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ABSTRACT

This document presents lessons on the counselor's role in helping students plan for success in tomorrow's workplace. The first lesson is designed to help school counselors gather information from a wide range of resources and summarizes the ways in which the workplace is changing. The second lesson focuses on identifying the skills needed to succeed in the changing workplace. The third lesson focuses on labor market projections, helping school counselors to become critical consumers of labor market information and to understand assumptions and factors driving projections. The fourth lesson encourages school counselors to increase their knowledge of the relationship between workers' basic skills and America's competitiveness in the international marketplace. Included with each lesson is information on the justification for the lesson; the expected learner outcome; instructor resources; directions for teaching-learning interaction; debriefing strategies; list of resources; and a brief discussion of an individualized learning plan for persons studying this content in an individualized program. (ABL)

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Educational Change:

Planning, Integration,

and Basic Skills

PLANNING FOR SUCCESS IN TOMORROW'S WORKPLACE

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COUNSELOR EDUCATION

Counselor Role and

Educational Change:

Planning, Integration,

and Basic Skills

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PLANNING FOR SUCCESS IN TOMORROW'S WORKPLACE



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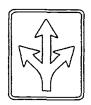


CHANGE IN THE WORKPLACE



Perennial Problem

How can comprehensive school counseling and guidance programs contribute to the delivery of the basic skills?



Practical Problem

What should be done to help school counselors identify the basic skills necessary for success in a changing workplace?



Justification for Lesson

School counselors often have little opportunity to learn about the workplace outside of the educational setting. This lesson is designed to help school counselors gather information from a wide range of resources and summarize the ways in which the workplace is changing.



Learner Outcome

The learner will acquire expertise and interest in keeping current regarding the nature of change in the workplace.





Instructor Resources

- Newsletter: Counselors and the Changing Workplace (handout)
- Example of a Front Page Format (transparency)
- Example of a Front Page with Headlines (transparency)
- The Workforce 2000: Challenges Related to the Workplace (transparency)
- Poster paper and markers



Teaching-Learning Interaction

The instructor should preassign the learners to read the handout titled Newsletter: Counselors and the Changing Workplace. Note: The articles abstracted in the Newsletter should be read in their entirety, if possible. Other appropriate articles listed in the Possible Resources section could also be assigned.

The instructor should also preassign each learner to bring to class four newspaper articles which highlight current challenges confronting the workplace.

The instructor should divide the class into groups of 3-5 learners, and ask the learners to offer an analysis of the relationships among their news articles and the contents of the preassigned reading, focusing on the similarities between both sets of materials.

Next, the instructor should ask the groups to serve as news editors, building a front page of titles and stories for a hypothetical newspaper to be distributed to all middle and senior high school students and guardians. The newspaper should be intended to alert readers to the changes challenging the workplace.

The instructor should explain the layout of a typical newspaper front page through the use of the transparency titled Example of a Front Page Format. A typical front page includes: a headline story, two subheadline stories, four secondary stories (including one picture story), and three column stories (covered in the lefthand column).





Teaching-Learning Interaction, continued

Next, the instructor should show the transparency titled <u>Examples of a Front Page with Headlines</u> and have the groups fill in the spaces with news story titles from the articles they have brought to class. On poster board, the groups should create mock front pages and display them at the front of the room.

The instructor should then have the groups critique each others' content, looking for similarities, unique responses, and additional titles to be added.

The instructor should then show the transparency titled <u>The Workforce 2000</u>: Challenges Related to the Workplace, reviewing the challenges proposed by the Hudson Institute. The instructor should have the groups of learners identify which "challenges to the workplace" generated in their groups did not appear in the handout. The learners should discuss these additional challenges.



Debriefing Strategies

The instructor should ask the groups the following questions:

- What skills were used during the exercise?
- How do these skills relate to the skills needed by future school counselors?
- Which changes in the workplace were new to you?
- What impact do these changes have on a school counseling and guidance program?
- What are you motivated to do as a result of the lesson?
- How do you plan to remain current about the changing workplace?





Possible Resources

- Annual and monthly issues of <u>Business Week</u>, <u>Fortune</u>, and <u>Forbes</u>
- <u>The Wall Street Journal</u>: Special Issues
- Ettinger, J. (1991). <u>Improved career decision making in a changing world: Module 1</u>. Garrett Park, MD: Garrett Park Press.
- Videotape: Work in the new economy by Social Studies School Services, Culver City, CA; 1-800/421-4246.
- Videotape: <u>The Tough New Labor Market and What it Takes to Succeed</u> by JIJT Works, Inc., 720 N. Park Ave., Indianapolis, IN 46202; 1-317/264-3720.



Individualized Learning Plan

If a learner is studying this content in an individualized program, he or she should be given the entire lesson. The learner should read all materials and complete all assignments and activities. Written responses in the form of a paper can be used to verify completion of the lesson. Note: As part of this learning experience, the learner should be asked to identify a counselor in the schools with whom to discuss the questions and issues of the lesson.



INSTRUCTOR RESOURCES

LESSON: CHANGE IN THE WORKPLACE



COUNSELORS AND THE CHANGING WORKPLACE NEWSLETTER...for school counselors

with an eye on basic skills

PUBLISHED BY:

Joe Daly and Jeff Lovejoy Colorado State University Fort Collins, Colorado



DATE: Early 1990s

This is a one time newsletter provided as part of a lesson to improve school counselor education. It provides background reading and references to materials which promote the value of comprehensive counseling and guidance programs.

The Future Face of America's Workforce

Introduction. The workforce in North America faces major changes in its structure and composition that will radically alter how employers recruit, hire, manage, and keep good employees. The worker of the future will be considered more as an asset than a fixed cost. Worker education, self reliance, skills, and flexibility will be the most important factors in hiring and promotion. The following trends are the most likely to be influencing that workforce in the coming years.

Increasing Diversity in the Workforce. The aging of the workforce and the population as a whole will create new problems and opportunities. As the numbers of older people increase, so will their influence. Aside from that group, the greatest change in numbers will be Hispanics, whose birthrate is higher than that of any other ethnic group in America. Greater influence may come from Asians though, because they are currently outperforming all other groups in technical and business education.

Women, by force of numbers, will gradually make their presence felt in the executive suites of the country. The labor pool is shrinking, thus creating possible opportunities for those who have traditionally had a difficult time breaking into it. On the other hand, intensive training will be required for many of these people, since jobs of the future will typically require more of all kinds of expertise.

Home Life and Work Life. New employee support programs will need to be instituted because of the changed face of family units and unconventional worksites and arrangements. There will be a new focus on workers as assets. Womens' work and education will shape their childbearing choices. American mobility will become even more of a strength because of the need to

strategically place companies for economic reasons.

Globalization: Competing in a World Economy. Worldwide technoscience competence will increase, thus forcing the U.S. to sharpen its competitive edge. More mergers and acquisitions lie ahead as a result of more and more companies taking a global perspective. This global trend will bring about sweeping changes in market basics.

The Changing Nature of Work. New critical skills are emerging even now, forcing training/education budgets to remain high. Business and industry will be reaching deeper into the education system to find and cultivate qualified workers. Artificial intelligence will make the leap from lab to application in a big way.

Employees and Health. U.S. workers are already more sedentary than a few decades ago. This trend will continue, making health and exercise programs more important. Workers will become more involved in health and safety issues, partly as a result of the above facts. At the same time, however, AIDS, which kills in the prime of a worker's life, will claim many more from the labor force.

Changing and Restructuring the Way Business Does Business. Rewarding innovation and instituting changes in compensation policies will be used to improve performance and to provide worker security while still cutting costs. Workers will be empowered as a result of the disbanding of company hierarchies. The workforce deck will go through a thorough reshuffling as business and industry adapt to changed needs. Increased regulation will probably be the norm as companies strive to align themselves with international guidelines. This will also call for an exploration and redefinition of workplace ethics.

Coates, J. F., Jaratt, J., & Mahaffie, J. B. (1990). Future work. The Futurist, 25(3), 10-19.

