SKILLS GAP Report

April 28, 2010

Prepared by:
University of Missouri – St. Louis
College of Business Administration
Background Information
Other Studies
NEW GRADS ILL-PREPARED

- A skills gap among newly-hired graduates is hurting U.S. competitiveness

- Almost half of the respondents said they have to provide readiness training for new hires.

- They reported that newly-hired graduates lacked such basic workplace skills as communication, creativity, and teamwork.

• 52% of businesses surveyed said there is a skill gap among their employees
• 63% said there is a skills gap with their applicants
• 32% gap is urgent
• 33% said gap would worsen

The Skills Gap in our Region." 2004 East Tennessee State University study.
The Skill-Gap Issue

“The future US workforce is here--and it is woefully ill-prepared for the demands of today’s and tomorrow’s workplace”


“Estimated that 80% of the labor shortage will involve skills, not numbers of workers potentially available.”

Employment Policy Foundation (EPF)
Today’s Objectives and Agenda

**Objectives:**
- Present survey results
- Gain your insights and feedback

**Agenda:**
- Survey Background
- Demographics
- Critical Skills and Gaps
- Additional Feedback
- Open Discussion
Survey Background
Skills Gap Team

• **Dr. Keith Womer**
  • Dean of the University of Missouri – St. Louis College of Business Administration

• **Steve Finkelstein**
  • Senior Partner, Experience on Demand

• **Kathy Ntalaja**
  • PhD Student, UMSL

• **Wes Boyce**
  • PhD Student, UMSL
## The Survey Process

<table>
<thead>
<tr>
<th>Step</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Step 1</td>
<td>Survey Planning (October-November 2009)</td>
</tr>
<tr>
<td>Step 2</td>
<td>Create a rough draft of the survey (November 2009)</td>
</tr>
<tr>
<td>Step 3</td>
<td>HR Advisory Group meeting to refine the survey and ensure it includes relevant questions (December 2009)</td>
</tr>
<tr>
<td>Step 4</td>
<td>Pilot study with the HR Advisory Group to further refine the survey and ensure it flows properly (December 2009-January 2010)</td>
</tr>
<tr>
<td>Step 5</td>
<td>Administer survey to individuals with differing backgrounds from a wide range of businesses (February-March 2010)</td>
</tr>
</tbody>
</table>
| Step 6 | Compile and analyze survey results  
• Weighted average to see which skills were the most critical or had the largest gap  
• Percentage of total responses from various groups  
• Considering and incorporating comments into the results |
| Step 7 | Presentation of survey results  
• HR Advisory Group draft presentation  
• Various other presentations to additional groups |
Key Questions

- What are the critical skills?
- Where are the skills-gaps?
- What are the business impacts?
- How do we close the skills-gaps?
Partnership

University

Working Together

Business
Definitions

**Critical Skill**  
Required to perform one’s job at a high level of performance.

**Skill Gap**  
A critical skill that is not meeting job requirements now or in the future.

(1) Soft skills, not technical skills  
(2) Not a gap created by shortage of people
Survey Demographics
Survey Overview

Population: UMSL College of Business Administration Alumni, minimum 4 year degree and HR professionals

Respondents: 317

Administered: January 2010

Demographics: Good distribution across industry, age, gender, company size and type

Although the survey population was targeted to the UMSL College of Business Alumni, the results are representative for other populations. The HR professionals completed their responses for their companies and the supervisors/managers answered the questions for their departments – these perspectives included many different populations.
Demographics

- **Gender:**
  - Male 67%
  - Female 33%

- **Type of Company:**
  - Private 45.4%
  - Public 39.4%
  - Not for profit 7.6%
  - Other 7.6%

- **Highest graduated degree:**
  - Bachelor’s 63.2%
  - Master’s 31.2%
  - Doctorate 3.2%
  - Other 1.6%
  - Associate’s 0.8%

- **Current or most recent position/title:**
  - Manager 28.4%
  - Analyst 12.6%
  - Staff Level 12.6%
  - Other 12.3%
  - Director 9.8%
  - Vice President 9.8%
  - President 8.2%
  - Entry Level 5.7%
  - CXO 2.2%
  - Board Member 0.9%
  - Other included the following:
    - Instructor/Teacher
    - Partner
    - Portfolio Manager
    - Consultant
Q27. What range below represents your company's annual revenue?

