

DOCUMENT RESUME

ED 337 649

CE 059 308

AUTHOR Nelson, Lucie, Ed.  
 TITLE Building a Workforce for the South. Proceedings of the Regional Workplace Literacy Conference (Atlanta, Georgia, June 21-23, 1990).  
 INSTITUTION Eastern Kentucky Univ., Lexington.; Georgia State Univ., Atlanta.; National Univ. Continuing Education Association, Washington, DC.; Southern Governors' Association, Atlanta, GA.  
 PUB DATE Jun 90  
 NOTE 72p.  
 PUB TYPE Collected Works - Conference Proceedings (021)

EDRS PRICE MF01/PC03 Plus Postage.  
 DESCRIPTORS Adult Basic Education; \*Adult Literacy; Basic Skills; Corporate Support; Curriculum Development; Educational Opportunities; Education Work Relationship; Government Role; Industrial Training; \*Job Training; \*Labor Force; Policy Formation; Skill Development; Unions  
 IDENTIFIERS United States (South); \*Workplace Literacy

ABSTRACT

The focus of this conference workplace literacy in the South is the need for cooperation and collaboration among policy-makers, business and industry, labor, and education providers. The document contains nine presentations: "What Frito-Lay Has Done in Workplace Literacy" (Mossberg); "The Need for a Literate Workforce in the South" (Price); "Policy Recommendations for Workplace Literacy" (Fingeret); "The U.S. Department of Education's Workplace Program--Governmental Perspectives" (Brand); "Effective Employee Basic Skills Program Roles for Labor and Business" (Jurmo, Sarmiento); "Recent Research of What Works and What Doesn't Work in the Workplace" (Mikulecky); "Developing Curriculum in the Workplace" (Valentine); "Training in Workplace Literacy" (Philippi); and "Upgrading Academic Skills in the Workplace--A Success Story at Duke Power Company" (Fowler). The conference agenda, a roster of participants, and regional conference tips are included. (NLA)

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# The Regional Workplace Literacy Conference Proceedings

June 21 - 23, 1990

ED337649



*Building a Workforce  
for the South*

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# **Conference Proceedings**

**Proceedings Editor: Lucie Nelson**

**Regional Conference Tips: Lucie Nelson**

**Proceedings Coordinator: Allison Willis**

**January 1991**

**These proceedings have been partially funded  
through conference registration fees.**

# Acknowledgments

These proceedings from the Regional Workplace Literacy Conference have been summarized from presentor's notes, articles, and audio tapes of the addresses. Because they are compilations, the length of the written presentations do not represent the length of the spoken addresses, nor their significance to the issue. We take full responsibility for any errors in the transcription. While all major conference addresses are included in these proceedings, we were able to record only two of the four workshops.

I appreciate the encouragement and enthusiasm of those who assisted with the compilation of the proceedings. Allison Willis, Eastern Kentucky University, has served as chief coordinator for this project and deserves untold credit.

Lucie Nelson

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## About the Conference

The idea for a conference dedicated solely to workplace literacy evolved during the Atlanta AAACE-COABE Conference in April, 1989. Program directors from the first round of funding in the U.S. Department of Education's Workplace Literacy Partnership grants met to discuss progress and expressed a sense of regional needs for those living in the Southeast. The proposed conference was designated a regional gathering, yet open to anyone who wished to attend.

Having initiated projects and worked through obstacles and uncertainties, the directors felt a strong need for support and additional information sharing. With the encouragement of the U.S. Department of Education and especially Ron Pugsley, a planning committee was formed and Atlanta was chosen as the site.

Eastern Kentucky University, with its strong conference planning division, and Georgia State University, located in Atlanta, agreed to assume the leadership roles for the conference. The conference provided partial funding for an assistantship at Georgia State to acquire added assistance by a graduate student. Funding for the conference was provided solely through registration and exhibitor fees.

The focus of the conference, as stated in the brochure, was the need for cooperation and collaboration among policy makers, business and industry, labor, and educational providers. It thus afforded an opportunity for discussion and the sharing of ideas and opportunities by all of the players involved in workplace literacy. Participation by business and government was much less than that of the educational providers. This seems often to be the case and must be addressed in future conferences. The development of mailing lists primarily by those in adult education settings limited the number of companies contacted. Thus, while conference attendance was a fair illustration of those who were feeling the greatest need for information and support, mailing list development and conference participation by industry must be improved in future conferences of this nature.

A format which devoted a large portion of its time to general sessions was determined to be the best tool for providing the development of a sense of community and common purpose. Key experts would make presentations regarding their own experiences in this new field.

A unique feature of the conference was the fact that the coordination of the conference centered on a coordinator in each of the southeastern states. As a rule this was a project director but in some cases another key person was selected to serve. These coordinators made the conference happen because they knew who the key players were in their states and how to encourage state representation in Atlanta. Each state was asked to participate in some specific way.

The conference further offered the project directors and other outstanding projects an opportunity to display some of their work through poster sessions and round-table displays and discussion. An open exchange of experiences and ideas was considered the most important element of the conference.

**Building a Workforce for the South** was a success. The number of attendees far exceeded expectations. The follow-up requests for information and another conference indicated a continuing desire to learn effective ways in which to meet the ever increasing demand for the teaching and learning of basic workforce skills. The conference slated for 1991 will include a more detailed workshop/short course agenda to provide effective strategies and techniques supported by field trips to successful programs. The following is a listing of the people who participated in various capacities:

### ***State Coordinators***

#### **Alabama**

Jo Smith

#### **Florida**

Ron Froman

Tony Lagos

#### **Georgia**

Sue Stephens Fleuren

#### **Kentucky**

Ruth Ann Phillips

#### **Louisiana**

Gary Patureau

#### **Mississippi**

Bob Richardson

#### **North Carolina**

Susie Lambert

#### **South Carolina**

Jimmy Smith

David Stout

#### **Tennessee**

Wes Hasden

K. Owen McCullough

#### **Virginia**

Elaine Squeri

#### **West Virginia**

Carol Reuther

## ***Co-Sponsors***

National University Continuing Education Association  
Eastern Kentucky University  
Georgia State University  
Southern Governor's Association

## ***Planning Committee***

Nancy Chase  
Judy Cheatham  
Scott Defife  
Sue Stephens Fle. n  
Annette Morgan

Lucie Nelson  
Joanne Nurss  
Bob Richardson  
Pam Ritchie  
Elaine Squeri

## ***Conference Program***

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### **Thursday, June 23, 1990**

- 2:00 P.M.      Registration and Exhibits
- 7:30 P.M.      Welcome  
Jean Young, First Lady of Atlanta
- 8:00 P.M.      General Session
- Presiding: Jean Devard Kemp  
                 Office of Adult Literacy, Georgia
- "What Frito-Lay Has Done in Workplace Literacy"*  
                 Kelly Mossberg, Frito-Lay
- 9:00 P.M.      State Display Tables  
                 Special Conference Kick-Off Drawing

### **Friday, June 22, 1990**

- 8:00 A.M.      Continental Breakfast
- 8:30 A.M.      Announcement
- Presiding: James C. Young  
                 Georgia State University, Atlanta
- Eldridge McMillian, Southern Growth Policy Board

- 9:00 A.M.      **Opening Address**
- Presiding: Susie Lambert**  
                  **Rowan-Cabarrus Community College, North Carolina**
- "The Need for a Literate Workforce in the South"***  
                  **Honorable David Price, U.S. Congressman from**  
                  **North Carolina**
- 10:00 A.M.      **Concurrent Sessions**
- A.      Panel Presentation**
- "Federally funded Projects: What We've***  
  ***Learned"***  
  **Ron Pugsley**  
  **Nancy Brooks**  
  **Sarah Newcomb**
- B.      Poster Sessions**
- "Successful Workplace Projects"***
- 11:30 A.M.      **General Session**
- Presiding: Ruth Ann Phillips**  
                  **Department of Education, Kentucky**
- "Policy Recommendations for Workplace Literacy"***  
                  **Dr. Hanna Arlene Fingeret, North Carolina Center**  
                  **for Literacy Development**
- 12:30 P.M.      **Lunch on Your Own**
- 1:30 P.M.      **Exhibits**
- 2:00 P.M.      **General Session**
- Presiding: Scott Defife**  
                  **Southern Governor's Association**
- "The U.S. Department of Education's Workplace Program:***  
                  ***Governmental Perspectives"***  
                  **Betsy Brand, U.S. Department of Education**
- 3:00 P.M.      **Panel Presentation**
- Presiding: Judy Cheatham**  
                  **Greensboro College, North Carolina**
- "Effective Employee Basic Skills Programs Roles for***  
                  ***Labor and Business"***  
                  **Paul Jurmo, Business Council for Effective Literacy**  
                  **Anthony Sarmiento, Department of Education for AFL-CIO**

4:30 P.M. Exhibits

5:30 P.M. Light Buffet and Reception  
Informal Discussion and Information Sharing

**Saturday, June 23, 1990**

8:00 A.M. Continental Breakfast

9:00 A.M. General Session

Presiding: Betty Wong  
Mississippi State Department of Education, Mississippi

*"Recent Research of What Works and What Doesn't Work  
in the Workplace"*

Dr. Larry Mickulecky, Indiana University

10:00 A.M. Concurrent Sessions

A. *"Developing Curriculum in the Workplace"*  
Dr. Tom Valentine

B. *"Getting Started on a Workplace Literacy Program"*  
Mattie Eley

C. *"Managing Workplace Literacy Programs"*  
Dr. Mikel Richardson

D. *"Training in Workplace Literacy"*  
Jorie Philippi

11:15 A.M. Final Exhibitor Drawing

11:45 A.M. Closing Luncheon

Presiding: Lucie Nelson  
Eastern Kentucky University, Kentucky  
David Stout  
Department of Adult Education, South Carolina

*"Upgrading Academic Skills in the Workplace—A Success  
Story at Duke Power Company"*

Fay Fowler, Duke Power Company

Final Door Prize Drawings

**Thursday, June 21, 1990**

**8:00 P.M. General Session**

**Kelly Mossberg - "What Frito-Lay has Done in Workplace Literacy"**

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### ***Introduction***

Kelly Mossberg currently, as Area Employee Relations Manager for Frito-Lay South, is responsible for Southeastern Operations Human Resources for approximately 5,000 employees in sales and manufacturing. He has five years with Frito-Lay in both field and headquarter assignments. He has prior experience with Union Camp Corporation as Corporate Industrial Relations Manager at their New York City headquarters. A graduate of Auburn University, he is originally from Atlanta, Georgia.