Colorado State University, 1992.

6

Change in the Workplace, H-1



Counselors and the Changing Workplace

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Newsletter

The New Economic Forces in America

In the past few years, other countries have started to catch up to America in terms of productivity. Perhaps more disturbing is that they have also begun to make inroads on our market share in many industries and product lines. The rules of the economic game have changed. Some of the reasons follow.

The Wealth of Nations. Because of post World War II affluence, consumers are able to afford more. A good part of this affluence, however, results from more family members working, people marrying later and having fewer children, and, most importantly, consumers buying more, saving less, and borrowing. The last is a key issue. The United States has gone from \$106 billion in the black with the rest of the world to \$500 billion in the red.

Globalization. This has caused international tastes to become homogenized. Travel, media, and marketing have all had a share in bringing this about. But some unexpected results have appeared as a result of this globalization. Governments have sometimes propped up failing businesses with guarantees. The effect has been something like preventing natural forest fires. The product cycle has been disturbed. Where once the United States developed technology and sold it to the rest of the world, the reverse is now often happening. The growth of international trade has made international markets more important than domestic markets.

Time, Taste, and Consumer Discrimination. Busier, more discriminating consumers are demanding more and better services to support their lifestyles. Since there is less time to accomplish household tasks, convenience is key. Many tasks previously done by consumers have now been commercialized. The fragmentation of America into interest groups has also caused a diversification of taste along gender, ethnic, geographic, and religious lines.

Technology. Most of these changes would have been impossible without the influence of technology. This same technology continues to simplify work, provide greater flexibility in production, and unfortunately, eliminate jobs.

Toward Meeting the New Standards

If America is to remain competitive in the global marketplace, it must learn the realities of the new

game. The rules are different now, and there are many more players. The following areas need to be addressed if the U.S. is going to continue to be a world class player.

Productivity. Manufacturing productivity has been improving of late, bucking the general trend in this country. The service sector lags behind, however, which is a cause for concern. But possibly the most distressing fact is that, in the future, most entry level workers will come from populations that have been marginally invested in. The cost of developing skills in these people will be great.

Quality. As has been evident from Japan's capturing of a significant share of America's auto market, consumers want quality and are willing to pay to get it. American performance has been lagging across the board. It is on the rise again, but will have to make continued strides to keep up with the countries who are in the forefront of quality marketing and manufacturing.

Variety, Customization, and Convenience. Choices have exploded in department stores, specialty stores, banking institutions, and communications. Consumers are no longer content with basic offerings. Part of the reason is affluence, and part is busy people looking for convenience. But the answer has to be catering to these needs with ever increasing precision and sophistication.

Timeliness and Flexibility. Fads, needs, and fashions are changing so fast that one of the most crucial elements in marketing today is timeliness. The time to get the product off the design table and into the consumer's hands now must often be a matter of days or weeks. The answer to much of this lies in flexibility of operation. Fast turnaround times for production and delivery systems are hallmarks of the business and industry of the future. This flexibility, of course, also entails a far sighted reading of consumer trends and needs.

Quality and the Consumer. Today's customer is savvy and impatient. Customer loyalty must be earned much more than in the past. If one business can't provide what is needed when it is needed and of the quality needed, the customer will go elsewhere. That puts the pressure on business and industry to be aware of the consumer as the driving force of business. With globalization, this is a tricky business indeed.

Carnevale, A. P. (1991). America and the new economy. Alexandria, VA: American Society for Training and Development. pp. 15-38.

Colorado State University, 1992.

Change in the Workplace, H-1



Example of a Front Page Format

		Subhead Story 2
Column Story 1	HEADLINE ST	TORY
Column Story 2	Secondary Story Picture Here Caption for Picture Here	
Column Story 3	Secondary Story 3	Sec- ondary Story 2
	Secondary Story 4	



Example of a Front Page with Headlines

Computer Screens Strain Users' Eyes, Specialists Say Interest R Remain S		31	
Rubber Check Ploy Could Be Seen Often in Campaign	'I never cry u	Nominee vo	ows to fight; nes an issue
Bush likely to be re- elected say majority of Americans	Arriving: Judge Clarence Thomas	·	
Soviets ask Group of Seven to ease switch to capitalism	Issue Spurs Workplace Awa	areness	Sports aren't just games to Americans
	Big Sports Often Mean Big MONEY		



Colorado State University, 1992.

The Workforce 2000: Challenges Related to the Workplace

Stimulating Growth in the Developing World

U.S. prosperity depends primarily on how fast the world economy grows and domestic productivity increases.

Accelerating Productivity in Service Industries

While manufacturing needs to increase productivity, prosperity in the U.S. depends much more on how fast output increases in health care education, retailing, government, and services. Services are a much larger part of the economy. Service productivity has actually declined in recent years.

Maintaining the Dynamism of an Aging Workforce

While the aging workforce has the potential to become less willing to relocate, retrain, or change occupations, the economy will demand more flexibility, adaptation, and willingness to learn.

Reconciling the Conflicting Demands of Women with Work and Families

We have become a society where everyone is expected to work or needs to work to provide for basic needs. Yet most policies and institutions are designed for men to work and women to stay home.

Integrating Underrepresented Ethnic Workers Fully into the Workforce

A greater number of the shrinking pool of new young workers will be from poverty stricken backgrounds and have poor school records, forcing employers to face the urgent task of fully utilizing underrepresented workers. As the new economy demands higher levels of skills, cultural changes and education and training investments will be needed to create *real* equal employment opportunity.

Improving Workers' Education and Skills

As society becomes more complex and dependent on the strength of its human capital, the amount of education and knowledge needed to contribute to the economy becomes greater.

Adapted from Johnston, W., & Packer, A. (1987). Workforce 2000: Work and workers for the twenty first century. Indianapolis, IN: The Hudson Institute.

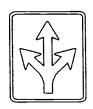


BASIC SKILLS IN THE CHANGING WORKPLACE



Perennial Problem

How can comprehensive school counseling and guidance programs contribute to the delivery of the basic skills?



Practical Problem

What should be done to help school counselors identify the basic skills necessary for success in a changing workplace?



Justification for Lesson

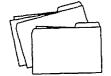
The changing workplace requires a new definition of the basic skills. This lesson will help school counselors conceptualize the basic skills by identifying the skills needed to succeed in the changing workplace.



Learner Outcome

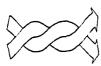
The learner will understand and appreciate the basic skills needed for success in the changing workplace.





Instructor Resources

- Visit Interview Form (handout)
- Visit Response Form (handout)
- Newsletter: Counselors and the Future of Schools (handout)
- Workplace Changes and Basic Skills (handout)
- Workplace Changes and Basic Skills (transparency)
- Workplace Basics (transparency)
- SCANS Basics (transparency)



Teaching-Learning Interaction

The instructor should preassign each learner to individually contact a nonpublic employer to arrange a 45 minute interview with a personnel officer, department manager, or training specialist. (The learners can use the Yellow Pages or the Chamber of Commerce to identify the employer.) During the interview, the learner should complete the handout titled <u>Visit Interview Form</u>.

Using the data from the handout titled <u>Visit Interview Form</u>, the instructor should have the learners complete the handout titled <u>Visit Response Form</u>.

The instructor should also preassign the learners to read the handout titled Newsletter: Counselors and the Future of Schools, which offers a brief analysis of basic skills in the workplace. Note: The articles abstracted in the Newsletter should be read in their entirety, if possible. Other appropriate resources listed in the Possible Resources section could also be assigned.

At the beginning of class, the instructor should indicate to the learners that they have been hired as consultants to a personnel team charged with hiring the workforce of tomorrow. The instructor should tell the learners that their charge is to identify the "basic skills" needed by employees to succeed in the rapidly changing workplace.





Teaching-Learning Interaction, continued

The instructor should ask the learners to individually list responses to the following question: "From your reading and your interview, what buzzwords or concepts used to describe the changes taking place within the workplace did you note?"