![Pie chart showing revenue ranges](chart-image)

- **$0 - 50 Million, 37.2%**
- **$50 - 100 Million, 4.9%**
- **$100 - 500 Million, 10.9%**
- **$500 - 1 Billion, 5.5%**
- **$1 - 5 Billion, 18.6%**
- **> $5 Billion, 23.0%**

Good mix of large and small companies - Revenue
Q28. Which range best describes the number of employees in your company?

- 1-100, 29.0%
- 101-500, 10.9%
- 501-1000, 8.7%
- 1001-5000, 13.1%
- More than 5000, 38.3%

Which range best describes the number of employees in your company? [Large, Small, Good mix of large and small companies]
Q10. Please check the option below that best describes your current or most recent position.

- Manager/Supervisor or Human Resources Representative, 59.4%
- Individual / Non-supervisory, 40.6%
Q19. What is your tenure with your current or most recent company?
Q20. Since graduation, how many different companies have you worked for in your career?

- 1, 33.6%
- 2, 21.6%
- 3, 10.4%
- 4, 15.2%
- 5, 8.8%
- >5, 10.4%

55% Only had 1 or 2 jobs
Critical Skills and Skills Gaps
### Critical Skills / Skills Gaps Game

<table>
<thead>
<tr>
<th>Critical Skills</th>
<th>Skills Gaps</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
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<tr>
<td>2</td>
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<td>10</td>
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</tbody>
</table>
## Compare Top 10 Critical Skills and Skill Gaps 2010

### 2010 Critical Skills*
- Active Listening
- Customer-Orientation
- Critical/Analytical Thinking #
- Oral Communications
- Time Management
- Teamwork/Collaboration
- Written Communications #
- Prioritization, Focus #
- Decision Making
- Leadership#

### 2010 Skill Gaps*
- Leadership
- People Management/Supervisory
- Change Management
- Strategic Planning
- Written Communications#
- Prioritization, Focus
- Active Listening
- Time Management
- Critical/Analytical Thinking
- Lean Thinking / Process Improvement (N)

# indicates a top 10 skill from 2008 that appeared in the top 10 for 2010
(N) indicates a skill that is new for the 2010 survey
Q6. Below are the **critical skills** in business necessary to achieve high individual performances and organizational goals based on a weighted average calculation.

<table>
<thead>
<tr>
<th>Skill</th>
<th>1 - Not Critical</th>
<th>2 - Somewhat Critical</th>
<th>3 - Critical</th>
<th>4 - Very Critical</th>
<th>5 - Essential Skill</th>
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</thead>
<tbody>
<tr>
<td>Leadership</td>
<td>3.6</td>
<td>3.7</td>
<td>3.8</td>
<td>3.9</td>
<td>4</td>
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<tr>
<td>Customer-Oriented</td>
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<tr>
<td>Critical/Analytical Thinking</td>
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<tr>
<td>Oral Communications</td>
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<tr>
<td>Time Management</td>
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<tr>
<td>Written Communications</td>
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<tr>
<td>Teamwork/Collaboration</td>
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<tr>
<td>Prioritization, Focus</td>
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<tr>
<td>Decision Making</td>
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<tr>
<td>Leadership</td>
<td>4.1</td>
<td>4.2</td>
<td>4.3</td>
<td>4.4</td>
<td>4.5</td>
</tr>
</tbody>
</table>
Q7. Below is the weighted average degree of current or anticipated skill gaps based on the survey results.

The degree of current or anticipated skill gaps in your organization

- Leadership
- People Management/Supervisory
- Change Management
- Strategic Planning
- Written Communications
- Prioritization, Focus
- Active Listening
- Time Management
- Critical/Analytical Thinking
- Lean Thinking / Process Improvement
## Compare Top 10 Critical Skills - 2008 vs. 2010