Frito-Lay Orlando, in partnership with the Orange County School System, offered its first employee basic skills training course in the Summer of 1988. Funded in part by a Workplace Literacy Partnership grant from the U.S. Department of Education, this program has significantly enhanced the skills of around 25% of the plant's employees. Kelly discussed the Frito-Lay Orlando employee basic skills program and why he believes it is a success.

### ***A Workplace Literacy Partnership***

If we could change the name of the conference from "*Building a Workforce for the South*" to "*Empowering a Workforce for the South*", we would get some insight into Frito-Lay's philosophy toward workplace literacy. We strongly believe that this type of program does exactly that—empowers our employees to take more ownership in the business. Our program at Frito-Lay Orlando can best be described as a joint partnership between industry and education. Webster defines a partnership as an association between two or more partners in a business enterprise to achieve a common goal. In the truest sense of the word, Frito-Lay Orlando and the Orange County Public School system

have joined together to form a partnership which has brought about the activity I am talking about tonight.

### ***Helping Each Other Grow***

The mission of the Orlando manufacturing facility "to satisfy our customers with the highest quality snack foods at the most competitive cost by achieving zero waste and helping each other grow," is not unique to Orlando. All 38 Frito-Lay manufacturing plants share the same mission. However, there is something unique in the way they are attempting to fill one aspect of that mission—helping each other grow. Driven by a vision of what the plant will be in the future, Orlando is pioneering an exciting new program to enhance the employee's basic skills in such areas as reading, language and math. This plant, located in one of the fastest growing areas of the United States was built in 1965 and currently employs around 300, and has traditionally had a very active workforce.

Within Frito-Lay there are business planning groups, that is periodic meetings of local management personnel from various departments within the business. Their purpose is to examine their collective "businesses" and look for ways they can improve quality, service and cost performance. During one of its meetings in 1987, the Orlando group recognized that major changes were going on in their business faster than the pace in which their employees basic skills and training were able to keep up. Specifically, the changes included the introduction of new computer based equipment as well as increased emphasis on the part of the company to drive decision making down to the lowest levels of the organization. Members of the business planning group asked themselves if employees' skills had kept up with these changes, and realized that the skills required to produce the product 25 years ago were not the same as those required today. Employees in 1965 were hired to operate one piece of equipment or to perform one task. Now employees are asked to operate not only more sophisticated equipment, but to take an active role in problem solving on a daily basis and to generate ideas to improve the plant's overall performance.

Frito-Lay, like many U.S. corporations, is facing foreign competition on the one hand, and the need to build up employees' basic skills on the other hand. Since it is our philosophy that our employees have made us the number one snack food

company in the world, we could not follow the lead of companies who choose to replace old employees with employees who possess the required skills. Our employees' experience and loyalty is invaluable to our success and for this reason Frito-Lay Orlando chose to empower their employees through the enhancement of their basic skills. A partnership was formed with the Orange County School system to develop a program that would do exactly that.

Orange County invested teachers, materials and course curriculum design, while Frito-Lay Orlando invested fifty thousand dollars to establish a training center on the plant site and to pay employees up to two hours of time "on the clock" while they attended instruction. Extensive planning went into the development of curriculum and the following questions were used to give planners direction:

1. How will we assess learning and progress?
2. What skills will be needed to form a baseline level?
3. What would a continuum look like?
4. Should course content be related and focused on learning to learn?

As part of the planning process, managers from Frito-Lay visited another company's facility to observe a successful workplace literacy program. They also visited a newer Frito-Lay facility in Georgia to examine what a state of the art facility would look like. The point of these visits was to glean some information from their experience and to determine a potential baseline skill level.

Planners wanted to create a positive non-threatening environment for employees; thus they knew strict confidence of employee information and assessment of skill levels must be maintained. Teacher selection was very important to establish trust between the program and employees. Curriculum, was designed to feature general usefulness while adhering to workplace literacy principles.

Phase one was a course termed reading strategies. The design of the course was based on the "think ahead, think while reading and think back" strategy and used sections out of the plant's operation manuals, the company's corporate benefits summary book and the company's newsletter for materials.

Phase two involved defining actual reading skills of employees. The entire plant was asked to complete a voluntary basic reading skills assessment exercise. Seventy percent of the employees completed the assessment. Each employee responding received a confidential letter explaining the exercise and advising them if they would benefit from the program to be offered.

During phase three classes began with those who chose to participate. Students attended two hour classes twice per week during their normally scheduled shift. The initial course offered lasted nine weeks and contained 24 students working with an instructor on the plant site. Post evaluations were completed by students and their immediate supervisors to determine if the program was a success. Feedback from those evaluations showed a unanimous yes.

Phase four introduced computers to assist in the instruction in english, reading, and math. Each student could work individually, at their own speed and at their own level. Computers were also made available during off shift times so employees could work on their own time.

### ***Empowering a Workforce for the South***

There is no question. The program has been a success for Frito-Lay and for our employees. Since its beginning 65 employees have enrolled and completed classes (representing around 25% of the total workforce at Frito-Lay Orlando) the rate of re-enrollment in math is over 75%. Each student completing the course receives formal recognition in a formal ceremony conducted by the plant manager. The curriculum has been expanded to five offerings and a sixth course is being planned. Individual tutoring courses are also offered. Post testing has indicated that the basic skills levels of employees enrolled in courses have improved significantly. Participation by job class almost mirrors overall plant population distribution. But the most important indicator of success has been from employees (see student's comments below).

The outlook for the workplace literacy program at Frito-Lay is bright. Course offerings will be further expanded to include introductory computer tutorials, stress management and effective presentation skills. Also, Frito-Lay is looking

into expanding the program to other Frito-Lay manufacturing plants and sales divisions in the future.

What has made our program successful? First, the program is a joint partnership between the company, the local facility management, local educational resources and employees. Second, local management provides active leadership during planning and execution stages of the program. Support is evident not only at the top of the organization but all the way down to the first line supervisory level. This is critical if a program is to be successful. Third, local educators are flexible and cooperative in their approach to developing a program which meets the needs of not only the business but the employees themselves. Fourth, the curriculum is job specific and relevant to the workplace. And finally, the trust and credibility of the program was established early on with all involved in planning and execution phases. Employees must feel that the overall mission of the program is to enhance their basic skills to the betterment of not only themselves but to the company.

### ***Conclusion***

As companies move toward the year 2000 we need to work smarter to stay on top. Competing companies have the same access to raw materials and technology that we do. What will keep us ahead of the competition is what we do with those materials and technology. Our employees are our strategic advantage. Basic skills programs will be our leverage for our employees' experience and loyalty so that we can work toward record growth and profits in the future while at the same time provide our employees with the opportunity to improve the skills they will use in virtually every aspect of their lives.

## ***Student's Comments***

**"For me this course is a dream come true. I am 58 years old and I have eight grandchildren, and I have learned that you are never too old to learn. My family seems proud of what I am doing. My husband is helping me at home and I am practicing reading with my grandchildren. I am thankful for this opportunity, sometimes I wish I could attend classes all day."**

**M. Addcock — 24 years with Frito-Lay Orlando**

**"Since I work in quality assurance and am constantly filling out reports, I was surprised to learn that they thought I could benefit from a reading skills class. I thought I could read pretty well, but I began to notice a change after my second class. I never realized how much I was missing when I tried to read something. Now I know I needed help."**

**A. Elise — 19 years with Frito-Lay Orlando**

**"Times are changing. Several of the employees got the chance to go to Frito-Lay's new plant in Perry, Georgia and we saw how different that plant is. Workers seemed to be much better educated and the equipment is much more difficult to operate. That equipment is going to find its way to Orlando and when it gets here, I want to be able to master it. I just hope more of our employees will sign up for the program."**

**C. Green — 17 years with Frito-Lay Orlando**

**Friday, June 22, 1990**

**9:00 A.M. General Session**

**Hon. David E. Price, U.S. Congressman from  
North Carolina - "The Need for a Literate  
Workforce in the South"**

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### ***Introduction***

David E. Price has represented the State of North Carolina in the U.S. House of Representatives since 1987. He currently serves on the Banking, Finance, and Urban Affairs Committee and the Science, Space, and Technology Committee. While his involvement has been impressive in many areas, his experience with the Sunbelt Institute studies of illiteracy and the education requirements of the workplace of tomorrow made him uniquely qualified to speak about the need for a literate workforce in the South.

Representative Price's presentation was originally scheduled to be the Opening Address on Thursday, June 21. However, due to an important vote in Congress (flag desecration amendment), he arrived instead on Friday, June 22 to address the morning General Session and spend valuable time with conference participants before and after his presentation.

### ***The Need for a Literate Workforce in the South***

There is no question that the education and the skill levels of the workforce are critical components of our nation's economy. National education, business and government leaders agree that our ability to compete in today's global economy depends on a highly educated workforce. Most of the new jobs being created across the nation demand higher levels of scientific, mathematic and technical skill than ever before. Today, people with only a high school diploma qualify for a mere 15 percent of new jobs, compared with 40 percent two decades ago.

## ***Sunbelt Study***

The cycle of under-education and consequent under-employment in the South was documented in a study conducted at the request of the Congressional Sunbelt Caucus. This study focused on workforce literacy in the South and its impact on the Southern economic challenge of the 1990's. The Sunbelt study confirmed the South's continuing education deficit, but argued that the region's literacy problem must increasingly be viewed in terms of workforce skills. For most businesses, the deficit lies not so much with grade school dropouts who never learned to read, write, add or subtract, but with high school dropouts with limited literacy skills. Because the diversification and automation of the economy require a higher skilled workforce, this literacy problem is fully as serious as the traditional literacy problem.

Although increasing attention is being paid to the challenge, the Sunbelt study documented the inadequacy of the state and federal response, with fragmented public and private programs serving too few people. Thus, this study was more than an analysis of the workplace literacy crisis, it was also a plan of action, recommending effective approaches to closing the literacy gap threatening the Southern economy.

Key recommendations included:

1. giving the federal government a catalytic role in developing higher quality and better funded adult education programs focusing on the workforce;
2. developing and disseminating model programs, curricula, and teaching technologies;
3. strengthening the relationship between adult basic education and the world of work and giving job training programs a stronger basic education component; and
4. encouraging private sector support and enhanced public-private cooperation in the implementation of programs.

## ***Literacy Summit***

In April 1989 congressional, education, labor and literacy leaders from across the south were brought together for interactive

round table discussions on legislative initiatives to resolve the workplace literacy crisis. During this two day Workplace Literacy Legislative Summit participants hammered out a blueprint for future legislative action. On the basis of this, Congress is developing a coordinated, targeted approach to literacy that will benefit the South and the nation.