Next, the instructor should divide the class into pairs, and, using the learner generated lists, ask each pair to discuss the following question: "How will these changes affect what employees need to know?"

The instructor should then show the transparency titled <u>Workplace</u> <u>Changes and Basic Skills</u>, and distribute the identical handout. The instructor should discuss the workplace changes listed on the transparency. Next, the instructor should ask the learners to suggest additional workplace changes from their lists that are not found on the transparency. These items should be clarified and considered as additions to the changes listed on the transparency.

Using the amended handout, the instructor should ask the pairs of learners to discuss and identify the "basic skills" needed as employees face each of the listed workplace changes.

While the instructor records suggested basic skills on the board, the learners should be instructed to generate a list of the basic skills needed by employees to be presented to the hypothetical personnel team.

As a summary of the lesson, the instructor should show the transparencies titled <u>Workplace Basics</u> and <u>SCANS Basics</u>.



Debriefing Strategies

The instructor should ask the pairs of learners the following questions:

- Which of the basic skills seemed related to the greatest number of workplace changes?
- Which basic skills were new to you?





Debriefing Strategies, continued

- How does this list of basic skills differ from traditional definitions of the basic skills?
- Are there additional skills that all workers will need to succeed in the changing workplace?

Note: It is important to point out that acquiring the basic skills increases effectiveness not just at work but at home and in school, as well.



Possible Resources

- Hudson Institute. (1987). Workforce 2000: Work and workers for the 21st century. Indianapolis, IN: Author.
- Boyett, S., & Conn, H. (1991). Workplace 2000: The revolution reshaping American business. New York: Dutton.
- Carnevale, A. (1991). <u>America and the new economy</u>.
 Alexandria, VA: American Society for Training and Development.
- Smith, D. (1988). Changing workplace Changing education.

 <u>Beyond the debate: Perspectives on the preparation of vocational education teachers</u>. Macomb, IL: Curriculum Publications

 Clearinghouse, 5-17.
- Bureau of Labor Statistics. (1990). Tomorrow's jobs.
 Occupational Outlook Handbook. Washington, D.C.: U.S.
 Government Printing Office. pp. 8-12.
- Bleuer, J. (1989). <u>Counseling underachievers: A counselor's guide to helping students improve their academic performance</u>.
 Ann Arbor, MI: ERIC Counseling and Personnel Services Clearinghouse.





Possible Resources, continued

- Griggs, S. (1988). The counselor as facilitator of learning. In G. Walz (Ed.). <u>Building strong school counseling programs</u>. (pp. 41-46). Alexandria, VA: American Association for Counseling and Development.
- Agency for Instructional Technology. (1992). Workplace readiness. Bloomington, IN: Author.
- Videotape: <u>Life after high school: Manufacturing workers</u>. (1990). Santa Monica, CA: Pyramid.



Individualized Learning Plan

If a learner is studying this content in an individualized program, he or she should be given the entire lesson. The learner should read all materials and complete all assignments and activities. Written responses in the form of a paper can be used to verify completion of the lesson. Note: As part of this learning experience, the learner should be asked to identify a counselor in the schools with whom to discuss the questions and issues of the lesson.



INSTRUCTOR RESOURCES

LESSON:
BASIC SKILLS
IN THE CHANGING
WORKPLACE



VISIT INTERVIEW FORM: Identifying Change in the Workplace

Interviewer	 	
w		
Interviewee's Title and Industry	 	

Possible Questions

- 1. What determines the success of your business?
- 2. What are the greatest challenges your business faces?
- 3. What changes are companies like yours making to increase productivity, efficiency, and competitiveness?
- 4. What buzzwords are used within your field that speak to the need for change, or the need to respond to change?
- 5. How have the leaders in your field become the leaders?
- 6. What three wishes do you have for your company?
- 7. What do your employees need most to be more productive and valuable to the company?
- 8. What do you read, and how do you stay current in your field?
- 9. How much has your company changed within the last five years, and what brought about the change?
- 10. In terms of your employees, your competition, and the economy, speculate on what changes you expect to see in the next three years.
- 11. How would stimulated growth in the world economy affect your business?
- 12. Do you have any concerns about your employees' willingness to relocate, retrain, or change job tasks?
- 13. How important is employee flexibility, adaptability, and willingness to learn within your business?
- 14. What policies have or will change within your field to accommodate women's conflicting demands of work and family?
- 15. To what degree will the labor pool be more ethnically diverse in the next five years, and what opportunities and challenges will this create?
- 16. To what degree will your employees need greater and/or different skills in the near future?
- 17. What basic skills do your employees need most to succeed?
- 18. Assuming there are two possible futures for your company (one with your company hitting hard times, with profit and job cutbacks; a second where your company increases profits and job opportunities), project what would cause each possible future to happen.



Colorado State University, 1992.

Basic Skills in the Changing Workplace, H-1

VISIT RESPONSE FORM: Identifying Change in the Workplace

Interviewer ______

- 1. List the title of the interviewee and his or her respective industry, and comment on the interviewee's receptivity to the interview.
- 2. Regarding the subjects discussed with the interviewee, how were your expectations and feelings prior to this activity different from the feelings you have now?
- 3. What most surprised you about the process and content of the interview?
- 4. What new forces changing and challenging the workplace were most new to you?
- 5. What do the workplace changes identified through the interview mean to a future school counselor?
- 6. What are you motivated to do as a result of the interview?
- 7. Did the interview change the way you view the school counselor's role?



COUNSELORS AND THE FUTURE OF SCHOOLS NEWSLETTER...for school counselors



with an eve on basic skills

PUBLISHED BY: Joe Daly and Jeff Lovejoy

Colorado State University

Fort Collins, Colorado

DATE: Early 1990s

This is a one time newsletter provided as part of a lesson to improve school counselor education. It provides background reading and references to materials which promote the value of comprehensive counseling and guidance programs.

What Work Requires of Schools: Introduction to the SCANS Report

Schools do more than prepare people to go out into the workplace. They get them ready to participate in community life, to enjoy themselves, to lead full lives. But the following report only concerns that part that prepares people to make a living. It is not calling solely for a workplace centered education, but it is concerned primarily with that aspect.

This country has traditionally not had to worry about foreign competition, but today the demands of the marketplace have changed. Because of these new realities, flexibility and teamwork have become the qualities that employers look for.

One of the implications of this change is that more than 50% of our young people are now trying to enter the workforce with neither the knowledge nor the foundation required to find or hold a good job. This will eventually have a ripple effect throughout the whole economy. Something needs to be done.

The Commission spent a full year talking to business owners, public employers, union officials, and front line workers. All delivered the same message: good jobs go to those who can put knowledge to work. Workers must have a certain level of responsibility and problem solving skills. Flexibility is the key in maintaining job security.

To succeed, students must develop a new set of competencies and foundation skills. In whatever they do after high school, they will need them.

What the Commission is trying to accomplish is to give these students the ability to achieve the same high performance standards that characterize the country's most competitive companies. To do this, schools will have to become high performance entities themselves.

Despite a solid decade of reform efforts, schools are falling farther behind in this effort rather than catching up. What this full report does is to spell out the skills that will be necessary for American graduates to be competitive in the international marketplace.

The necessary skills have been broken down into:

Competencies:

Resources Interpersonal Skills Information Systems Technology

Foundations:

Basic Skills
Thinking Skills
Personal Qualities

The most vital importance in implementing this program is the cooperation of parents, employers, and educators, working together toward the implementation of the basic skills.

Secretary's Commission on Achieving Necessary Skills. (1991). What work requires of schools: A SCANS report for America 2000 (A letter to parents, employers, and educators). Washington, D.C.: U.S. Department of Labor.

Colorado State University, 1992.

Basic Skills in the Changing Workplace, H-3



Counselors and the Future of Schools

Newsletter

The New Economic Forces in America

In the past few years, other countries have started to catch up to America in terms of productivity. Perhaps more disturbing is that they have also begun to make inroads on our market share in many industries and product lines. The rules of the economic game have changed. Some of the reasons follow.

