

# Nursing Skills Under the Microscope

by John Villarreal

Facing today's globalized economy American workers no longer compete with only each other for high-wage or even low-wage jobs. To stay competitive in a global market, employers have sought various ways to cut costs and improve profit margins. One factor of production that has felt this pinch is labor. America's workers have seen high-wage, low-skill manufacturing jobs move across national borders and become low-wage, low-skill jobs for their foreign counterparts. If skilled labor shortages exist, then employers will look for workers from around the world to expand.

The shortage of skilled labor constitutes an apparent gap between the skills employers are looking for and those skills the American workforce can bring to market. If workers had industry-based standards or skill standards to guide education and training curriculum, then employers might not have to spend as much time and money on initial orientation and training. A process of establishing industry-based standards resulting in a skilled workforce cannot take place overnight. Once employers have identified skill standards, education and training providers can develop curriculum to effectively teach the skills employers are requiring. The whole process could very possibly take years to complete. Therefore, it is essential that employers across all industries are able to identify future occupational skill requirements and trends. One way to do this is by conducting a survey of employers and workers to gauge the value each group places on particular skills necessary to do a job.

## Nurses Face New Challenges in Today's Market

No one industry or occupation can operate in a vacuum. Globalization and technology have affected skill requirements for all workers and Registered Nurses (RNs) are no exception. Today's dynamic economy has also imposed changing skill requirements and new educational principles on nurses. It is important to note that the Bureau of Labor Statistics (BLS) has projected that RNs will experience the largest numerical growth, be one of the fastest growing in terms of percentage change, and among the higher paying occupations between 2000 and 2010. The importance of having enough skilled RNs to provide care for an ever-growing population can therefore not be understated. For this reason, the nursing field was chosen for closer examination. To help gain a better understanding of how particular skills related to this occupation are valued, a survey was conducted of nursing employers. This data was then compared to information from an existing study of the opinions of working RNs regarding skills they felt were necessary to do their job.

The purpose of this study was threefold. First, to describe the opinions of employers about the relative importance of generic and

specific skills used by nurses. Using the results of an employer survey, the second purpose was to compare the employer opinions with a previous study of nurses' opinions about the importance of various skills. Third, the results of the comparison were used to speculate about the implications of differences and place them into perspective. Results were also used to make recommendations for training strategies and future research. Within this scope, skills needed by RNs in an evolving and dynamic health care system are studied.

## Survey Instrument

A self-administered survey was used to gather the opinions of employers about the relative importance of generic and specific skills used by nurses. A survey, cover letter, and return envelope were mailed to 333 Human Resource Directors and Directors of Nursing throughout Texas. A web page (<http://www.twc.state.tx.us/lmi/surveys/rnskills/index.html>) was also created that contained a copy of the cover letter and a copy of the survey that could be printed and faxed or sent as an email attachment to [skills.survey@twc.state.tx.us](mailto:skills.survey@twc.state.tx.us). The surveys were mailed and the website and email address were launched on June 24, 2002. Respondents were asked to reply by July 12, 2002. Phone calls were made during the weeks of July 8<sup>th</sup>-12<sup>th</sup> and 15<sup>th</sup>-19<sup>th</sup> to remind the Human Resource Directors and Directors of Nursing about the survey.

## Analysis of Survey Results

In order to address the first purpose of this study, survey questions were developed to determine the level of importance placed on a variety of universal skills. The survey responses were then compared to O\*NET<sup>1</sup> survey responses of working RNs in order to address the second research purpose. The results of the comparison were used to speculate about the implications of differences between the two groups. The following describes the results of the study and analysis of the data that was collected. Specific skills were addressed within six broad skill categories: Basic, Social, Complex

Table 1

Top 10 Skills Across All Categories

Employers		Employees (O*NET)	
Skill	Score	Skill	Score
Active Listening*	97	Speaking*	79
Speaking*	97	Service Orientation*	79
Problem Identification*	94	Reading Comprehension*	73
Information Gathering	94	Social Perceptiveness*	73
Time Management	94	Judgment and Decision Making	73
Reading Comprehension*	93	Critical Thinking	71
Writing*	93	Coordination	71
Instructing	93	Active Listening*	69
Service Orientation*	92	Problem Identification*	67
Active Learning⌘	91	Writing*⌘	65
Social Perceptiveness*⌘	91	Science⌘	65
Solution Appraisal⌘	91	Monitoring⌘	65

\*Skill is identified on both lists.