Some of the major workplace literacy legislation pertains to vocational education, science and technological literacy, and basic literacy. While legislators have not reached a consensus about all the specifics of literacy legislation, they have reached agreement about the importance of an educated workforce. Literacy is not a partisan issue, nor is it a state issue. The private as well as the public sector must be part of the solution. Workforce literacy has an enormous impact on the entire nation; it impacts business, education, the media, and all levels of government; thus all must share the responsibility for seeing that solutions are sought.

### ***Conclusion***

Thus, we must build a partnership to solve the crisis. Together, we can expand the notion of literacy beyond the three R's to match the realities of what it will take to claim a job in the offices and factories of tomorrow. Together, we can maintain and improve the South's economy and our nation's position in the global economy as a result. We cannot afford to do otherwise.

**Friday, June 22, 1990**

**11:30 A.M. General Session**

**Dr. Hanna Arlene Fingeret - "Policy  
Recommendations for Workplace Literacy"**

---

### ***Introduction***

Hanna Arlene Fingeret has been working in literacy education since 1969. She spent ten years in the Boston area as a literacy tutor and teacher, program director, teacher trainer and consultant. Her research includes field studies on how non-literate adults manage their lives and a statewide evaluation of ABE in North Carolina. She has done extensive work in the field of participatory literacy education and presently serves as Director of Literacy South at North Carolina State University.

Dr. Fingeret's presentation focused on the implications recent research in workplace literacy education has for policy and practice. She attempted to place the federal role in legislation in a broader context, and to look at workplace literacy not only in terms of "what the mandate for workplace literacy legislation is", but more broadly—looking at what we need to be thinking about conceptually when we think about workplace literacy programs.

### ***The Purpose of Workplace Literacy Education***

I have had the privilege of being able to spend time with some workers who are in some of the workplace literacy programs. These workers, these students, these learners understand that through the work they do, they quite literally run the industries they work for. Because of them, the lights come on, the heat works, the trash gets emptied, but no matter how good their work, many of them feel locked into place. They feel that they are victims of language, culture, race, gender, and class discrimination. Learning to read can enhance their lives, but does not necessarily lead to new jobs or opportunities. Literacy is a tool for freedom, but literacy will not set them free.

We usually define workplace literacy in terms of the demands of the workplace. But many of these learners are literate, even eloquent about their workplaces. They have another kind of workplace literacy, they can read the world of their workplace with quite accurate literal comprehension. They understand about institutional racism even though they cannot spell it.

Education in the United States has traditionally been viewed as a means of getting ahead and opening new doors. Literacy has been portrayed as a key to social mobility, getting a better job and having a higher standard of living. The present attention to workplace literacy is a little bit different. We hear more talk now about literacy being a way of keeping your present job and protecting yourself from obsolescence. A way of continuing your present employment and supporting America's competitiveness in the global marketplace. This is literacy as much for protecting the present as it is doing something new about the future.

A basic question emerges. What is the purpose and underlying rationale for workplace literacy education? Without clarity about the fundamental purpose of such programs, we cannot talk about policy. A piece of the purpose has to do with increased productivity; but what do we mean when we say we want an expanding economy as one of the major outcomes of workplace literacy?

When we think about purposes for workplace literacy programs, we know literacy historically has been a tool for gaining access to power. Instrumental power (can do new things), personal power (feel more capable of doing new things), and political power (those who have been disenfranchised can begin to have a new voice as citizens). Recent research looking at both the workplace of the future and in some cases the workplace of the present, asserts that what we need are literate workers who are able to think critically, learn new jobs quickly and independently, and who can work easily as members of teams. In order for those things to happen a sophisticated level of literacy skill and personal development is required. At the same time we also see pressure in many places for narrow technical workplace education programs that will train workers in limited, job related skills, but stop short of true literacy development which has to do with the ability to be continually learning. This is a result of

a number of factors. Some employers do not see a need for sophisticated literacy skill development; others do not feel it is their responsibility. In some cases employers feel threatened by the potential consequences of broader literacy skills. They are concerned that workers involved in such programs will begin demanding better working conditions, more pay or will simply leave for more lucrative jobs where they will be treated in a way that will make them feel better.

In addition to goals that have to do with worker's skill development, whether broadly or narrowly defined, are goals that have to do with economic development. A more literate workforce will ideally mean the end of economic problems for the United States that have to do with international competitiveness, as well as those that have to do with local fiscal needs. However, we know the problems we are facing today are not simply problems that have to do with literacy but are instead issues that have to do with modernization, capitalization, debt reduction, monetary policy, as well as issues of social justice and equity. These larger issues raise questions about the relationship between workplace literacy and community development. Adults need the literacy skills that will support their involvement in economic development, developing their own businesses, and in participating in local decision making in an informed manner. Workplace literacy has to be understood as only one component of larger efforts for workforce literacy development and only one component of adult education. Personal, emotional, social, and cultural development has to be understood as valid, important literacy goals in addition to economic and workforce development. It is only when we pull all these factors together that we can see the kind of community economic development that is going to be necessary to contribute to the larger issues around economic development in our country.

### *Include Attention to Lowest Skill Levels*

In the long run, economic development is served by the development of our hearts and souls, as well as our intellects and our skills. We have talked a long time as if there is some magical point when individuals transform from being illiterate to literate. We are seeing now that there is no such thing as that magical point. The Young Adult Literacy Study has had a lot to do with helping us think in terms of literacy profiles rather than a cut point between literate and illiterate.

This re-conceptualization from a dichotomous view to a continuous view of literacy is a cornerstone for thinking broadly about workplace and workforce literacy development.

While thinking of literacy skill development in terms of a continuum provides a truer picture of the continuing literacy each of us find ourselves in throughout our lives, this continuum view also legitimizes using literacy resources to work with adults whose skills may already be fairly sophisticated. Employers fear that it will cost too much to work with employees who have the lowest level skills. This kind of argument dehumanizes people by treating them as replaceable parts in the production process, and ignores the larger effects of literacy education. Working with individuals whose skills are already at a sophisticated level is a short term view, but one we are confronted with often. Policy has to include attention to adults with the lowest level of skills and to place that in the context of this continuum view of literacy and literacy development.

A final set of goals for workplace literacy has to do with personal development...the growth and learning of human beings who also happen to be workers, family members, and community leaders. Workplace literacy education programs provide access to education for a whole group of people who might otherwise not have the opportunity to continue their skill development. It is important that, since these programs are offered on the worksite, people are able to have access to these programs who otherwise would not have had access to them. Although the programs are on site, we are working with whole human beings, and we need to be concerned about the broader goals of human development. Thus, workplace literacy programs need curricular content that will respect the experience and the aspirations of the workers who are involved in programs.

### *Address a Broad Set of Issues*

It is clear that if workplace literacy programs are to support an expanding economy and a participatory, democratic society then they cannot be narrowly job skills oriented. This is not to say that I am not a supporter of functional context curriculum, but the issue has to do with whose context and which contexts. Workplace literacy for the purposes of

supporting an expanding economy and a democratic society has to mean the ability to apply the technical reading and writing skills in the context of lives, cultures, and linguistic backgrounds as well as the context of work environments. Workplace literacy policy must reflect our knowledge that literacy education addresses just one aspect of the conditions that affect our economy today. Policy for a democratic society, as well as a healthy economy must address the broad set of issues including discrimination and structural inequality. The dignity of workers, as well as their skills, needs to be at the heart of workplace literacy programs if they are to serve these broader economic and social development goals over the long term.

### *Enhanced Sense of Value*

A positive workplace environment, the kind of workplace environment that research right now is talking to us about and saying that we need, one in which workers are able to be continuing learners, are able to learn new jobs, and to work together flexibly in teams—this is a workplace environment that depends upon employees who have a strong sense of their own value (the value of the knowledge, skills, background and the culture of the language that they bring to their jobs and to the workplace). Workplace education policy must support the development of workers' enhanced sense of their own value. This is facilitated by bringing workers into the policy development process, as well as the program development process from the very beginning.

Many of us were taught that first you learn to read and then you read to learn. We now understand that this kind of artificial separation of content and skills does not hold up. We know that literacy is fundamentally about reading. As we read the world, the way we read text is changed, and our interaction with text has something to do with our interaction with the world. Language experience and culture shape the meanings we attach to experience and to text. Workplace literacy must support the integration of skills instruction with content that is meaningful to students. Recognizing that this content may indeed have to do with people's jobs, but it also may have to do with the rest of their lives and their backgrounds, their roles in their families, communities, churches, or their desire for leisure reading.

## *Meaningful to Students*

There are three corollaries to this point. First, this content cannot be known without workers input in curriculum decisions. No matter how well meaning, educators and employers simply cannot speak for others. Employees must be involved in instructional and programmatic decisions. Therefore, what follows is that evaluation of workplace literacy programs must include attention to workers learning goals, as well as to the employer's interests. In addition, in order for these things to happen training has to be provided for literacy educators to whom this is a relatively new way of doing business. Literacy programs traditionally have not been known for relevant content and literacy educators have not had much training in how to create instructional materials with their students. Policy has to support the provision of additional training to literacy educators.

## *Flexible Developing Programs*

There are as many models for literacy programs as there are programs. This kind of pluralism is important. It is important that companies remain flexible in their development of workplace literacy programs, and remain willing to tailor their efforts to the needs of the situation and to their employees' characteristics. This may mean adding transportation, childcare, involving other family members, or providing individual tutoring as well as small classes. It is important that programs are monitored to insure that employees are provided with the greatest possible opportunity to participate. Policies for workplace literacy must allow for flexible developing programs that reflect the continuing growth of employers and workers.

## *Summary*

In summary, I recommend that workplace literacy policy address the broad set of issues that includes discrimination and structural inequality. That it support workers' enhanced sense of their own value. That it include attention to adults with the lowest level skills. That it support the integration of skills instruction with content that is meaningful to students. That it involve workers in the process of policy development and in instructional and programmatic

decisions. That it include evaluation that attends to the workers' learning goals as well as to the employers' interests. That it support the provision of additional training for literacy educators. That it allow for flexible developing programs that reflect the continual learning and growing of both employers and their workers. And that it serve personal, emotional, social and cultural development, as well as economic and workforce development.

### *Conclusion.*

Workforce and workplace literacy programs are vitally important. The involvement, participation and support of the private sector is crucial for all of us. It is important not to lose site of the fact that our larger goal is a better world for all of us to live in. Workplace literacy policy must support cooperative working relationships among employers, unions, educators and workers. It must be a wedge into the social and economic inequalities that plague our world. It must support the innate dignity of every human being. Workplace literacy has to do with reading the world that is the workplace, dealing with text is simply one element of literacy in the workplace. Because it is easy to get lost in conversations about the economy, we must keep in mind that we are talking about the lives of real people...employers, workers, teachers, and learners.