The Wealth of Nations. Because of post World War II affluence, consumers are able to afford more. A good part of this affluence, however, results from more family members working, people marrying later and having fewer children, and, most importantly, consumers buying more, saving less, and borrowing. The last is a key issue. The United States has gone from \$106 billion in the black with the rest of the world to \$500 billion in the red.

Globalization. This has caused international tastes to become homogenized. Travel, media, and marketing have all had a share in bringing this about. But some unexpected results have appeared as a result of this globalization. Governments have sometimes propped up failing businesses with guarantees. The effect has been something like preventing natural forest fires. The product cycle has been disturbed. Where once the United States developed technology and sold it to the rest of the world, the reverse is now often happening. The growth of international trade has made international markets more important than domestic markets.

Time, Taste, and Consumer Discrimination. Busier, more discriminating consumers are demanding more and better services to support their lifestyles. Since there is less time to accomplish household tasks, convenience is key. Many tasks previously done by consumers have now been commercialized. The fragmentation of America into interest groups has also caused a diversification of taste along gender, ethnic, geographic, and religious lines

Technology. Most of these changes would have been impossible without the influence of technology. This same technology continues to simplify work, provide greater flexibility in production, and unfortunately, eliminate jobs.

Toward Meeting the New Standards

If America is to remain competitive in the global marketplace, it must learn the realities of the new

game. The rules are different now, and there are many more players. The following areas need to be addressed if the U.S. is going to continue to be a world class player.

Productivity. Manufacturing productivity has been improving of late, bucking the general trend in this country. The service sector lags behind, however, which is a cause for concern. But possibly the most distressing fact is that, in the future, most entry level workers will come from populations that have been marginally invested in. The cost of developing skills in these people will be great.

Quality. As has been evident from Japan's capturing of a significant share of America's auto marke! onsumers want quality and are willing to pay to get it. American performance has been lagging across the board. It is on the rise again, but will have to make continued strides to keep up with the countries who are in the forefront of quality marketing and manufacturing.

Variety, Customization, and Convenience. Choices have exploded in department stores, specialty stores, banking institutions, and communications. Consumers are no longer content with basic offerings. Part of the reason is affluence, and part is busy people looking for convenience. But the answer has to be catering to these needs with ever increasing precision and sophistication.

Timeliness and Flexibility. Fads, needs, and fashions are changing so fast that one of the most crucial elements in marketing today is timeliness. The time to get the product off the design table and into the consumer's hands now must often be a matter of days or weeks. The answer to much of this lies in flexibility of operation. Fast turnaround times for production and delivery systems are hallmarks of the business and industry of the future. This flexibility, of course, also entails a far sighted reading of consumer trends and needs.

Quality and the Consumer. Today's customer is savvy and impatient. Customer loyalty must be earned much more than in the past. If one business can't provide what is needed when it is needed and of the quality needed, the customer will go elsewhere. That puts the pressure on business and industry to be aware of the consumer as the driving force of business. With globalization, this is a tricky business indeed.

Carnevale, A.P. (1991). America and the new economy. Alexandria, VA: American Society for Training and Development. pp. 15-38.

Colorado State University, 1992.

10 Basic Skills in the Changing Workplace, H-3



Workplace Changes and Basic Skills¹

Workplace Changes	Basic Skills Needed
Self managed work teams	
Rightsizing; fewer layers; fewer managers	
International customers and competitors	
Faster product development time	
Customer and quality service driven	
Continuous organizational change	
Self managed professional development	
Zero based defects	
Just in time delivery	
Flexible automated manufacturing	
Niche marketing	
International standards	
Peer evaluations	

¹Source: Rich Feller, Colorado State University.

Colorado State University, 1992.



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Zero based defects	
Just in time delivery	
Flexible automated manufacturing	
Niche marketing	
International standards	
Peer evaluations	

²Source: Rich Feller, Colorado State University.



Workplace Basics³

- Learning to Learn
- Reading, Writing, and Mathematics
- Communication
- Adaptability: Creative and Critical Thinking, Problem Solving
- Personal Management: Self-Esteem, Goal Setting/Motivation, Personal/Career Development
- Group Effectiveness: Interpersonal Skills, Negotiation, and Teamwork
- Influence: Organizational Effectiveness and Leadership



Colorado State University, 1992.

³Adapted from: Carnevale, A. P., Gainer, L. J., & Meltzer, A. S. (1988). <u>Workplace basics: The skills employers want</u>. Alexandria, VA: American Society for Training and Development. (ERIC Document Reproduction Service No. ED 299 462)

SCANS Basics⁴

The SCANS basic skills profile is made up of five competency areas and three foundation sets of skills that are considered necessary for solid job performance. These include:

Competencies: Effective workers can productively use:

- Resources allocating time, money, materials, space, and staff;
- Interpersonal Skills working on teams, teaching others, serving customers, leading, negotiating, and working well with people from culturally diverse backgrounds;
- Information acquiring and evaluating data, organizing and maintaining files, interpreting and communicating, and using computers to process information;
- Systems understanding social, organizational, and technological systems, monitoring and correcting performance, and designing or improving systems;
- **Technology** selecting equipment and tools, applying technology to specific tasks, and maintaining and troubleshooting technologies.

Foundation: Competence requires:

- Basic Skills reading, writing, arithmetic and mathematics, speaking, and listening;
- Thinking Skills thinking creatively, making decisions, solving problems, seeing things in the mind's eye, knowing how to learn, and reasoning;
- **Personal Qualities** individual responsibility, self-esteem, sociability, self-management, and integrity.



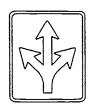
⁴Secretary's Commission on Achieving Necessary Skills (SCANS). (1991). What work requires of schools: A SCANS report for America 2000. Washington, DC: U.S. Department of Labor.

LABOR MARKET PROJECTIONS



Perennial Problem

How can comprehensive school counseling and guidance programs contribute to the delivery of the basic skills?



Practical Problem

What should be done to help school counselors identify the basic skills necessary for success in a changing workplace?



Justification for Lesson

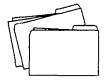
Labor force projections are often presented in technical documents which are difficult for counselors to interpret. This lesson will help school counselors (1) become critical consumers of labor market information, (2) understand assumptions and factors driving projections, and (3) assist learners in using this information.



Learner Outcome

The learner will understand ways in which projections pertaining to the changing workplace are made.





Instructor Resources

- Newsletter: Counselors and the Future of Schools (handout)
- Factors Influencing Occupational Demand Forecasts (transparency)
- Industries in Transition (transparency)
- Fastest Growing and Declining Manufacturing Industries (transparency)
- Occupations Adding the Most Jobs, 1988-2000 (transparency)
- Occupations Losing the Most Jobs, 1988-2000 (transparency)



Teaching-Learning Interaction

The instructor should preassign the learners to read the handout titled Newsletter: Counselors and the Future of Schools. The instructor should offer insights on how projections are determined, alternative projections, and a critique of projections as a guidance tool. Note: The articles abstracted in the Newsletter should be read in their entirety, if possible.

The instructor should divide the class into groups of three learners and ask the learners to review the key points of the articles within the Newsletter.

The instructor should have each learner identify three new personal insights and three questions about labor force projections.

Next, the instructor should explain the transparency titled <u>Factors Influencing Occupational Demand Forecasts</u> to illustrate how the Department of Labor arrives at the forecasts documented in the <u>Occupational Outlook Handbook</u>.





Teaching-Learning Interaction, continued

The instructor should display the transparency titled <u>Industries in Transition</u>, showing one industry at a time. The instructor should have the pairs of learners project whether there will be job growth or decline in the listed industries. Volunteers should provide a rationale using information from the previous instructor led discussion.

	Industry	Growth	Decline
a.	travel agencies	✓	
b.	coal mining		1
c.	outpatient care	✓	
d.	individual social services	✓	
e.	alcoholic beverages		✓
f.	railroad transportation		✓
g.	water and sanitation	✓	

Next, the instructor should review the transparencies titled:

Fastest Growing and Declining Manufacturing Industries
Occupations Adding the Most Jobs, 1988-2000
Occupations Losing the Most Jobs, 1988-2000

The instructor should ask the learners what this means for students seeking advice about possible careers. It is hoped that the learners will identify the need to integrate this information with information from the O'Toole article in the Newsletter, which suggests that a student's interests and the forecast data should be equally considered.