7 out of 10 Critical Skills In 2010 were in 2008

<table>
<thead>
<tr>
<th>2008 Critical Skills</th>
<th>2010 Critical Skills*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Critical Thinking and Problem Solving</td>
<td>Active Listening (N)</td>
</tr>
<tr>
<td>Decision Making</td>
<td>Customer-Orientation #</td>
</tr>
<tr>
<td>Execution</td>
<td>Critical/Analytical Thinking #</td>
</tr>
<tr>
<td>Oral Communications</td>
<td>Oral Communications #</td>
</tr>
<tr>
<td>Teamwork/Collaboration</td>
<td>Time Management (N)</td>
</tr>
<tr>
<td>Leadership</td>
<td>Teamwork/Collaboration #</td>
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<td>Customer Orientation</td>
<td>Written Communications #</td>
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<td>Written Communication</td>
<td>Prioritization, Focus</td>
</tr>
<tr>
<td>Data Analysis</td>
<td>Decision Making #</td>
</tr>
<tr>
<td>Change Management</td>
<td>Leadership #</td>
</tr>
</tbody>
</table>

# indicates a top 10 skill from 2008 that appeared in the top 10 for 2010
(N) indicates a skill that is new for the 2010 survey
## Compare Top 10 Skill Gaps - 2008 vs. 2010

5 out of 10 Skill Gaps in 2010 were in 2008, 3 New Gaps

<table>
<thead>
<tr>
<th>2008 Skill Gaps</th>
<th>2010 Skill Gaps*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Critical Thinking and Problem Solving</td>
<td>Leadership</td>
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<tr>
<td>Leadership</td>
<td>#</td>
</tr>
<tr>
<td>Oral Communications</td>
<td>People Management/Supervisory</td>
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<tr>
<td>Execution</td>
<td>#</td>
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<td>Change Management</td>
<td>Change Management</td>
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<td>Written Communications</td>
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<td>Change Management</td>
<td>Strategic Planning</td>
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<td>People Management and Supervision</td>
<td>Written Communications</td>
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<tr>
<td>Decision Making</td>
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<tr>
<td>Data Analysis</td>
<td>Prioritization, Focus</td>
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<td>Project Management</td>
<td>Active Listening (N)</td>
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<td></td>
<td>Time Management (N)</td>
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<td></td>
<td>Critical/Analytical Thinking</td>
</tr>
<tr>
<td></td>
<td>Lean Thinking / Process Improvement (N)</td>
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</table>

# indicates a top 10 skill from 2008 that appeared in the top 10 for 2010
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Comparison of critical skills for respondents impacted and not impacted by the economy

<table>
<thead>
<tr>
<th></th>
<th>Impacted</th>
<th>Weighted Average</th>
<th>Not Impacted</th>
<th>Weighted Average</th>
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</thead>
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<tr>
<td>Active Listening*</td>
<td>4.40</td>
<td>Active Listening</td>
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<td>Oral Communications*</td>
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<td>Oral Communications</td>
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<td>Time Management*</td>
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<td>Time Management</td>
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<tr>
<td>Critical/Analytical Thinking*</td>
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<td>Prioritization, Focus</td>
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<td>Written Communications*</td>
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<td>Teamwork/Collaboration</td>
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<td>Relationship Building</td>
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<td>Written Communications</td>
<td>4.03</td>
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<tr>
<td>Prioritization, Focus*</td>
<td>4.04</td>
<td>Decision Making</td>
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<tr>
<td>Teamwork/Collaboration*</td>
<td>4.02</td>
<td>Data Analysis</td>
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<tr>
<td>Applying Technology to Business</td>
<td>4.00</td>
<td>Customer-Orientation</td>
<td>3.93</td>
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</table>
Comparison of skills gaps for respondents impacted and not impacted by the economy

<table>
<thead>
<tr>
<th>Skill</th>
<th>Impacted Average</th>
<th>Not Impacted Average</th>
</tr>
</thead>
<tbody>
<tr>
<td>Leadership</td>
<td>2.90</td>
<td>People Management/Supervisory 2.89</td>
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<td>Active Listening</td>
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<td>Leadership 2.77</td>
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<td>Decision Making</td>
<td>2.75</td>
<td>Project Management and Execution 2.72</td>
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<td>People Management/Supervisory</td>
<td>2.71</td>
<td>Strategic Planning 2.69</td>
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<td>Employee Engagement</td>
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<td>Prioritization, Focus 2.68</td>
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<td>Critical/Analytical Thinking</td>
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<td>Lean Thinking / Process Improvement 2.68</td>
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<td>Written Communications</td>
<td>2.65</td>
<td>Written Communications 2.67</td>
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<td>Creativity / Innovation</td>
<td>2.63</td>
<td>Creativity / Innovation 2.63</td>
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<td>Change Management</td>
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<td>Change Management 2.59</td>
</tr>
<tr>
<td>Lean Thinking / Process Improvement</td>
<td>2.62</td>
<td>Time Management 2.56</td>
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</table>