**Friday, June 22, 1990**

**2:00 P.M. General Session**

**Betsy Brand - "The U.S. Department of  
Education's Workplace Program:  
Governmental Perspectives"**

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***Introduction***

Betsy Brand is the Assistant Secretary for the Office of Vocational and Adult Education in Washington, D.C. She has worked extensively with various U.S. Congressional Committees in the areas of labor and human resources since 1981. She is skilled in developing, drafting and handling legislation. Her presentation attempts to summarize her breadth of experience and the governmental perspective on workplace literacy.

***A Better Educated Workforce***

I have felt since coming to the Department of Education that we do not spend enough time and effort focusing on education for work. For the most part, we have had our federal policies dictated by individuals in the academic sector. We need to recognize that there are a large number of children who will never go into an academic or baccalaureate degree program, yet they need additional training. Thus far, we have *not* recognized this with our federal education policies.

Today 50-60% of our children do go on for a baccalaureate degree, but only about 25% of that number stay and receive a four year degree. What happens to the rest? And what happens to those who drop out of high school and never go to college at all? Some will find a job, but our policies and our programs do not recognize these workbound youth—the people who some are calling the forgotten half. It is time for us to design some programs and policies that focus on the work bound youth, programs that result in some positive experiences for them. This is a far reaching broad problem that needs to be dealt with system wide.

There have been a lot of reports calling for a restructuring of our educational system. I have been pleased by these reports, particularly when the business sector has become involved. Since the early 1980's business has been "crying out" about the need for our schools to educate people who can be productive employees. Yet, we have not responded. Over the past 12 months the business community has, in a variety of ways, stood up and said to the educational system, "The product that you are sending us is a poor product, we can't use it." This is a dramatic message, it is a strong message. I think it is a good message, one that schools and people involved in education are finally beginning to listen to and respond to. We need to know what business wants that final product to look like.

An interesting report released this past Tuesday by the Commission on the Skills of the American Workforce is titled "America's Choice: High Skills or Low Wages". The report is truly a perspective from the business sector on what we are facing if we don't do something to change the product that our education system is producing. We have an opportunity to prepare students for high skill jobs a high standard of living and a strong economy. Or we could go about business as usual and allow our citizens to participate in low skill jobs where they will have a low standard of living and obviously be in a poor position to compete in the global economy. This exciting report raises issues that will be very controversial, but that need to be discussed.

In the South you have been fortunate that the education system has been at the lower end of the scale nationwide. The reason you are fortunate is that this has really forced you to examine what has gone on, and what education means in terms of your economy. I think what the leadership in the South has recognized is that education is tied directly to economic development and thus tied to the health of the economy in the states in the South. The connection between education and work needs to be made and has been made quickly in the South. Because this connection has been made, we are seeing a lot more activity with regard to workplace literacy and educating the workforce. I believe the South is leading the nation in terms of workplace literacy programs. Of the funds that we have provided under the State Adult Education Grants, 70% goes to workplace literacy programs. There is a strong focus on workplace literacy in the South,

and this is because your industries and business leaders have recognized that you cannot have a vibrant economy without a well trained workforce. The South has 97% more workplace literacy programs than the West, 86% more than the North East, and 73% more than the Midwest. These are startling figures, but those areas of the country have tended to have more robust economies and have not yet made the connection.

### ***Workplace Literacy***

There are many reasons to focus on workplace literacy. We have technological changes facing us that require new skills of our workers. In the workplace, however, we have a problem not only in the area of technology, but also in the area of basic skills. One of every eight workers today reads at the fourth grade level or lower, and one of every five, or 24 million workers, reads at the eighth grade level or lower. This does not even take into account immigrants and the special needs that they have. You are all familiar with Workforce 2000 and the demographics. I'm not telling you anything new, most of you deal with these problems on a daily basis.

We have a tremendous amount of work to do in the area of workplace literacy. We have a tremendous amount of work to do in our schools. So the Department of Education is looking at both a prevention and remediation side of the problem. Remediation through the Adult Education Act and workplace literacy programs that we fund, as well as other on going efforts. Prevention through the Carl Perkins Vocational Education Act and many of our other education programs.

### ***The Federal Agenda***

Education is at the top of the President's agenda. You have probably heard about his Education Summit held last September in Charlottesville, Virginia with each of the 50 Governors. I would like to share with you the six goals that came out of that summit. As I do, think about how you can support them, how you might be able to get involved in them, how as a parent you can support them with your own children. Take them back to your local communities; focus

on them. We are all stock holders in our education system and all of us need to be involved in what happens in the K-12 system, because it is eventually going to effect all of us. The president has called upon us all as stock holders to become involved.

1. By the year 2000 all children in America will start school ready to learn. (There are a tremendous number of reports that tell us if children start out in Kindergarten or first grade on par with their fellow students, that they have a much better chance of staying in school, retaining their normed grade and graduating. This is an important goal because, if we lose children early on, we may lose them forever.)
2. By the year 2000 the High School graduation rate will increase to at least 90%. (Our graduation rate right now is around 75%, we have quite a way to go.)
3. By the year 2000 Americans will leave grades 4, 8 and 12 having demonstrated competency over challenging subject matter including english, math, science, history and geography, and that every school in America will insure that all students learn to use their minds well so that they may be prepared for responsible citizenship, further learning and productive employment in our modern economy. (This goal goes to the heart of the skills one needs to be a productive employee.)
4. By the year 2000 all United States students will be first in the world in science and math achievement.
5. By the year 2000 every adult in America will be literate and will possess the knowledge and skills necessary to compete in a global economy and exercise the rights and responsibilities of citizenship.
6. By the year 2000 every school in America will be free of drugs and violence and will offer a disciplined environment conducive to learning.

A statement released by the President and Governors who attended this summit reads as follows: "America's educational performance must be second to none in the 21st century. Education is central to our quality of life, it is at the heart of our economic strength and security, our creativity in the arts and letters, our invention in the sciences, and the perpetuation of our cultural values. Education is the key to American industrial competitiveness."

We have tried to respond to the areas of adult literacy and workplace literacy by some of the initiatives we have undertaken at the Department of Education. We have increased our budget for adult education and are seeking the largest budget for the Adult Education Act ever. We are supporting increased funds for the workplace literacy programs so that we can fund almost double the number of projects. We are asking for additional funding for homeless programs that we run which are tied to job training. We have funded some excellent projects under the Workplace Literacy Program, through them we are learning about what works and what doesn't work in teaching adults. Because you cannot teach adults the same way you teach an 18 year old, workplace literacy programs make their education relevant and meaningful. Adults are much more willing to learn under those circumstances. We are also working on coordination of programs and services, and technical assistance with the dissemination of information to the field.

Along these lines, President Bush has created an inter-agency group called The Taskforce on Literacy. This taskforce is designed to find ways to allow the different agencies who are responsible for basic skills programs to learn from each other and work more closely together. They will attempt to make definitions consistent and performance standards consistent. Also, they will look at ways to encourage service integration and to make services more flexible at a single site.

The Department of Education will be learning a lot from those in the field over the next few years. But, once we have this information, what will we do with it? First, we plan to do a lot more dissemination and technical assistance. Also, we plan to be a lot more visible out in the states. The Department has requested money to create a National Literacy Institute on Research and Practice. Basically, it would be a national center that would provide clearinghouse services, technical assistance,

research and demonstration projects, workshops and conferences to inform those out in the field about what works and how to do what works. That center will also be supported by funds from the Department of Labor, as well as the Department of Health and Human Services. These three agencies will serve as advisors to guide the activities of the center. In addition, we will be funding more research. As a part of this we will be evaluating the results of the workplace literacy projects funded this past year to find out what works and what does not. The result of that evaluation will be widely disseminated.

### ***Conclusion***

In the future we will need to tap into the great pool of talent and experience of all of our citizens. In order for America to be competitive and to remain competitive in the global economy, we will have to change the way things have been done. We can export our jobs, we can import workers, or we can build up the skill of our citizens. Learning must be a lifetime project, people will be touching the adult education system throughout their lives from now on. Education will not be ending at high school or college, technology will not allow that and new ways of doing business will not allow that. We have to train people to adapt to whole new ways of doing things.

As President Bush has said, "We must bring in the generations, harness the unused talent of the elderly and the unfocused energy of the young. For not only is leadership passed from generation to generation, but so is stewardship." We have the responsibility to pass this educational legacy on. Our nation needs a world class workforce and our children deserve a world class education.

**Friday, June 22, 1990**

**3:00 P.M. Panel Presentation**

**Paul Jurmo and Anthony Sarmiento -  
"Effective Employee Basic Skills Programs:  
Roles for Labor & Business"**

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***Introduction***

Paul Jurmo is the Senior Program Associate for the Business Council for Effective Literacy, Inc. (BCEL). Anthony Sarmiento is Assistant Director of the Department of Education for the AFL-CIO in Washington, D.C. During this panel presentation, the two discussed the important roles business and labor, as well as educators and public policy makers, should play in building more effective workplace literacy efforts. The discussion began with the business perspective presented by Paul Jurmo, followed by Anthony Sarmiento with the labor perspective. Participants were then given the opportunity to ask questions about implementing the ideas presented.

***Part I - The Business Perspective***

The nation has a lot to learn from the workplace literacy efforts which are now underway in the South. Policy organizations like the Southern Growth Policies Board, the Sunbelt Institute, and the Appalachian Regional Commission have for several years been focusing the attention of public policy makers on the workforce implications of the region's literacy problems. The region plays host to community based literacy practitioners who have developed nationally recognized models for combining literacy education with economic development.

The South has a lot going on in workplace literacy. But despite the hard work, the workplace literacy field in the United States is still in its infancy. We as a field, not only in the South but across the country, have a lot of work to do to build on the experience we've gained so far. We have a great need for better informed policy-making and for high quality staff development opportunities.

## ***The Business Perspective***

Although it would be nice to be able to say there is a business perspective on workplace literacy issues, that is simply not the case. The reality is that businesses are responding to the employee basic skills question in many different ways. After observing what the business community has said and done around this issue for the past six years, I have come to the conclusion that there is no single business perspective. What seems in fact to be the case is that the business community is responding in many ways to the question of how prepared U.S. workers are to handle the new workplace.