Debriefing Strategies

The instructor should ask the groups of learners the following questions:

- What is the relationship between the projections and workplace changes?
- How can projections be used to assist in course planning?
- How have you felt about the value of projections in the past?
- How could projections be used to limit student choices?
- What are the consequences of not attending to projection data?
- What is the ideal use of projection data within school counseling and guidance programs?



Possible Resources

- Lowenstein, H., & Fisher, R. (1989). Outlook 2000. Monthly labor review, 112(11).
- McDaniels, C. (1989). <u>The changing workplace: Career counseling strategies for the 1990's and beyond</u>. San Francisco: Jossey-Bass.
- Ettinger, J. (1991). <u>Improved career decision making in a changing world: Module 2 and module 5</u>. Garrett Park, MD: Garrett Park Press.
- Bureau of Labor Statistics. (1992). Tomorrow's jobs.
 Occupational outlook handbook. Washington, D.C.: U.S.
 Government Printing Office, pp. 8-14.
- Videotape: Ten fastest growing careers: Jobs for the future program. (1990). Mt. Kisko, N.Y.: Guidance Associates.





Individualized Learning Plan

If a learner is studying this content in an individualized program, he or she should be given the entire lesson. The learner should read all materials and complete all assignments and activities. Written responses in the form of a paper can be used to verify completion of the lesson. Note: As part of this learning experience, the learner should be asked to identify a counselor in the schools with whom to discuss the questions and issues of the lesson.



INSTRUCTOR RESOURCES

LESSON: LABOR MARKET PROJECTIONS



COUNSELORS AND THE FUTURE OF SCHOOLS NEWSLETTER...for school counselors

COLNSELORS

with an eye on basic skills

PUBLISHED BY:

Joe Daly and Jeff Lovejoy Colorado State University Fort Collins, Colorado

DATE: Early 1990s

This is a one time newsletter provided as part of a lesson to improve school counselor education. It provides background reading and references to materials which promote the value of comprehensive counseling and guidance programs.

Three Scenarios for the Future of Occupations

Futurists are racing madly all over the country lately. Though no one really knows what the future holds, the prognosticators seem to be falling into three main categories.

1st Scenario (Optimists):

The headliners in this group include Alvin Toffler (Future Shock), John Naisbitt (Megatrends), and the World Future Society. Although there are differences among members of this group, they generally see the future as highly technical, highly speculative, and highly imaginative regarding the work scene. They see robots and computers taking over the workplace, new and original careers dominating, and entrepreneurships and small businesses flourishing. In general, they see these actions in the workplace as a revolution.

2nd Scenario (Cautionaries):

This group sees a future much like the present. Their view of workplace trends would be characterized more by evolution than revolution. The Bureau of Labor Statistics and the Census Bureau have done most of the forecasting in this mode. The trends they see in careers are basically the same as what we see now; this is backed up by figures which show slow, incremental changes as opposed to radical ones.

3rd Scenario (Pessimists):

The primary proponents of this dark outlook are the AFL-CIO in their study, The Future of Work, and Eli Ginzberg in Good Jobs, Bad Jobs, No Jobs. The basis for this view is a 30 year chart of unemployment figures. The unemployment rate low (7.1%) in the 1980s, for instance, is higher than the high during the 1950s

(6.8%). Some of the reasons for this dismal forecast are:

- negative U.S. balance of payments
- high value of U.S. dollar overseas
- flood of imports in basic industries
- cheap cost of foreign labor

The AFL-CIO report points out that these factors will lead to a two tiered workforce. Technical people at the top of organizations will still enjoy a relatively affluent lifestyle. Midlevel jobs will disappear and the bottom level will consist of high turnover, low skilled, low paying jobs. The proponents of this scenario predict a permanent underclass in America of 10-20 million people.

The Job for Educators:

- 1. Become more future oriented.
- Stress continuity and change in future occupations.
- 3. Emphasize flexibility in preparation
- 4. Become more aware of job options/possibilities.
- 5. Connect education to business, industry and government.
- 6. Promote models of small business and entrepreneurial success.

McDaniels, Carl. (1986). Three of many possible future occupational scenarios for the 1990s. The journal of cooperative education, 22(2), 1-9.

Colorado State University, 1992.

Lal

Labor Market Projections, H-1



Counselors and the Future of Schools

COLAGELOGO

Newsletter

Forecasting Your Working Future

You're soon to leave the comfortable confines of the campus and search for your first career job. Do you listen to the labor economists or to the futurists as to where the jobs are? The correct answer is: neither.

The fact is, both of these groups have relatively poor track records when forecasting future job markets. The economists tend to assume that the future will be much like the present—that trends will remain the same. The futurists base their forecasts on narrow views of future trends: more drama than reality—and much more saleable. In more down to earth terms, labor economists were making forecasts in the 1970s based on high energy availability, softening inflation, high employment, and unchanged defense spending. Using hindsight, we can see that these forecasts were not exactly on target. And the futurists have based their prognostications mainly on the unchecked and exponential growth of technology. While this growth has been true for some segments of the marketplace, it has been far from the truth for others.

A closer reality of the actual changing workplace is that no single version holds true for everyone. The future is composed of too many variables to accurately predict. In other words, all the scenarios may come true, but only for limited demographic segments.

Another important component in the equation when you are looking for a job is that statistics cannot factor in ability and ambition. If you possess both of these in the area in which you are searching, your chances for success are good. What you must realize is that career counselors and various prognosticators cannot tell you what will determine your career choices, only what will influence them.

There are three main elements that will determine the workplace of the future: continuity, change, and choice. A part of human nature—the part that opts for tradition—is uncomfortable with change. This element accounts for those segments of the workplace that will be the same five or even ten years from now. It may appear in certain stagnant companies, or it may occur only in layers or segments of certain companies or businesses. The variation in this component is caused by the next component—change.

Colorado State University, 1992.

History is full of unexpected events or trends that changed not only political history, but the workplace and the marketplace as well. The 1973 oil embargo, the war in the Persian Gulf, and the success of the Japanese economic machine are only a few examples. The international political environment is such right now that any one of many combinations could conspire to change the entire appearance of the labor market landscape. The upheavals in Eastern Europe, the changed military stance of what was once the Soviet Union, and the impending economic union of most of Europe are only a few of these.

The third element is choice. What alternatives will the world's players choose when confronted by major changes? The labor scene will change subtly or drastically, depending on these choices. These choices, in turn, will be made in the moral, emotional, and economic climate of the time, the values that are prevalent when the choices are made. To the extent that these values change—and they do—the responses to problems will also change.

An example of this last component is the forecast—and reality—of greater reliance on technology. Many forecasters see an increasing amount of America's workload being done at home by isolated workers. This is, in fact, happening in many cases. But the fact that most people in this country carry out the bulk of their social lives at work or centered around work will likely slow or hinder the runaway nature of this trend.

Which brings us back to your choice. This nation—and much of the industrial world—is consumed by statistics. Everything is measured, analyzed, and forecast in terms of figures produced from population samples. What you, as a potential career person, must realize is that these are only guides within the labor market landscape. They say nothing about your individual potential as a career person. You are the only one that can create that particular set of statistics.

O'Toole, J. (1983). How to forecast your working future. World future society. (pp. 19-25).



Labor Market Projections, H-1

Factors Influencing Occupational Demand Forecasts

A. ASSUMPTIONS

Because the future course of the economy is uncertain, the Bureau of Labor Statistics has prepared three scenarios of future economic growth, with varying assumptions about growth of the labor force, output, productivity, inflation, and unemployment. The Occupational Outlook Handbook is based on a moderate growth scenario.