⌘Skills at the end of the list tied with the same score

Problem Solving, Technical, Systems, and Resource Management skills. Table 1 shows the top ten skills identified by each group across all categories.

Active Listening, Speaking, Reading Comprehension, and Writing were among the top five skills listed for both employers and nurses. Both groups agreed on some of the most important **Basic** skills, but they didn't agree on all skills. Employers indicated that Active Learning was extremely important, while nurses indicated that Critical Thinking was more important. This difference in opinion implies that employers value the ability to learn new information and grasp its implications. Working nurses, on the other hand, felt that it was more important for them to be able to use logic and analysis to identify strengths and weaknesses of different approaches.

Service Orientation and Social Perceptiveness are two **Social** skills that were valued the most by both nurses and Directors of Nursing/ Human Resource Directors. The highest employer score for a **Social** skill went to Instructing, while Service Orientation was most valued by nurses. Nurses identified Coordination as an important skill to perform their daily tasks but employers did not list it. It's not difficult to understand why a nurse would need to be service oriented and socially perceptive; although, employers more highly valued a nurse's ability to teach others how to do something. Working nurses felt that adjusting their actions in relation to the action of others was a more important skill to have.

The **Complex Problem Solving** skill category indicated that employers and nurses both felt that Problem Identification and Information Gathering were the two most important skills, respectively. Also, Solution Appraisal and Idea Evaluation were viewed by both groups as important skills for nurses. Employers viewed Synthesis/Reorganization, or the ability to reorganize information to better approach problems or tasks as an important skill for nurses. Implementation Planning was seen as a more important skill to working nurses as it deals with the practical approaches for implementing an idea. Even though these last two skills were rated differently between the groups, they are somewhat similar in definition.

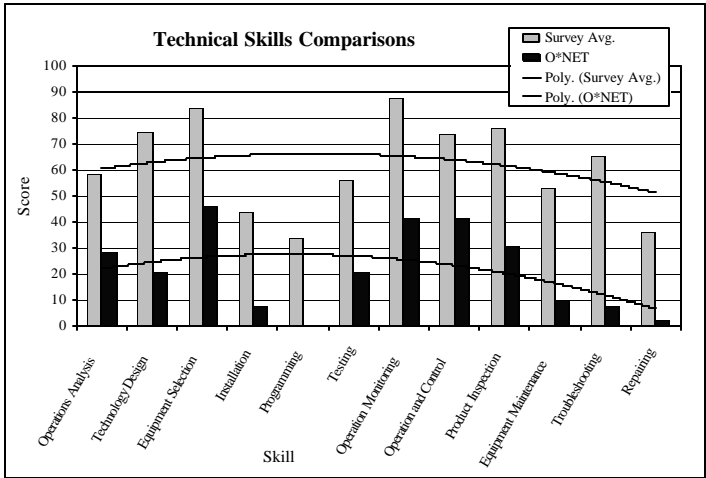
Four of the top five **Technical** skills were common for both employers and nurses. Operation Monitoring, Equipment Selection, Product Inspection, and Operation and Control were all identified as the most important **Technical** skills by both groups. The survey results showed that employers felt that Technology Design was an important skill, but working nurses valued Operations Analysis more highly. On the surface, one might not associate Technology Design with nursing. A closer examination of the definition illustrates that it has to do with adapting equipment and technology to serve user needs, which has practical nursing application.

Nurses also recognized two of the three **Systems** skills identified as important to employers. Identification of Key Causes, and Judgment and Decision Making skills were viewed by both groups as important for working nurses. Employers valued Systems Evaluation skills while nurses felt that Systems Perception was more important. Hence, employers valued a nurse's ability to look at many indicators of system performance, taking into account their accuracy. Nurses felt that determining when important changes have occurred in a system or are likely to occur was more important to carrying out their duties.

Time Management and Management of Personnel were both rated as the most important **Resource Management** skills by both employers and nurses. Both skills refer to management of others. As nurses earn experience and tenure, it can be ascertained that they will be asked to take on supervisory roles.

Table 1 indicates that employers and nurses valued **Basic**, **Social**, and **Complex Problem Solving** skills more than other categories. The top four skills for employers were either **Basic** or **Complex Problem Solving** skills. The top four for nurses were either **Basic** or **Social** skills. Hence, employers valued the capacity to solve ill-defined problems in complex, real world settings while nurses valued working with people to achieve goals. Employers appreciated the theoretical whereas nurses valued the practical application of skills. A majority of the largest discrepancies were in the **Technical** skills category. Nurses did not see **Technical** skills, as a whole, as very important to performing their daily tasks. Employers viewed some of these skills as important, but many scored below seventy. Table 2 illustrates the difference in mean scores, with "quasi" trend lines included to show the importance of skills in relation to other skills in that category. The data reveal that even though there were vast differences between the mean scores for employers and nurses, their opinions bear out more agreement than disagreement.