In some cases, businesses haven't given the question much thought at all and haven't really developed a position on the topic. There are a variety of reasons for this lack of action. Some have not yet been hit in the face, or in the pocketbook by the painful experience of having an under-educated workforce. Others are so preoccupied with financial matters that management does not have the time to look at the issue of employee basic skills. Still others have simply not been exposed to the concept of workplace literacy.

There are also businesses which have considered the issue and found that they have a worker basic skills problem, but have decided to ignore the problem. While some of these companies lack the resources necessary to begin a workplace literacy program, more often they hope the problem will resolve itself through company lay-offs and the purchase of new technology. In other cases, businesses look at the problem and decide the solution lies in improving traditional school education. This response ignores the fact that millions of low literate workers are already beyond school age and will be in the workforce for the next 20 to 30 years.

Some businesses, realizing they have an employee basic skills problem, seek a solution that will not cost them much time or money. These businesses typically look for an educational institution or vendor to provide a low-cost, "quick" solution to the problem. Other businesses recognize that the skills of the available workforce are not what the company requires, and the employer decides that the most efficient way to deal with the problem is to find a test or other screening device to eliminate inadequately-skilled workers before they are hired.

Finally, there are those few businesses who have sat down, done their homework, and realized that an effective response to the employee basic skills problem will require a number of short and long term efforts on many fronts. Time, thought, a collaborative spirit, and hard resources are devoted to dealing with the problem. And these things will continue to need to be devoted, not just by these businesses, but by the entire nation if we are to effectively deal with the millions of under-educated adults who will make up a good chunk of our workforce for the next 20, 30, or more years.

### ***The Growing Interest in Workplace Literacy***

Workplace literacy has been a hot topic in recent years. Business and labor leaders have been told by public policy makers, educators and the media that they should be paying attention to the basic skills of their workers. They have been learning that the work force is changing as the pool of available workers is increasingly made up of people who have deficiencies in the area of basic skills. They are also learning that the workplace is changing. Workers are now expected to have higher levels and broader ranges of basic skills.

In response to what they have been told and in response to their own direct experience, business and labor leaders have now begun to pay more attention to employee training and education issues. Businesses have been forming task forces, examining workforce resources in their communities and in their industries, assessing the basic skills of their own employees, and in some cases actually jumping in and setting up programs for their employees. Unions have increasingly done the same.

### ***Lessons Learned to Date***

On the surface, it seems as if the key players have become aware, shown some interest, done some planning, and devoted some resources to begin tackling the employee basic skills problem. But we should not be satisfied with where things stand today. The quality of existing programs and the level of commitment to these programs are not what they should be. If educators, employers, unions, or public policy makers really want to develop effective employee basic skills

efforts in this country, some hard questions must be dealt with and a good deal more groundwork must be done before we go much further.

Far more care must be taken when assessing needs. In too many cases an employee education effort is implemented without a true understanding of the problem or the range of possible solutions. Understanding the literacy problem in a particular workplace requires careful study by all parties concerned. A team of managers, union representatives, educators and employees should be formed. This team should first do their homework to learn from the considerable work already done by researchers and other employers and unions.

Basic skills are no longer defined as the 3 R's we learned in grammar school. Thus, an employee education planning team should use a broader definition which includes technical and social skills. Through employee (and supervisor) interviews, observations of workers actually on the job, and production record reviews, a planning team will produce a clear picture of the skill areas with which workers might be having problems. These are the areas an employee education program should be designed to accomplish.

Once problem areas are identified, the team needs to continue their systematic planning by investigating possible strategies for responding to them and by developing the appropriate response for their workplace. Rushing in to set up an educational program is not always the best response. Sometimes restructuring particular jobs to enable workers to perform more efficiently and safely with the skills they already possess is the most appropriate response. Sometimes rewriting the materials used in a job to make them more easily understood by the workers who have to use them is the most appropriate response.

In most cases, however, developing an instructional program is the best route to take. Yet, often planners of employee basic education programs have little prior experience putting together a literacy program. Many naturally assume that any instructional method will work. This is obviously a false assumption. Research has shown that, too often, traditional literacy programs have simply adopted academic

instructional approaches found in school. This curricula has little direct relevance to the particular job tasks employees face each day. If mastery of job-related literacy tasks is at least part of the program's intended purpose, such standardized curricula are not a direct route to those job-related objectives. Planners should decide first what they want to accomplish with an educational effort. By beginning here, they will be better able to decide on the best method to reach these goals.

As an alternative to the traditional curricula which teach skills in a vacuum that is isolated from meaningful uses, some literacy practitioners have developed a contextualized approach to instruction. The contextualized is structured to enable the learner to learn by doing, to develop the strategies used in fluent reading and writing by actually practicing those strategies in real, meaningful activities. No two of these programs look the same. Some define the "context" for the learners, while others involve employees themselves in defining literacy tasks and topics on which to build the curriculum.

A growing number of workplace educators are developing a third alternative for employee basic skills education which rejects these two instructional approaches. This third alternative goes by a number of names: participatory, collaborative, learner centered, worker centered, partnership education, and other terms. Basically, all see the worker, not as a company machine which needs some technical fine tuning, but as a human being with considerable strengths and interests. Learners' personal qualities are seen as assets; thus participatory workplace programs are structured to provide multiple opportunities for workers to build on their strengths, enable them to think critically, analyze and solve problems, and communicate clearly.

The emphasis of needs assessment in participatory programs is not so much on workers' deficits as on their existing abilities, interests and potential. Learners study articles in the company newsletter, work related statistics, and other texts related to the topics which interest them. They also write about those topics, share their writings and give feedback to one another. Verbal communication and math activities, even complex tasks, are likewise built around real world interest. By encouraging workers to focus on a wide range of

topics of personal interest, participatory programs reinforce the notion that language is a tool which workers can use to accomplish meaningful, interesting goals.

In this collaborative arrangement, employers and educators are seen as partners who help define what is studied in the program, but they don't dominate the process. In this collaborative process, workers' self-esteem and team spirit are reinforced as they realize that they have something to say and have colleagues who are willing to listen.

### ***Actions Needed***

These kinds of carefully planned programs, unfortunately, remain a distinct minority within the field. These programs require a number of ingredients not yet widely available. Our challenge is to make sure that the basic ingredients of vision, cooperation, qualified personnel, and material resources are in place before we go much further with literacy efforts which should be aiming at creating not only a more productive workforce but a more just and democratic society as well.

Employers, unions, and public policy makers faced with setting up a worker education program should not settle on quick fix solutions. They need to do careful needs assessments and resource development. By doing so, they will be engaging in the same kind of thoughtful planning they would give to any other business decision.

Vendors of educational texts, software, videos, and consulting services are often overlooked as players in the workplace literacy efforts. As a field, we need to encourage workplace literacy publishers and consultants to become our allies in the development of appropriate methodologies rather than function as competitors for scarce educational resources. It is also time that more representatives of the news media get beyond merely repeating what is already known about the workplace literacy issue. The public needs to know what needs to be done, and by whom, to really create a strong American workforce and society. The media can help educate us all.

Adult educators need to take the time to remember that the process of developing a quality educational program requires considerable technical skills and a clear vision. In workplace programs, we are being pushed into a focus on the bottom line when in fact we know that employee basic skills education is much more than fine tuning workers' technical skills to increase corporate profits.

Finally, we need to remember the central role which workers themselves play in these efforts. We mustn't forget that the success of workplace literacy education in this country will be largely up to the workers who will participate in the programs we create with them. If we leave them out of the process of putting together our educational program, we will likely fail to take advantage of their considerable valuable knowledge and positive motivations.

### *Conclusion*

Workers in the United States have a lot going for them already. That includes those who didn't get the opportunity to develop strong literacy skills. If the rest of us do our part, we can make sure all of our workforce get a real chance to succeed this time around.

## ***Part II - The Labor Perspective***

There are many important issues in the area of workplace literacy I could have chosen to talk about today. I could have discussed the difficulty we have had on the Department of Education's Literacy Definition Committee in defining literacy. One of the debates we had in trying to come up with a definition of literacy for the United States as it measures adults throughout the country was over the nature of literacy. Should we emphasize only the use of printed and written information or should we emphasize both the use and the production of printed and written information? I could have chosen to talk about all the different ways unions have been involved in worker education. Why we are so interested in this and why unions are bargaining for more in the collective bargaining agreement to set up education programs. However, and more importantly, I would like to talk about relationships.

### ***The Labor Perspective***

There has been a lot of discussion so far about partnerships, but what is the nature of these partnerships? When we talk about relationships we need to recognize that each partner has different perspectives, values and priorities. How do we resolve these differences? How do we acknowledge them and move on? These questions are important to unions, because there will always be differences between unions and management. This is not to say that the stereotype of labor and management always fighting is true. It is far from true and we have more in common than we have differences; we agree that there is a need for increased adult education but we debate about what to do and how to utilize the resources available.

How do we take care of these relationships? Partnerships are important, so how do we make them work when there are differences among the partners? We have heard the joke that says the definition of coordination is an unnatural act between two unconsenting partners...it is even worse when you talk about a three way relationship between employees, employers and educators. We must first ask the question: "What is the quality of this partnership?" As far as the business/ employee relationship is concerned, the rhetoric

about employees being a company's greatest resource needs to be more than rhetoric.

### ***The Example of Frito-Lay***

At the Frito-Lay Orlando plant, employees were shown in a variety of ways how important they were. Workers received all kinds of signals that they were truly valued by management and that the rhetoric was not just rhetoric. What were some of these signals? The Orlando plant had a no-layoff policy. Even when new technology came in, employees working the jobs replaced by machines were given the opportunity to retrain for new jobs. Like most companies, they had two alternatives as new technology affected their plant. They could fire people who didn't have the skills and replace them with people who did, or they could retrain the people they had. This plant recognized that someone who has shown 15 years of loyalty to the company had something to offer that is not as tangible. Also, they were willing to back up their commitment statements with money to educate their employees. They allowed employees to go to classes as part of their regular eight hour work day, put in a new education center with computers, and even after the Federal grant money was gone, they continued the program. All participation in the program was voluntary and employees believed it was everyone's responsibility to make the company continue to be productive. Finally, the company talked about empowering their workforce. Is this kind of relationship attainable where you are now?

In Frito-Lay Orlando, Kelly Mossberg made it clear that the relationship was a real team. Each partner was in the program for the long haul. At the same time employers and employees figure out the nature of their relationship, the educational partners need to monitor their relationship, credibility and trust with the private sector.