B. ANALYSIS OF FOUR COMPONENTS LEADING TO FORECASTS

- 1. Labor Force Growth Spanning 1988-2000
 - a. Changes in population based on births, deaths, and net migration
 - b. Labor force projection rate changes
- 2. The Economic Outlook
 - a. Consumer expenditures (personal purchases)
 - b. Investment (business investment in equipment)
 - c. Government (spending on social programs)
 - d. Exports (agricultural products)
 - e. Imports (oil from OPEC)
- 3. Industry Output and Employment Projections
 - a. Demand for goods and services is converted to jobs
 - b. Studies of productivity and technology trends are used to estimate future output per worker hour
- 4. Occupational Staffing Patterns
 - a. Industry projections are made
 - b. Occupations in demand are identified



INDUSTRIES IN TRANSITION

Are the following industries in growth or decline?

	INDUSTRY	GROWTH	DECLINE
A.	Travel Agencies		
В.	Coal Mining		
C.	Outpatient Care		
D.	Individual Social Services		
E.	Alcoholic Beverages		
F.	Railroad Transportation		
G.	Water and Sanitation		



FASTEST GROWING AND DECLINING MANUFACTURING INDUSTRIES¹

Industry	Percent change 1988-2000		
Fastest growing:			
Miscellaneous publishing	43		
Engineering & scientific instruments	33		
Medical instruments & supplies	26		
Partitions & fixtures	25		
Plastics products	24		
Most rapidly declining:			
Tobacco manufacturers	-29		
Telephone & telegraph apparatus	-25		
Miscellaneous textile goods	-25		
Alcoholic beverages	-24		
Office & accounting machines	-23		



¹Source: Bureau of Labor Statistics.

OCCUPATIONS ADDING THE MOST JOBS 1988 - 2000²

Occupation	Employment growth (in thousands)
Retail salespersons	730
Registered nurses	613
Janitors and cleaners	556
Waiters and waitresses	551
General managers	479
General office clerks	455
Secretaries (except legal and medical)	385
Nursing aides, orderlies, and attendants	376
Truck drivers (light and heavy)	369

²Source: Bureau of Labor Statistics.



OCCUPATIONS LOSING THE MOST JOBS 1988 - 2000³

Occupation	Employment loss (in thousands)
Farmers	266
Farm workers	153
Electrical and electronic assemblers	103
Sewing machine operators/garment workers	89
Hand packers and packagers	75
Electrical and electronic equipment assemblers	71
Typists and word processors	61
Inspectors, testers, and graders	42
Stenographers	36

³Source: Bureau of Labor Statistics.

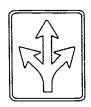


BASIC SKILLS AND THE INTERNATIONAL MARKETPLACE



Perennial Problem

How can comprehensive school counseling and guidance programs contribute to the delivery of the basic skills?



Practical Problem

What should be done to help school counselors identify the basic skills necessary for success in a changing workplace?



Justification for Lesson

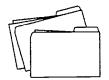
America's economic competitiveness depends on American workers' possession of the basic skills. This lesson encourages school counselors to increase their knowledge of the relationship between workers' basic skills and America's competitiveness in the international marketplace.



Learner Outcome

The learner will understand the importance of the basic skills in helping students compete in the international marketplace.





Instructor Resources

- America's Choice: High Skills or Low Wages! (handout)
- Outcomes of Losing the Competitive Edge (handout)
- Outcomes of Losing the Competitive Edge (transparency)
- Productivity and Opportunity (handout)
- Productivity and Opportunity (transparency)



Teaching-Learning Interaction

The instructor should preassign the learners to read the handout titled America's Choice: High Skills or Low Wages!.

The instructor should ask the learners to identify what they perceive as good and bad consequences of both competition and productivity, listing these items on the board.

The instructor should then discuss the transparency titled <u>Outcomes of Losing the Competitive Edge</u>.

Note: Beginning with increased global competition, show how each of the factors influence the next factor, going clockwise from 1 to 6. Indicate that the cycle needs to be broken for America to become more competitive.

The instructor should divide the class into pairs, asking the learners to teach each other their understanding of the discussion by completing the handout titled <u>Outcomes of Losing the Competitive Edge</u>.

The instructor should show the transparency again, integrating new insights into the transparency from class input.

Next, the instructor should discuss the transparency titled <u>Productivity</u> and <u>Opportunity</u>.





Teaching-Learning Interaction, continued

Note: Beginning with the items in top left (work smarter, etc.), explain how this group of factors affects items in the middle right (reduced material costs, etc.), and move clockwise to suggest the relationship between productivity and opportunity.

The instructor should then have the pairs of learners teach each other their understanding of the lecture by completing the handout titled Productivity and Opportunity.

The instructor should show the transparency again, integrating new insights into the transparency from class input.

The instructor should ask the pairs the following questions:

- What is the relationship between competition and productivity?
- How does a person/business/organization become more productive?
- What skills beyond the three R's are critical to helping a person/organization/business become more competitive, productive, and valuable to their organization?
- What should be included in your own planning so that you can be more productive?
- What is the relationship among student course planning, the basic skills, competition, and productivity?
- What can schools do to assure that all students recognize the relationship among course planning, the basic skills, competition, and productivity?
- How can school counselors aid all students in planning for the basic skills needed to remain competitive and productive?
- What probable consequences exist for students not acquiring the basic skills, given the growing competitiveness of the international marketplace?





Debriefing Strategies

The instructor should ask the following questions:

- What new insights do you have about the relationship of the basic skills to competition and productivity in the international marketplace?
- What does increasing your personal productivity mean in terms of your role as a school counselor within comprehensive counseling and guidance programs?



Possible Resources

- Coates, J., Jarratt, J., & Mahaffie, J. (1991, May-June). Futurework. Futurist, 25(3), 9-19.
- Smith, D. (1988). Changing workplace Changing education. Beyond the debate: Perpectives on the preparation of vocational education teachers. Macomb, IL: Curriculum Publications Clearinghouse, 5-17.
- Warnat, W. (1991). Preparing a workclass workforce: To compete internationally we must educate youth for high skill jobs. <u>Vocational Education Journal</u>, 66(5), 22-25.
- Carnevale, A. (1991). America and the new economy. Alexandria, VA: American Society for Training and Development, pp. 15-38.
- Video: The tough new labor market and what it takes to succeed. (1991). Indianapolis, IN: JIST Works.





Individualized Learning Plan

If a learner is studying this content in an individualized program, he or she should be given the entire lesson. The learner should read all materials and complete all assignments and activities. Written responses in the form of a paper can be used to verify completion of the lesson. Note: As part of this learning experience, the student should be asked to identify a counselor in the schools with whom to discuss the questions and issues of the lesson.



INSTRUCTOR RESOURCES

LESSON: BASIC SKILLS AND THE INTERNATIONAL MARKETPLACE



America's Choice: High Skills or Low Wages!¹ Executive Summary²

The Problem

Since 1969, real average weekly earnings in the United States have fallen by more than 12 percent. This burden has been shared unequally. The incomes of our top 30 percent of earners increased, while those of the other 70 percent spiraled downward.

In many families, it now takes two people working to make ends meet, where one was sufficient in the past.

The United States is in the midst of the second longest economic expansion in its history. But that expansion is built largely on the fact that 50 percent of our population is employed compared with 40 percent in 1973. Forty million new jobs were created as the baby boom generation reached working age and more women entered the workforce. More of us have been working, so we produced more.

However, workforce growth will slow dramatically in the 1990s. We can no longer grow substantially just by adding new workers.

The key to maintaining, to say nothing of improving, our standard of living is productivity growth—more products and services from every member of the workforce.

But, during the past two decades, our productivity growth has slowed to a crawl. It now takes nearly three years to achieve the same productivity improvement we used to achieve in one year.

If productivity continues to falter, we can expect one of two futures. Either the top 30 percent of our population will grow wealthier while the bottom 70 percent becomes progressively poorer, or we all slide into relative poverty together.

The Task

To ensure a more prosperous future, we must improve productivity and our competitive position. We cannot simply do this by using better machinery, because low wage countries can now use the same machines and can sell their products more cheaply than we can.