6 out of 10 the same
Comparison of skills gaps for supervisors and non-supervisors

<table>
<thead>
<tr>
<th>Supervisors</th>
<th>Weighted Avg</th>
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<tr>
<td>Leadership</td>
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<td>Written Communications</td>
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<tr>
<td>Active Listening</td>
<td>2.68</td>
</tr>
<tr>
<td>Prioritization, Focus</td>
<td>2.68</td>
</tr>
<tr>
<td>Critical/Analytical Thinking</td>
<td>2.66</td>
</tr>
<tr>
<td>People Management/Supervisory</td>
<td>2.66</td>
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<tr>
<td>Decision Making</td>
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</table>

<table>
<thead>
<tr>
<th>Non-supervisors</th>
<th>Weighted Avg</th>
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<tbody>
<tr>
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<td>People Management/Supervisory</td>
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<td>Written Communications</td>
<td>2.65</td>
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<tr>
<td>Lean Thinking / Process Improvement</td>
<td>2.65</td>
</tr>
<tr>
<td>Prioritization, Focus</td>
<td>2.63</td>
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<tr>
<td>Strategic Planning</td>
<td>2.63</td>
</tr>
<tr>
<td>Creativity / Innovation</td>
<td>2.63</td>
</tr>
<tr>
<td>Active Listening</td>
<td>2.62</td>
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<tr>
<td>Change Management</td>
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</tr>
<tr>
<td>Project Management and Execution</td>
<td>2.59</td>
</tr>
</tbody>
</table>

7 out of 10 the same
Q23. What are the areas of negative impact to your company as a result of the skill-gaps not being met? (check all that apply)?

Other responses: lack of leadership vision, lost market share, reduced positive working relationships, long-term sustainability, lower sales, and increased turnover.
Q24. What do you feel are the major reasons for these skill gaps? Why do they exist? What are the key causal factors?

- Limited Experience
- Lack of awareness
- Academic/Business Environment Gap
- Apathy/Inappropriate priorities
- Other priorities
- Lack of time
- Speed of change
- Lack of funding
- Inadequate pre-college training
- Classes are not available
- Other (please specify)
Q4. Which category best describes your current or most recent function or occupation?
Q5. Which category best describes your current or most recent company's primary industry?

Which category best describes your current or most recent company's primary industry?

- Financial Services
- Other (please specify)
- Professional Services
- Technology
- Aerospace
- Manufacturing
- Telecommunications
- Education
- Healthcare
- Government
- Life Sciences
- Transportation
- Consumer Business
- Retail
- Insurance
- Distribution
- Real Estate
- Military
- Pharmaceutical
Q5. Which category best describes your current or most recent company's primary industry?

- The top 5 other responses included the following:
  - Advertising/Marketing
  - Energy/Utilities
  - Media
  - Legal
  - Publishing

- Other positions and/or titles receiving votes:
How can we address these skill gaps?
Q8. How can Industry help address these skill gaps?

How can Industry help address these skill gaps?

- Mentoring
- Real Time, On the Job Training
- Cross-Training
- *Job Rotations
- Better Hiring
- *Classroom Training
- External Training
- *Internship - Full Time one semester
- *Special Assignments
- *Internship - Part Time one semester
- College Classroom Project
- Job Sharing
- Self-Study
- Other (please specify)
- Loan Executive Program

* Indicates items that were in the 2008 top 5
Q9. How can the University help address these skill gaps? (check your top 3)

- New certificates
- Other (please specify)
- Weekend retreats on specific topics
- Web-based instruction
- Add new emphasis areas
- *Change curricula in degree program
- *More business guest speakers in the classroom
- *Expand internship programs
- *Special projects joint with business

* Indicates items that were in the 2008 top 5.
Q9. How can the University help address these skill gaps? (check your top 3)

- Other suggestions included the following:
  - Applying more of an emphasis on technology
  - Bringing the real world into the classroom (i.e. teachers with real world business experience, guest speakers, cases, mentors, etc)
  - Create a Project Management curricula
  - Teach students proper work etiquette (i.e. attire, ethics, behavior, etc)
  - Increased focus on verbal and written communication skills
  - Orienting classes to have more of a practical application in the business environment outside of the classroom
Q11. What top 15 skills were not taught in your degree program(s) that you developed after graduation have been critical to your success?

