questions to answer:

1. ***What is our specific desired outcome?*** The key word here is "specific." As management guru Peter Drucker once observed, what get measured gets done. Everyone involved in decision improvement needs to understand exactly what's being measured.

2. ***What is our specific method of measurement?*** Consider the difference between, "Our goal is to improve the decision making around here," and "Our goal is to reduce employee turnover by five percent within the next six months." The next time you have a great idea for improving workplace decision making, the first question you should ask is, "How can we measure the outcome?

3. ***What period of time is best to measure?*** It is tempting to measure the next week or the next month. Maybe you should be measuring the next year. Many improvements take time to become ingrained in the culture. The more significant the change, the longer it generally takes for the culture to embrace it. Those making the adjustment need to understand that this practice is the new normal. Measure it for a week and old practices will return within the following several days. Enforce it for six months and people will forget the way things use to be.

4. ***How will we define a significant improvement?*** There are times we can expect too much from an effort. Reducing error rates by one percent over a year may not sound like much. But in a firm that produces millions of widgets per year, this improvement can add millions to the bottom line. Be realistic, or those doing the improving may resist simply because they don't think the goal is achievable.

5. ***How can we best engage those involved in implementing this effort?*** Plans only succeed with solid execution. That

execution is usually dependent on the front line. With so much on everyone's plate, getting people to embrace a new way of thinking can be quite the challenge. Demonstrate how they, personally, can make a difference. Provide graphic illustrations of how their improved decision making adds to the bottom line. Make the new practices you've introduced a part of daily and weekly discussions. Ask for and embrace their ideas and input. Persistence will pay off with measureable improvement.

More than one survey of emerging workers found that they look at their first position upon graduation as a "training job."

The critical thinking skills gap in your firm is not something that can be legislated or trained away. Improvement in workplace decision making depends on the coaching provided by individual professionals. After all, "leader, manager and supervisor" have never been just titles. Each represents a suite of skills that enable those with the responsibility to improve the problem solving performance of everyone being supervised. With the current number of workforce entrants lacking critical thinking

skills, coupled with the economy's transition to non-routine, cognitive jobs, this on-going, one-on-one development becomes all that more imperative. What's one step can you take in the next few weeks to compel the behavioral changes necessary to begin this process?

Suggested Reading

The undoing project: a friendship that changed our minds
Michael Lewis - W.W. Norton & Company - 2016

Deep smarts: how to cultivate and transfer enduring business wisdom
Dorothy Leonard-Barton-Walter Swap - Harvard Business School Press - 2005

iBrain: surviving the technological alteration of the modern mind
Gary Small and Gigi Vorgan - Collins Living - 2008

The overflowing brain: information overload and the limits of working memory
Torkel Klingberg - Oxford University Press – 2009

Thinking, fast and slow
Daniel Kahneman - Farrar, Straus and Giroux – 2011

Your survival instinct is killing you: retrain your brain to conquer fear, make better decisions, and thrive in the 21st century
Marc Schoen-Kristin Loberg - Hudson Street Press – 2013

The organized mind: thinking straight in the age of information overload
Daniel J. Levitin – Dutton – 2014

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