The key to productivity improvement for a high wage nation lies in the third industrial revolution now taking place in the world. The steam engine and electric motor drove the first two industrial revolutions, causing profound changes in work organization. This boosted productivity, quality, and living standards dramatically. The creation of the modern factory in the 1800s and mass production in the 1900s followed these technology breakthroughs.

The advent of the computer, high speed communications, and universal education are heralding a third industrial revolution, a revolution the key feature of which is high performance work organization.

The Organization Of Work In America

The organization of America's workplaces today is largely modeled after the system of mass manufacturing pioneered during the early 1900s. The premise is simple: break complex jobs into a myriad of simple rote tasks, which the worker then repeats with machine like efficiency.

The system is managed by a small group of educated planners and supervisors who do the thinking for the organization. They plan strategy, implement changes, motivate the workers, and solve problems. Extensive administrative procedures allow managers to keep control of a large number of workers. This form of work organization is often referred to as the "Taylor" model.

Most employees under this model need not

Colorado State University, 1992.

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¹National Center on Education and the Economy. (1990, June). <u>America's choice: high skills or low wages!</u>

²Copyright 1990. National Center on Education and the Economy. All rights reserved.

be educated. It is far more important that they be reliable, steady, and willing to follow directions.

But in the world's best companies, new high performance work organizations are replacing this "Taylor" method. These companies are using a new approach to unleash major advances in productivity, quality, variety, and speed of new product introductions.

Mass production methods will continue to produce high volume, inexpensive goods and services for a long time to come. But what the world is prepared to pay high prices and high wages for now is quality, variety, and responsiveness to changing consumer tastes, the very qualities that the new methods of organizing work make possible.

"Tayloristic" methods are not well suited to these goals. Firms struggling to apply the traditional methods of work organization to more complex technologies, more frequent product introductions, increased quality requirements, and proliferating product variety often create cumbersome and inefficient bureaucracies.

The new high performance forms of work organization operate very differently. Rather than increasing bureaucracy, they reduce it by giving front line workers more responsibility. Workers are asked to use judgment and make decisions. Management layers disappear as front line workers assume responsibility for many of the tasks—from quality control to production scheduling—that others used to do.

Work organizations like these require large investments in training. Workers' pay levels often rise to reflect their greater qualifications and responsibilities. But the productivity and quality gains more than offset the costs to the company of higher wages and skills development.

Despite these advantages, 95 percent of American companies still cling to old forms of work organization.

Is There A Skills Shortage In The United States? Because most American employers organize work in a way that does not require high skills, they report no shortage of people who have such skills and foresee no such shortage. With some exceptions, the education and skill levels of American workers roughly match the demands of

Colorado State University, 1992.

their jobs.

Our research did reveal a wide range of concerns covered under the blanket term of "skills". While businesses everywhere complained about the quality of their applicants, few talked about the kinds of skills acquired in school. The primary concern of more than 80 percent of employers was finding workers with a good work ethic and appropriate social behavior: "reliable", "a good attitude", "a pleasant appearance", and "a good personality".

Most employers we interviewed do not expect their skill requirements to change. Despite the widespread presumption that advancing technology and the evolving service economy will create jobs demanding higher skills, only five percent of employers were concerned about a skills shortage. These were mainly large manufacturers, financial service organizations, and communications companies.

The reason we have no skills shortage today is that we are using a turn of the century work organization. If we want to compete more effectively in the global economy, we will have to move to a high productivity work organization.

How We Prepare Our Front Line Workers For Work

More than 70 percent of the jobs in America will not require a college education by the year 2000. These jobs are the backbone of our economy, and the productivity of workers in these jobs will make or break our economic future.

No nation has produced a highly qualified technical workforce without first providing its workers with a strong general education. But our children rank at the bottom on most international tests—behind children in Europe and East Asia, even behind children in some newly industrialized countries.

More than any other country in the world, the United States believes that natural ability, rather than effort, explains achievement. The tragedy is that we communicate to millions of students every year, especially to low income and minority students, that we do not believe that they have what it takes to learn. They then live up to our expectations, despite the evidence that they can meet very high performance standards under the



right conditions.

Unlike virtually all of our leading competitors, we have no national system capable of setting high academic standards for the noncollege bound or of assessing their achievement against those standards.

America may have the worst school to work transition system of any advanced industrial country. Students who know few adults to help them get their first job are left to sink or swim.

Only eight percent of our front line workers receive any formal training once on the job, and this is usually limited to orientation for new hires or short courses on team building or safety.

The American postsecondary education and training system was never designed to meet the needs of our front line workers. The system is a combination of education programs for full time college students and short term training for the severely disadvantaged, and can be difficult to access. Because employers have not set training standards, few students can be sure that there is a market for the courses they pursue. Education is rarely connected to training standards. Few students can be sure that there is a market for the courses they pursue. Education is rarely connected to training, and both are rarely connected to an effective job service function.

Another Way

While the foreign nations we studied differ in economy and culture, they share an approach to the education and training of their workers and to high productivity work organization:

- They insist that virtually all of their students reach a high educational standard.
 We do not.
- They provide "professionalized" education to noncollege bound students to prepare them for their trades and to ease their school to work transition. We do not.
- They operate comprehensive labor market systems which combine training, labor market information, job search, and income maintenance for the unemployed.
 We do not.
- They support company based training

through general revenue or payroll tax based financing schemes. We do not.

 They have national consensus on the importance of moving to high productivity forms of work organization and building high wage economies. We do not.

Our approaches have served us well in the past. They will not serve us well in the future.

The Choice

Americans are unwittingly making a choice. It is a choice that most of us would probably not make were we aware of its consequences. Yet every day, that choice is becoming more difficult to reverse. It is a choice which undermines the American dream of economic opportunity for all. It is a choice that will lead to an America where 30 percent of our people may do well—at least for awhile—but the other 70 percent will see their dreams slip away.

The choice that America faces is a choice between high skills and low wages. Gradually, silently, we are choosing low wages.

We still have time to make the other choice—one that will lead us to a more prosperous future. To make this choice, we must fundamentally change our approach to work and education.

1. Problem: Two factors stand in the way of producing a highly educated workforce: (1) we lack a clear standard of achievement and (2) few students are motivated to work hard in school. One reason that students going right to work after school have little motivation to study hard is that they see little or no relationship between how well they do in school and what kind of job they can get after school. Other advanced industrial nations have stringent performance standards that virtually all students must meet at about age 16 and that directly affect their employment prospects.

Recommendation: A new educational performance standard should be set for all students to be met by age 16. This standard should be established nationally and benchmarked to the highest in the world.

We propose that all American students

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meet a national standard of educational excellence by age 16 or soon thereafter. Students passing a series of performance based assessments that incorporate the standard would be awarded a Certificate of Initial Mastery.

Possession of the Certificate of Initial Mastery would qualify the student to choose among going to work, entering a college preparatory program, or studying for a Technical and Professional Certificate, as described below.

Creation of the Certificate of Initial Mastery standard would require a new approach to student performance assessment. We recommend the creation of new performance based examinations for which students can explicitly prepare. The assessment system would provide multiple opportunities for success rather than a single high stakes moment of possible failure. Most important, the examination, though set at a very high standard, is not intended as a sorting mechanism on the pattern of virtually all the major tests now in use. Our goal is to set a tough standard that almost everyone will reach, although not all at the same time.

Once created, this system would establish objective standards for students and educators, motivate students, and give employers an objective means to evaluate the accomplishments of students.

2. Problem: More than 20 percent of our students drop out of high school—almost 50 percent in many of our inner cities. These dropouts go on to make up more than one third of our front line workforce. Turning our backs on those dropouts, as we do now, is tantamount to turning our backs on our future workforce.

Recommendation: The states should take responsibility for assuring that virtually all students achieve the Certificate of Initial Mastery. Through the new local Employment and Training Boards, states with federal assistance should create and fund alternative learning environment for those who cannot attain the Certificate of Initial Mastery in regular schools.