### ***Building Relationships Among Partners: Education & Business***

I suggest the educational and business partners think about how they will design their *own* formative evaluation. How will you rate the metacognitive skill of *each of the partners*. These are the kinds of things we rate our participants

on, how do we rate? Part of this will involve communication that goes beyond throwing people together. The partners must learn about each other. Those of you in education must now not only become experts in learning theory and instructional design, but also experts about the industry you find yourself working within. If you are not aware of the kinds of trends and pressures the individuals you are working with are working under, the kinds of new technology that are facing those individuals, the consolidation of ownership that may be causing changes...then how will you come across as credible to those hardline, bottom line managers?

How will you come across as credible to employees when they get the feeling you don't appreciate the kind of jobs, tasks and work conditions they face? Look at the relationship between supervisors and employees. You can tell a lot about this relationship by looking at the work conditions and the conditions of the equipment ...are the signals there similar to those we "saw" at Frito-Lay? When you talk about the importance of linking literacy/basic skills training programs to existing training at the work site, are you making the assumption that there is existing training at the worksite?

If you look at recent research by the American Society for Training and Development or the Society for Human Resource Management, you will find that only 10% of the American workforce gets any kind of formal training on the job. As a general rule, the more education you bring to a job the more likely you are to get someone to invest in maintaining that education. When you look at who gets the training it is the managers and highly paid technicians. The less education you bring to a job the less likely you are to get someone to invest in maintaining that education. In surveys done by their own, only 25% of employers said they are interested in basic skills programs. Seventy-five percent said that they were not interested or that they did not think it was their job.

### ***Building Relationships Among Partners: Education & Labor***

Educators should not only look at the job task, but the total work environment and culture. Begin by reading Business Week or the Wallstreet Journal to follow some of the current trends and ideas that concern the work partner. If you are in a unionized plant, read books about unions and worker

involvement, look over a copy of the contract and the collective bargaining agreement to find out the rules that govern the workplace right now. And draw on your own experience. Think about the jobs you have had and the job you have now. Who gives training where you work? Is learning a value in your organization, has anyone ever asked you for your ideas about what the priorities ought to be or what you will be assigned to do? Only about 25% of most companies even do anything like an employee survey.

We are all illiterate in some particular context depending upon what we are being asked to do, the nature of the reading material we are given or the nature of the writing we have been asked to do. Once we realize there is not much difference between us and the individuals we are trying to serve we will start to design programs with their interest in mind and they will come to us.

The alliance between labor organizations and educators is a natural one. Just as you have said that you want education to go beyond productivity and job training, so we in the labor movement want education to go beyond productivity and job training. It is not just important that people be able to do their job, it is important that people be able to perform their responsibilities as citizens as well as union members. If our members cannot read their union newspaper, their contracts, proposals and collective bargaining agreements, how will they be able to vote in an informed way—whether it be for a candidate for union office or a candidate for elected office in our government?

### ***Conclusion***

In 1916 Samuel Gompers, the first AFL-CIO President captured Labor's perspective. He said, "Education is not an arbitrary thing that automatically ends with a certain year of life, but must continue throughout life if the individual is really to live and make progress. Education is an attitude toward life, an ability to see and understand problems and utilize information forces for the best solution to life's problems." Education has nothing to do with productivity specifically, but speaks of human potential and helping our members do what they want to do and reach for whatever goals they have set for themselves.

**Saturday, June 23, 1990**

**9:00 A.M. General Session**

**Larry Mikulecky - "Recent Research of What Works and What Doesn't Work in the Workplace"**

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### ***Introduction***

Dr. Mikulecky is Professor of Education at Indiana University as well as the Chair of the Language Education Department there. His research examines the literacy requirements for success in business. He has served as a consultant to numerous governmental agencies and school districts. He is also author of over 75 published works.

Dr. Mikulecky's presentation summarized, in part, a chapter that he and Rad Drew have recently completed for publication. The explanation here will attempt to summarize some of that chapter and Dr. Mikulecky's remarks. The chapter, "Basic Literacy Skills in the Workplace" will appear as Chapter 24 of the text, Handbook of Reading Research: Volume II (1991), Longman.

### ***What is Basic to Functional Literacy in the Workplace?***

By the 1970's research had established that American adults spend more time reading and writing in the workplace than they do anywhere else. Since so much of adult reading time is spent on work-related material, it becomes essential that we understand the reading demands encountered in these materials.

The definition of functional literacy continues to be muddled; there is little agreement on what skills actually comprise literacy. Thus, literacy specialists define literacy in a number of ways and even disagree about the best ways to measure literacy levels. Some prefer to look at job literacy competencies while others prefer establishing grade level equivalencies.

Using grade level indicators is somewhat problematic. Research has shown that workers can read work-related materials at a higher grade level than they can newspaper-like materials. Sticht (1986), found a variance of up to four grade levels when reading job-related materials. Familiarity with the topic and format seem to attribute to this finding. Therefore, grade level definitions of literacy are particularly ineffective as a reader's background knowledge increases.

It appears that the ability to process information by an individual may be a better predictor of functional literacy task difficulty than the more traditional indicators of reading difficulty.

### ***Literacy Demands in the Workplace and Workplace Training***

There are a small and shrinking number of jobs requiring little or no literacy, and the amount of literacy demands appears to be increasing in most sectors of the workplace.

In 1980 Diehl and Mikulecky examined 100 workers in a representative cross-section ranging from executive vice presidents to fork-lift drivers. Only 2% of the occupations examined required no reading or writing, in fact most required workers to spend nearly two hours daily reading print, charts, graphs, and computer terminals. Difficulty of on-the-job reading material ranged from the ninth to the twelfth grade levels.

Many high school students are unprepared for using literacy skills in the workplace. Rather than reading from a single text, workers are required to gather information from several sources to solve problems, provide services and perform tasks. Problem-solving reading skills (the abilities to set purposes, self-question, summarize information, monitor comprehension, and make useful notes) often distinguish superior workers from adequate workers when exhibited at the workplace.

The literacy demands for vocational training appear to be even higher. Mikulecky (1982) found that students in job-training programs actually spent more time reading texts and manuals than did high school juniors. Readability formulas

have indicated that training materials range in difficulty from eighth-grade level to college-graduate level. While these high levels create a demand on vocational students, the student's interest, motivation and familiarity with a given subject matter often offset some degree of the difficulty.

It is clear that an individual's success in the classroom and the workplace is dependent, in part, on an ability to read and apply information obtained from complex contextual and graphic materials. Literacy skills in vocational training and work settings include reading to solve problems and make judgements.

### ***Literacy Skills Demands Have Been Increasing with Some Exceptions***

The difficulty levels of occupational reading are quite high. Even blue collar workers average more than one and one-half hours of daily job reading. Though having a wealth of background knowledge on a topic can lower reading difficulty levels, the heaviest job-related reading is performed by new workers learning new jobs and these are the least likely to have the needed background experience.

Literacy needs have changed. For example, materials handlers have traditionally been the employees who picked up boxes and moved them from place to place. Muscles not brains were hired. Today in many industries the same jobs require that employees sit in chairs and run computers that monitor automated warehouses. They keep real-time inventories and do real-time quality control. They now have a much more important role in the management of the operation intellectually than ever before.

Fragmented, assembly line type jobs are now frequently shipped out of the country, leaving Americans with low literacy abilities without employment. Many service industries are attempting to compensate for the low skills through the use of pictures on cash registers, robots and computerized pricing. These are attempts to eliminate mistakes by lower skilled employees and in many cases reduce the need for lower skilled workers altogether. General Motors, for example, is quickly approaching its goal of an 80 percent reduction in non-skilled positions through the increased use of robots.

## ***The Changing Nature of Work***

As the nature of work changes, so do the accompanying levels of literacy skills required. Even though we have been informed in numerous reports that service industry jobs will make up the greatest number of new jobs in the immediate future, a good deal of increased paperwork and regular managing of information to solve problems will be required.

While much research, including that of Mikulecky, tells us that high-tech jobs will make up only a small percentage of future jobs, occupations that have traditionally required minimal basic skills are becoming more complex, demanding higher-level reading, writing and computational skill. Some occupations will show a decrease in skill requirements, but most will move from low-skill to middle-skill levels.

### ***Relationship of Literacy Skills to Job Performance***

The underlying assumption that literacy skill levels and job performance are directly related has not been demonstrated in an overwhelming way in research. Most of the research is sketchy and based on military studies.

While reading ability has been shown to be a moderate predictor of job performance, literacy and cognitive performance do not totally explain job performance. A much higher relationship was noted between job performance and the ability to apply and use reading, writing, and computation skills critically. Low ability reading levels, however, do result in losses in production, quality, and general corporate performance through costly accidents and mistakes.

To summarize, literacy skills appear to be related to job performance in at least two ways:

1. the best workers can communicate and use print to solve problems; and
2. the least effective workers do not use print in such ways and may be prone to costly dangerous errors in situations calling for the use of basic skills.

## ***How Generic and Transferable are Literacy Skills?***

For many years it was assumed that once basic skills were learned, they would easily be transferable to the workplace or vocational training. Researchers, however, have found that transfer on the part of learners is severely limited. Duffy (1985) noted that transfer from one reading task to another depends on the similarity of components (the processing requirements) of the tasks. For example, Sticht (1982) reported that military recruits given traditional literacy-skill training made gains while in class, but tended to revert and lose their skills within eight weeks. Personnel retained 80 percent of their end-of-course gain in job literacy training and only 40 percent of their end-of-course gain in general reading.

According to Mikulecky et al. the most effective job literacy training programs appear to integrate literacy skills training with actual job training. Programs such as this avoid the risk of mistakenly assuming transfer or mistakenly counting on generic skills.

### ***Effective Training Programs***

A key characteristic of effective workplace literacy programs is a job-oriented approach that employs tasks, materials, and training directly linked to the functional context in the workplace. This increases the likelihood of transfer and continued practice of skills and strategies mastered in training (Sticht & Mikulecky, 1984).

Dr. Mikulecky discussed several military and civilian programs in which teaching materials were developed using table of content, indexes, tables and graphs that were needed on jobs. He discussed the use of video disc and computer applications as they have been developed for specific programs. He also described a retraining program which hired a reading specialist to help employees gain mastery of technical vocabulary, concepts, and materials. The specialist set up special study guides to break down assignments into manageable tasks and in some cases rewrote or redesigned materials to lower difficulty levels.

Several conclusions could be made. It does appear possible to make fairly rapid gains in the ability to comprehend technical material if training is focused on that material. General literacy improvement, however, was less apparent in such programs. Best results seemed to occur when basic skills training was integrated with technical training. Matching training to the application on the job appears to be the most successful approach.