![Bar chart showing the top 15 skills developed after graduation, with Applying Technology to Business being the most critical and Meeting Management being the least critical.](chart.png)
Q12. How/where did you acquire those important skills?

How/where did you acquire those important skills

- Learning from others
- Trial and error
- Self Study i.e reading/web-based
- Formal company training
- Special projects
- Formal third party training
- Other (please specify)
Q25. What internal training and development programs does your company have to address the skills needed? (check all that apply)?
Wrap-Up
Wrap up summary

- Critical skills and gaps identified two years ago still persist
- New skills gaps are apparent due to the economy and the changing environment
- Potential negative impacts are significant.
- Universities and Businesses need to work more closely together/partner to address the skill-gaps.
- Universities need to change their curriculum to include more real-world, business experience and continuing education.
- Businesses need to continue to provide internal development programs.
- Individuals must take responsibility for their own development
- The partnership between business and academic groups is more crucial than ever to close skill gaps
QUESTIONS
Top 10 Soft Skills for Job Hunters
By Kate Lorenz, CareerBuilder.com Editor

1. **Strong Work Ethic**. Are you motivated and dedicated to getting the job done, no matter what? Will you be conscientious and do your best work?

2. **Positive Attitude**. Are you optimistic and upbeat? Will you generate good energy and good will?

3. **Good Communication Skills**. Are you both verbally articulate and a good listener? Can you make your case and express your needs in a way that builds bridges with colleagues, customers and vendors?

4. **Time Management Abilities**. Do you know how to prioritize tasks and work on a number of different projects at once? Will you use your time on the job wisely?

5. **Problem-Solving Skills**. Are you resourceful and able to creatively solve problems that will inevitably arise? Will you take ownership of problems or leave them for someone else?

6. **Acting as a Team Player**. Will you work well in groups and teams? Will you be cooperative and take a leadership role when appropriate?

7. **Self-Confidence**. Do you truly believe you can do the job? Will you project a sense of calm and inspire confidence in others? Will you have the courage to ask questions that need to be asked and to freely contribute your ideas?

8. **Ability to Accept and Learn From Criticism**. Will you be able to handle criticism? Are you coachable and open to learning and growing as a person and as a professional?

9. **Flexibility/Adaptability**. Are you able to adapt to new situations and challenges? Will you embrace change and be open to new ideas?

10. **Working Well Under Pressure**. Can you handle the stress that accompanies deadlines and crises? Will you be able to do your best work and come through in a pinch?
Appendix
**Step 1:** Please check the top 10 critical skills ( ) that you feel are the most important for the individuals to excel in their current and future jobs and career.

**Step 2:** Please also check the top 10 skills gaps that need to be addressed for current and future jobs.

<table>
<thead>
<tr>
<th>Skills</th>
<th>Critical Skills</th>
<th>Skills - Gaps</th>
</tr>
</thead>
<tbody>
<tr>
<td>Critical Thinking</td>
<td>✗</td>
<td>✗</td>
</tr>
<tr>
<td>Leadership</td>
<td>✗</td>
<td>✗</td>
</tr>
<tr>
<td>Decision Making</td>
<td>✗</td>
<td></td>
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<tr>
<td>Customer Centric</td>
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<td>✗</td>
</tr>
<tr>
<td>Change Management</td>
<td></td>
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</table>
### 2010 Survey Format

<table>
<thead>
<tr>
<th></th>
<th>1 Not Critical</th>
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</tr>
</thead>
<tbody>
<tr>
<td>Responses</td>
<td>4</td>
<td>13</td>
<td>47</td>
<td>79</td>
<td>171</td>
<td>314</td>
</tr>
<tr>
<td>Responses x Scale 1 to 5</td>
<td>4</td>
<td>26</td>
<td>141</td>
<td>316</td>
<td>855</td>
<td>1342</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Weighted Avg. (1)</th>
<th>4.27</th>
</tr>
</thead>
</table>

(1) \( \frac{1342}{314} = 4.27 \)