Table 2



## Conclusions

Of the six skills categories, employers placed a higher level of importance on **Basic**, **Complex Problem Solving**, and **Social** skills respectively. The skills that employers rated at the top of each of these categories all scored in the nineties on a scale of zero to one hundred. Two of the four **Resource Management** skills scored in the nineties as well. According to the survey results, employers placed a higher level of importance on skills in these four descriptive categories. And within each category, employers felt that these skills were the most important for their Nurses to possess. So, how do Human Resource Directors and Directors of Nursing of Texas hospitals' opinions differ from those of their working nurses?

At first glance, the scores for all skills across the six skill categories appeared vastly different. Survey responses indicated that across all skills categories, employers placed a much higher level of importance on skills than the RNs who responded to the O\*NET survey. One possible explanation is that employers generally place greater importance on skills than their employees. With more highly skilled workers, the less training and employee development employers will have to pay for in the future. Another possible explanation would be that Human Resource Directors and Directors of Nursing do not regularly perform the duties of a Registered Nurse, therefore, they are not as "in touch" with skill requirements as their nurses. In comparing the two sets of importance scores, one must consider that these valuations come from two completely different groups. It can be expected that two groups as opposite as employers and employees would hold different opinions about a variety of topics. So, it's not difficult to understand why the importance scores were so different for employers and working nurses across all skill definitions. Even though these scores were vastly different, there was agreement on the most important skill categories and the most important skills within each category. The few differences that appear are thought provoking, but a trend begins to emerge upon closer inspection.

The lists of most important skills identified by employers and working nurses had a lot in common with only a few notable differences. As stated earlier, nurses took a more practical approach to assigning importance of skills. Using logic to solve problems, adjusting action in relation to others, and developing an approach to implement an idea were just a few of the most important skills identified by nurses. Employers placed a higher value on understanding implications of new information for future use, teaching others, reorganizing information to better approach problems, and adapting equipment to serve user needs. Working nurses appreciated the practical whereas employers favored the theoretical or abstract. Case in

point, Mathematics was one skill that was rated highly among employers but not so highly rated by working nurses. One challenge to education and training providers may be to assist in closing these "gaps" in opinion by either changing the attitudes of employers or by providing more comprehensive training to RNs.

## Recommendations for Future Research

This study was primarily concerned with describing opinions of employers on the importance of various skills, but no attention was paid to why employers feel the way they do. A possible area of future study would be to build on the results of this study by attempting to answer why employers feel the way they do about certain skills. Also, one could build on the results of the O\*NET study to find justification for why working nurses feel the way they do about the importance of various skills. Both of the above suggestions would take considerable time and effort, but would go a long way in determining why opinions vary so much between employers and working nurses.

As doctor's time becomes more expensive, employers are demanding more of their RNs. As health care costs rise, hospital employers will seek to find ways to cut those costs. Lowering labor costs through shifting duties to lower-paid employees is a real possibility. As new procedures and technology emerge, new skills will be required to keep pace with these changes. Registered Nurses are faced with many challenges in a dynamic health care industry, and greater skill development will only solidify their importance and ability to deliver quality health care.

For more information on this nursing survey, visit the LMI searchpage at [texasworkforce.org/lmi](http://texasworkforce.org/lmi) or contact John Villarreal at (512) 491-4818 or [john.villarreal@twc.state.tx.us](mailto:john.villarreal@twc.state.tx.us). If you are interested in a skills survey for your area contact James Dossett at (512) 491-4874 or [james.dossett@twc.state.tx.us](mailto:james.dossett@twc.state.tx.us).

## Notes:

<sup>2</sup> The Occupational Information Network (O\*NET) is an electronic database that combines the descriptive detail of the Dictionary of Occupational Titles (DOT) coupled with other types of relevant labor market data. Information on O\*NET is available for over 950 occupations. All occupations are coded using the latest version of occupational classification taxonomy known as the Standard Occupational Classification system. All occupations on O\*NET are described by a universal set of forty-six skills. Only the importance of these universal skills varies by occupation.