### ***Modifying Literacy Demands Via Job Performance Aids***

Training is not the only way to narrow the gap between worker literacy abilities and workplace demands. Information can be restructured so that it is more accessible and comprehensible to workers. The restructured information is often called job performance aids (JPA).

Performance aids are usually based on a task analysis of the jobs to be accomplished by the employee. While they vary in format, typically checklists, flowcharts, step-by-step directions and computerized guidance programs are used. Job performance aids are designed to improve job performance and lower the time needed for training.

### ***Needed Research***

Dr. Mikulecky noted five areas of research which still need attention:

1. developing workplace literacy process models;
2. determining the generalizability and limits of transfer for literacy strategies in the workplace;
3. examining the cost-effectiveness of workplace literacy training efforts;
4. technology's role in workplace literacy training; and
5. economic and political issues related to race and social class.

Research in the area of cost-effectiveness would be particularly helpful to businesses considering a workplace training program. Workplace literacy is often concerned with

the cost-benefit ratio of training. Military research by Sticht (1982) indicates that a grade-level gain in reading ability takes approximately 100 hours of engaged literacy training time. Focusing on job specific training can cut the time and thus cut costs, but gains may be limited to the job-specific materials.

### ***Multistranded Approaches***

There appear to be three major problem areas in workplace literacy. These areas relate to:

1. extreme low-level literates who are unable to function independently with even simple print

*(this is the smallest number of workers but those who are foremost on the public's mind) ;*

2. new and experienced workers who can read at a moderate level (the sports page), consider themselves literate, but derive little benefit from expensive training because of insufficient reading, computing, and study abilities,

*(this includes the vast majority of workers who may even have a high school degree yet test too far below minimum training levels to be successful in on-going training ); and*

3. workers at nearly all ability levels who make some job-related literacy mistakes that influence safety, productivity and promotability

*(mistakes are reported by employers as the major literacy problem. Literacy-related productivity problems involve mistakes such as the need to redo correspondence or a safety error and block the ability to implement new productivity innovations ).*

Most work sites experience all three of the above problem areas. It is unlikely that a single solution will solve all of them. A multistranded approach which offers varying solutions to varying problems is needed.

## ***Conclusions***

There is a gap between the literacy abilities needed to be productive in the workplace and the ability levels of a significant percentage of workers. This gap is largely the result of a general increase in the demands of most jobs that has occurred at the same time that many very low-skilled jobs have been disappearing or shifted to nations where labor is less expensive.

Because a disproportionate percentage of black and Hispanic workers are among those with the most inadequate skills, our ability to thrive economically may be dependent upon our ability to integrate these workers into our labor force more productively. We must recognize that there are several workplace literacy problems and that they call for differing solutions. The workplace of the 1990's may require as many different educational resources as our school systems presently require.

**Saturday, June 23, 1990**

**10:00 A.M. Concurrent Session**

*Note: Only summaries from two of the four concurrent sessions were obtained during the conference, they were prepared by participants in the sessions indicated.*

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**Dr. Tom Valentine - "Developing Curriculum in the Workplace"**

Curriculum provides a reason for student placement and direction for the program. In order to design curriculum for a workplace literacy program, educators must visit the worksite to gather information for planning purposes. This information should include: the literacy education needs of the corporation, the goals of the proposed program, the resources needed for the proposed program and the nature of the employees the program would need to serve. Specific questions to ask when gathering this information include:

1. The Literacy Needs of the Corporation:
  - how do we know some employees in the corporation need literacy education?
  - educational level of workers?
  - literacy related job problems?
  
2. The Goals of the Proposed Program:
  - to what extent will the proposed program be expected to increase production in the corporation?
  - to what extent will the proposed program be expected to increase job satisfaction among employees?
  - to what extent will the proposed program be expected to increase employees' self-esteem?
  - to what extent will the proposed program be expected to help employees with literacy tasks not related to work?
  - to what extent will the proposed program be expected to help improve the community in which the corporation resides?

- does the corporation consider this program to be primarily an employee benefit or primarily production-oriented training?
- how will the corporation judge the success of the program?

**3. The Resources Needed for the Proposed Program:**

- what resources (i.e. instructional location, materials, release time, money) will the corporation contribute to the program?
- what resources will the educational provider be expected to contribute?
- who will staff the program?
- where will the program be housed?
- how much money is available for curriculum development?

**4. The Nature of the Employees the Program Would Serve:**

- who exactly will the program be designed to serve?
- how many of these employees are there?
- are employees unionized?
- why might those employees choose to enroll in the program (incentives and benefits)?
- why might those same employees choose not to enroll (threats and competing demands)?
- who can best inform us about the employees probable reaction to such a program?

During preliminary activities talk with supervisors, employees, union representatives, tour the plant and identify sample on-the-job reading, writing and math tasks. Initial contact requires realism, and often you must educate the business as well as the employees.

Be sure instruction is geared toward specific tasks - this kind of instruction is the most productive. Workers must see that the program values learning and expects success from them.

## **Jorie Philippi - "Training in Workplace Literacy"**

A multi-stranded approach to curriculum design is the most successful for program development. This type of approach meets the needs of both the employee and the employer. It involves the learner as a whole person and transfers to whole-life situations. A multi-stranded approach utilizes metacognitive methods to focus on or mirror job skills as applied to life skills.

To be successful in selling your training to business, you need to understand the agenda or criteria for need in the targeted industry. Your program competes with various other internal and external forces for time, material, monies, and other resources. All businesses and industries have their own agenda.

The focus of all workplace literacy training is to serve the basic worker. To make that person promotable and in general a more successful employee and citizen. There is so much knowledge out there that people cannot process effectively. You are charged with helping people access the knowledge they need. So help your clients set realistic expectations.

There are corporate and individual expectations. Do not make the mistake of promising more than you can effectively deliver. If your program attempts to be too broad based or to remediate too deeply you are doomed to fail. Understand the changes which are desirable to make a positive impact in the specific workplace. Compare these desired changes to the corporate allotted time frame. Be realistic in marketing expectations. While focused adult learners can make significant progress fairly quickly, it is impossible to remediate twelve years of poor education in six weeks. You can positively impact job specific skills very effectively.

It is a recognized academic goal to teach information and expect transfer to general life situations. In reality, 80% of what you teach is lost within six weeks if it is not reinforced by frequent practice. People are being overwhelmed by the knowledge explosion. We are all being exposed to more material than we can internalize, thus reinforcement is ever more critical.

To be competent performers in our society, and to develop a good image of self worth, people need to hold an important job. Today this requires critical thinking skills and the ability to make choices on every level. The enculturation process of being on welfare erases the ability to make choices. The system does not allow productive choices; the system dictates behavior. Thus, recipients gradually lose their ability to choose effectively. Training empowers workers to become and remain fully functional. Today it is necessary to be promotable just to retain a job, even the most basic entry level job is becoming more technical. A job candidate must be able to read warnings, follow directions, interpret signals, and probably be computer literate. Workplace changes are not going to stop. It is our job as trainers to help employees meet the increased challenges these changes will bring.

To be functional, training materials must access the familiar - both in the workplace and in broader life situations. Analyze a specific segment need and design materials to meet that need.

**Saturday, June 23, 1990**

**11:45 A.M. Closing Luncheon**

**Faye Fowler - "Upgrading Academic Skills in the Workplace—A Success Story at Duke Power Company"**

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***Introduction***

Faye Fowler serves as Director of Human Resources Planning, Development and Employee Relations, as well as Assistant to the Vice President of Human Resources for Duke Power Company. She has been with Duke since 1960 and has worked primarily in the areas of employee relations and improvement. Her presentation dealt with the way in which basic skills training relates to changing work requirements specifically at Duke, but her observations are easily applicable to worksites throughout the South.

***The Need for Higher Skills in a Changing Workplace***

As you are well aware, there is a looming mismatch between the education of employees and the educational requirements of the jobs in this country. As educators, you know the statistics and the predictions better than I do. But as a representative of a major employer in North and South Carolina, I can tell you that what I do know frightens me. At Duke Power Company we are seeing a shrinking labor pool, fewer qualified applicants for our job openings—no applicants for some job openings, and an ever increasing training requirement for employees in some areas due to regulation and rapid changes in technology. If that is what we are seeing today, what will the future look like?

The Future World of Work, a report published by the United Way of America paints a sobering picture of the workforce needs by the turn of the century. Its authors predict that 75% of new jobs will require at least some college education, where as 60% of America's current jobs can be performed with a high school diploma or less. At the same

time many employees already in the workforce will see an increasing need for advanced training due to the technological advances we see today and those on the horizon. The job may stay the same, but the way of getting that job done will change dramatically and will require a high level of knowledge on the part of employees.

This gap is already showing itself in the dollar amounts that businesses are investing in corporate training. In the late 80's businesses were investing at least twenty-one billion dollars to teach remedial education and fundamental job skills. In the July, 1988 *Trend Letter*, John Nesbitt wrote that by the turn of the century more than 65% of large U.S. companies will provide remedial education to boost productivity and reduce mistakes. What Nesbitt did not say is that companies are already investing in remedial training in an effort to retain valuable dedicated employees. Such has been the case at Duke Power Company.

### *Duke Power Company*

Duke Power Company, the nation's seventh largest investor owned utility, services 1.6 million customers in the two Carolinas and is renowned in the utility industry for building its own power plants (most utility companies do not construct their own plants, but instead bring in contract labor to do this). Since the beginning of the company's construction department in the 1920's, its employees have built twenty-six hydroelectric stations, eight coal fired stations, and three nuclear stations. The technological developments in efficient production of electrical power are evident in these plants—particularly when you compare the earliest hydro-dams with the nuclear stations. The technology in the nuclear stations is unbelievably advanced, and the men and the women who have helped build these plants represent a very special segment of Duke's employee population. They are highly skilled in the area of construction and highly experienced in their various specialties. Yet, sadly some of them are part of the estimated 23 million adults who are considered functionally illiterate. Two major developments have brought the needs of these employees to the forefront of Duke's internal educational efforts.

The first came about as a part of the company's move to de-escalate our construction activity. Construction has

taken a back seat to maintenance since around 1986 when Duke opened its third nuclear station. The winding down of the company's construction phase made us take a hard look at the abilities of our existing construction forces to perform maintenance work—not only in the hydro and fossil plants, but particularly in our nuclear plants. You can imagine the technical and regulatory requirements associated with nuclear power. Maintenance work must be done in such a way that it meets very high, very specific standards set by the nuclear industry. While the construction experience provided the basic hands-on skills necessary to do this maintenance work, there was a definite need for technical knowledge and better reading, math and writing skills for these employees. We found we had two problems early on:

1. some of our employees could not pass the Nuclear Regulatory Committee's basic qualifications tests to gain the clearance necessary to do the maintenance work—they lacked the necessary reading, writing and math skills; and
2. some of our employees could pass these tests, but were limited in their effectiveness because they lacked a high school diploma which is required for these employees to be able to sign-off as accomplishing work in the stations.

