DISTANCE EDUCATION TECHNOLOGIES AND THE GLOBAL SKILLED WORKER SHORTAGE: CAN WE CLOSE THE GAP?

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ABSTRACT

Projections indicate a global shortage of skilled labor is large, eminent, will not be confined to developed countries, and will perhaps be even more of a serious problem to emerging markets. The skilled worker shortage will provide an opportunity for the use of distance education technologies to deliver training for new employees and retraining for employees requiring up-dated work skills. Current distance education technologies are adequate for these purposes.

INTRODUCTION

Recent surveys of employment conclude that we headed for a global shortage of skilled workers. The U. S. Bureau of Labor Statistics says that the size of the shortfall in the U.S. is estimated to be 5.3 million by 2010 and growing to 14 million by 2015. [9]

Globally, from a study of 37,000 employers in 27 countries conducted by Manpower, Inc., 4 of 10 employers reported having difficulty finding qualified skilled workers. India projects a shortfall of 350,000 business-process staff by 2010. [11]   The expected magnitude of India's skilled worker problems is the biggest threat to India's economic growth and has resulted in increasing the attractiveness of alternative locations in Eastern Europe and China. [6]

A survey of human resources professionals concluded that only 10% of Chinese job candidates were suitable for filling managerial jobs in foreign firms in nine occupational areas: engineers, quantitative analysts, generalists, life science researchers, finance workers, accountants, doctors, nurses, and support staff. Further, they observed that given the global aspirations of most of the Chinese firms surveyed, of the 75,000 additional leaders that these firms will need there fewer than 5,000 can be identified to fill those positions. [3]

Europe is similarly affected.   A recent study forecasts a significant shortage engineers in Germany; one in two German industrial companies has encountered a "personnel bottleneck" through which they have been unable to find suitable candidates for open positions. [12] [5]

SKILLED LABOR SHORTAGE: WHY?

There are many known causes of the "personnel bottleneck". First, the high rate of growth of the globalization's enabling technologies has caused a rapid increase in the demand for trained, skilled workers. Progress in the telecommunication technologies have has created environments and delivery systems that have spawned e-commerce and virtual retail outlets, increased globalization with offshoring and 24/7 business operations.

But there are other causes of the shortfall that cannot be explained by the global economies growth rate or the increased use of outsourcing. The demographic shift towards aging populations in almost all developed countries is now resulting in fewer labor market entrants. The increasing ease of emigration has resulted in greater labor mobility between countries, especially for professionals and the technically-trained. Overly generous severance packages and unemployment compensation has also been suggested as one of the major reasons for the anticipated labor shortage. Research shows that "non-participants" in the workforce have risen throughout Europe. In the U.S. about 70% of the population of working age work while only 60% participate in Western Europe and 50% in Eastern Europe. [1]

Finally, immigration has been found to be a serious cause of many nations' skilled labor shortages. "Brain drains" have resulted in large influxes of skilled workers to the U.S. and Western Europe from developing countries [4] and a shift of skilled labors from Eastern to Western European countries. [1]

A TRAINING OPPORTUNITY

The continued developments in communication technologies have also created an opportunity for distributed training. As the globalization and offshoring efforts of organizations continue and accelerate, the need to train local labor effectively and cost efficiently will require organizations to utilize distance education systems. A recent survey found that 60% of U.S. companies use some form of e-learning to deliver training to their employees, customers, and/or suppliers. [6]

Over time, distance education delivery systems have increasingly incorporated technology to enhance the delivery systems and positively influence its outcomes. Organizations now rely on different technologies, from video- or audio-taped to Internet-based technologies, to permit the integration of text, audio and video. Some companies even use "video-game" format for on-the-job training programs. [7]

Expertus, a global training company, recently conducted a survey of 268 multinational firms Eighty-two percent of the firms surveyed were providing training to their employees and employees of their partners and/or customers outside their headquarters country. These firms reported that over 72% of the total value of their training budgets was consumed by training efforts in foreign locations. [2]

SUMMARY AND CONCLUSIONS

Facing a worldwide shortage of skilled workers, firms will have to provide training to a larger number of workers. Greater use of offshoring and outsourcing will require that firms provide training in multiple languages to their employees plus those of their partners, suppliers and customers.

Most distance education technologies can be effectively employed for this kind of training. Further, they have been found to be very cost effective. Employees trained via distance education technologies learn more than those that were trained in "live" settings. [10] [12] Thus, improvements and enhancements within the various distance education technologies make it possible to deliver training to these employees more efficiently and effectively.

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