All students should be guaranteed the educational attention necessary to attain the Certificate of Initial Mastery by age 16, or as soon as possible thereafter. Youth Centers should be

established to enroll school dropouts and help them reach that standard. Federal, state, and local funds should be raised or reallocated to finance these dropout recovery programs. Once the Youth Centers are created, children should not be permitted to work before the age of 18 unless they have attained the Certificate of Initial Mastery or are enrolled in a program to attain it.

3. Problem: Other industrial nations have multiyear career oriented educational programs that prepare students to operate at a professional level in the workplace. Graduates of these programs have the skills to hit the ground running when they get their first full time job at age 19 or 20. America prepares only a tiny fraction of its noncollege bound students for work. As a result, most flounder in the labor market, moving from low paying job to low paying job until their mid twenties, never being seriously trained.

Recommendation: A comprehensive system of Technical and Professional Certificates and associate's degrees should be created for the majority of our students and adult workers who do not pursue a baccalaureate degree.

Technical and Professional Certificates would be offered across the entire range of service and manufacturing occupations. A student could earn the entry level occupation specific certificate after completing a two to four year program of combined work and study, depending upon the field. A sequence of advanced certificates, attesting to mastery of more complex skills, would be available and could be obtained throughout one's career.

The Secretary of Labor should convene national committees of business, labor, education, and public representatives to define certification standards for two to four year programs of professional preparation in a broad range of occupations. These programs should combine general education with specific occupational skills and should include a significant work component.

Students could pursue these programs at a wide variety of institutions accredited to offer them, including high schools, community colleges, and proprietary schools. The system should be designed to make it possible for students to move

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easily between the Certificate programs and college.

A means should be established to ensure that all students can receive financing to pursue these programs.

4. Problem: The vast majority of American employers are not moving to high performance work organizations, nor are they investing to train their nonmanagerial employees for these new work organizations. The movement to high performance work organizations is more widespread in other nations, and training for front line workers, funded in part by national assessments on employers or general public revenues, is commonplace.

Recommendation: All employers should be given incentives and assistance to invest in the further education and training of their workers and to pursue high productivity forms of work organization.

We propose a system whereby all employers will invest at least one percent of their payroll for the education and training of their workers. Those who do not wish to participate would contribute the one percent to a general training fund, to be used by states to upgrade workers skills. We further recommend that public technical assistance be provided to companies, particularly small businesses, to assist them in moving to higher performance work organizations.

5. Problem: The United States is not well organized to provide the highly skilled workers needed to support the emerging high performance work organizations. Public policy on worker training has been largely passive, except for the needs of a small portion of the severely disadvantaged population. The training system is fragmented with respect to policies, administration, and service delivery.

Recommendation: A system of Employment and Training Boards should be established by federal and state governments, together with local leadership, to organize and oversee the new school to work transition programs and training systems we propose.

We envision a new, more comprehensive

system where skills development and upgrading for the majority of our workers becomes a central aim of public policy.

The key to accomplishing these goals is finding a way to enable the leaders of our communities to take responsibility for building a comprehensive system that meets their needs. The local Employment and Training Boards for each major labor market would:

- Take responsibility for the school to work and Youth Center to work transition for young people;
- Manage and oversee the Youth Centers;
- Manage and oversee a "second chance" system for adults seeking the Certificate of Initial Mastery;
- Manage and oversee the system for awarding Technical and Professional Certificates at the local level;
- Manage a labor market information system:
- Manage and oversee the job service; and
- Coordinate existing programs.

The states would need to create a parallel structure to support the local Boards, coordinate statewide functions, and establish state standards for their operation.

Conclusion

America is headed toward an economic cliff. We will no longer be able to put a higher proportion of our people to work to generate economic growth. If basic changes are not made, real wages will continue to fall, especially for the majority who do not graduate from four year colleges. The gap between economic "haves" and "have nots" will widen still further and social tensions will deepen.

Our recommendations provide an alternative for America. We do not pretend that this vision will be easily accepted or quickly implemented. But we also cannot pretend that the status quo is an option. It is no longer possible to be a high wage, low skill nation. We have choices to make:

Do we continue to define educational success as "time in the seat", or choose a

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new system that focuses on the demonstrated achievement of high standards?

- Do we continue to provide little incentive for noncollege bound students to study hard and take tough subjects, or choose a system that will reward real effort with better pay and better jobs?
- Do we continue to turn our backs on America's school dropouts, or choose to take responsibility for educating them?
- Do we continue to provide unskilled workers for unskilled jobs, or train skilled workers and give companies incentives to deploy them in high performance work organizations?
- Do we continue in most companies to limit training to a select handful of managers and professionals, or choose to provide training to front line workers as well?
- Do we cling to a public employment and training system fragmented by institutional barriers, muddled by overlapping bureaucracies and operating at the margins of the labor market, or do we choose a unified system that addresses itself to a majority of workers?
- Do we continue to remain indifferent to the low wage path being chosen by many companies, or do we provide incentives for high productivity choices?

Taken together, the Commission's recommendations provide the framework for developing a high quality American education and training system, closely linked to high performance work organizations. The system we propose provides a uniquely American solution. Boldly executed, it has the potential not simply to put us on an equal footing with our competitors, but to allow us to leap ahead, to build the world's premier workforce. In so doing, we will create a formidable competitive advantage.

The status quo is not an option. The choice we have is to become a nation of high skills or one of low wages.

The choice is ours. It should be clear. It must be made.

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The International Marketplace, H-2

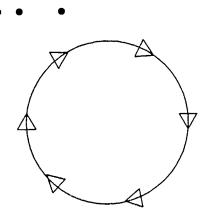
Outcomes of Losing the Competitive Edge

2. Restricted Markets

1. Increased Global Competition

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Lower labor costs



3. Increased Unemployment

Emotional costs

• Lay offs

- 6. Weakened Infrastructure
- Facilities and systems not rebuilt

- 4. Decreased Profits
- Wages don't increase

5. Increased Cost of MoneyGovernment deficits increase•

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Outcomes of Losing the Competitive Edge

1. Increased Global Competition

- Lower labor costs
- Increased research and development
 - Increased investment in technology
 - Increased access to information and markets
- Improved education levels
- Cheaper Capital

Weakened Infrastructure

- Facilities and systems not rebuilt
- Facilities and systems not expanded
 - Facilities and systems not created
- **Programs** cut

5. Increased Cost of Money

- Government deficits increase
- Personal debt increases
- Less incentive to risk (research/expand/invest)
- Tougher for small companies to keep inventory or permanent workers.

2. Restricted Markets

- Lay offs
- Decrease in expanding job creation
- Worker displacement/ dislocation

3. Increased Unemployment **Emotional costs**

- Social costs
- Income taxes not collected
- Increased employment benefits paid
 - Information access skills valued more

4. Decreased Profits

- Wages don't increase
- Dividends aren't granted
- Less incentive to invest in local companies
 - Harder to save

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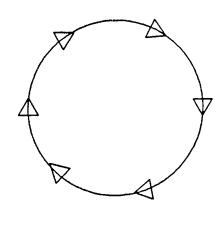
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The International Marketplace, H-3

ERIC Full Text Provided by ERIC

How Do You Increase Productivity?

Work smarter



More competitive labor costs

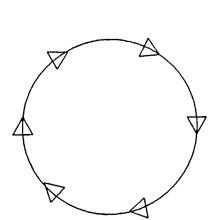
Increased profits

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Productivity and Opportunity

How Do You Increase Productivity?

- Work smarter
- Work harder
- Use new tools
- Reorganize/manage work processes differently



- More competitive labor costs
 - Reduced materials costsMore competitive prices
- Better quality control
 - Fewer defects
- Better service provided

- Increased profits
- Expanded market share
- Better wages and benefits for more workers
 - Greater dividends/investment return
- Increased investments
- Job growth/creation/opportunities
- Increased research and development efforts
- Increased income taxes collected for government services/infrastructure quality
- Increased regular (permanent) workforce