The second development relates closely to the first. As our construction efforts closed down we were faced with more employees than we needed. Layoffs are nothing new in the construction business; our construction employees are familiar with the ebb and flow of that type of work. At the same time these were employees who had a lot to offer because they had worked so long with the company. Duke wanted to provide them with jobs, if there was a way to do that. With the support of Duke's management, internal placement activities were stepped up to place these employees in jobs in other areas of Duke Power Company. This became a difficult and often frustrating experience because nine times out of ten these employees were going to have to have in-depth training to meet the qualifications for the new job. Without that training, both the employee and the hiring manager were put in losing positions—neither were getting what they wanted.

With these developments and the obvious educational needs they presented to us, Duke had to do something. In 1986 a partnership was formed with the York County (South Carolina) Adult Education Office to establish two efforts, a tutoring program and a G.E.D. program. With Y.C.A.E.'s assistance and guidance, construction employees were screened to identify those who needed one-to-one tutoring and those who needed G.E.D. classes either to improve their general knowledge or to actually prepare for their High School equivalency exam. With the screening completed, learning began in earnest in January, 1987 and in June, 1987 forty-five employees graduated in a formal ceremony...the following year 39 more employees received their G.E.D. in a formal ceremony. The ages of our graduates ranged from 19 to 63 years—they had between six and 31 years of service with Duke Power Company. Some had started with the very basic one-to-one tutoring and had advanced through the G.E.D. program.

### *Elements of Success*

What are the things that made this effort successful? What are the keys to success in our program? First, the screening process, the classes, the G.E.D. exams, and the graduations were conducted at the work site. This made the educational process less stressful and more comfortable for these employees. It also eliminated some of the real and subconscious barriers to success. Employees learned in very familiar training rooms, places they had been many times before. They went to class immediately after their regular work day so that they didn't have to go home, clean up and drive back. They did this on their own time so that we were convinced that their commitment was there and that it was a strong commitment. Second, the support of other employees was very apparent. Other employees were involved as tutors and aides in the G.E.D. classroom, in fact from January 1987 to April 1988 around 1,400 hours were given by these employees to help tutor co-workers. Their ability to do this in a supportive, caring manner enabled those in classes to learn in a comfortable, open environment. Third, the quality of the educators we were able to involve in the program had a tremendous impact. Without the efforts of these professionals giving us their guidance and supporting us in our objectives

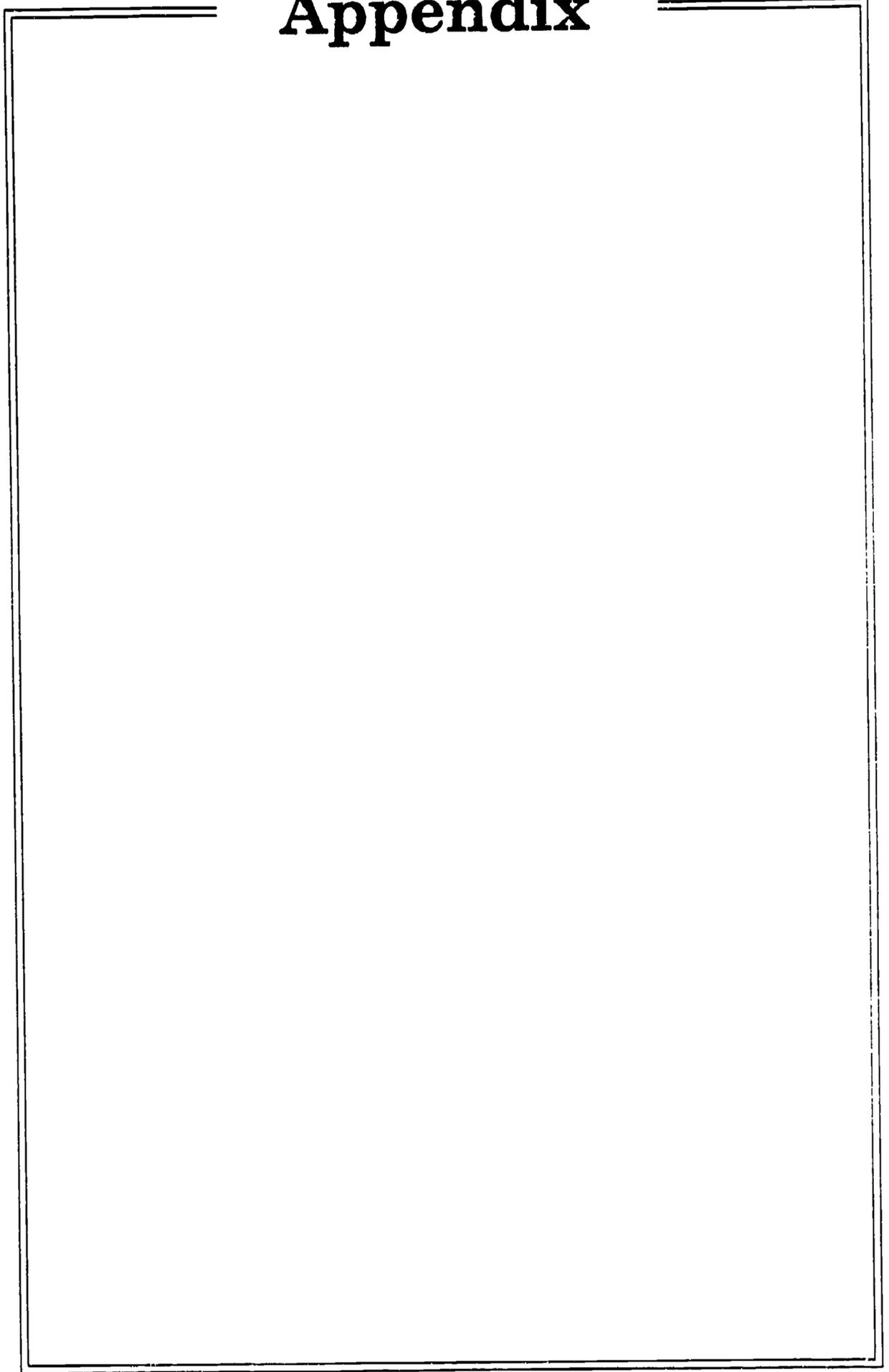
we would not be able to be here today attesting to the fact that programs can be successful in the workplace. And finally, we had the understanding by employees that there was a need to change and to improve their educational ability. They were aware of and supportive of our changing priorities from construction to maintenance work—they could see things changing and were eager to gain the skills that would enable them to change too. They had too much to lose for them not to change.

Those first two years of on site training have laid the foundation for continuing educational opportunities for Duke employees. As the needs of employees have changed, so too have our programs. The employees themselves have given a great deal of input into how courses should be taught and what types of reference materials should be available to them. A resource center is open four days a week, and employees are given the opportunity to participate in classes taught by the York County Adult Education office as well as a variety of self-directed computer courses. In addition college courses are now being offered at the worksite to improve employees skills on the college level. Employees take this resource center seriously and they take the responsibility for making sure that its contents meet their needs

### ***Conclusion***

Education cannot survive without the support of business. And business cannot survive without the support of education. Duke power also has an outreach program called P.I.E.—Power in Education. In this program employees throughout our service area devote a number of hours each month to help tutor students in neighborhood schools. This program is an example of where we devote our time to the school system. Our internal training program is an example of where one school system devotes its time to Duke Power Company. We had a need and York County Adult Education came through. That is what power in education is all about.

# Appendix



# Building a Workforce for the South Conference Participant List

## A

Adams, Rosemary  
Aguillon, Andy  
Allen, Sheila  
Alston, Sheree  
Anderson, Alvin F.  
Angel, Penny

## B

Bacon, Gary  
Baldwin, Anna O.  
Banfield, Marian  
Barron, Dorothy  
Bates, Patricia  
Bauer, Robert  
Beeland, Bob  
Berty, Pat  
Berthel, Richard  
Betz, Mike  
Bibb, Ann W.  
Blackledge, Dewey  
Blackledge, Mary Jo  
Boggis, Molly  
Bowen, Teresa  
Bowler, Michael F.  
Bozarjian, Robert  
Brand, Betsy  
Branscomb, Chuck  
Brevard, Darryl  
Bridgers, Jim  
Brooks, Nancy Smith  
Browder, Jerry  
Brown, Bill  
Brown, Jane McLachlan  
Buchholz, Michael L.  
Bullock, Sarah  
Burden, Geneva  
Burke, Baxter  
Burke, Lynda  
Burt, Miriam  
Butler, Elaine

## C

Callaway, Tony  
Canfield, Carol  
Cates, Dianne S.  
Cave, Katherine (Katy)  
Centeno, Janie F.  
Chapman, Marilyn Mitchell  
Chase, Nancy  
Cheatham, Judy  
Christopher, John  
Clark, John  
Clouse, Jane  
Clymer, Carol  
Coffey, Pat  
Coile, Suzanne  
Compton, Joyce  
Cooper, Elloris  
Cooper, Wade H.  
Coulter, Ann  
Cox, Ron  
Culross, Terry

## D

Daniel, Cherry  
Daniel, Lee  
DeFife, Scott  
DeStefano, Johanna  
Dixon, Bonny C.  
Doak, Perry J.  
Dovers, Judith  
Dunlavey, Walt  
Dunn, Becky

## E

Eley, Mattie H.  
Eoff, Joe C.  
Evans, Vergie L.  
Everhardt, Phil

**F**

Fetterman, Karin  
 Fingeret, Hanna Arlene  
 Fisk, William R.  
 Fluere, Sue  
 Foley, Thomas F.  
 Folsom, Jenny  
 Foster, Dina  
 Fowler, Faye  
 Froman, Ron

**G**

Gabbard, Carol  
 Gailey, Lamar  
 Garrett, Mary  
 Gash, Joyce  
 Gendimenico, Rosalie  
 Gilfillan, Betty  
 Gilfillan, Dave  
 Gore, Dart  
 Gray, Brenda  
 Greenfest, Michael

**H**

Hackney, Susan W.  
 Halverson, Brent  
 Handshaw, Dick  
 Harris, Irwin  
 Harrison, Johnnie  
 Hasden, Wes  
 Heatherly, Jeannie  
 Heninger, Dorothy  
 Hensley, Beth  
 Hewitt, Karen  
 Hiles, Judy  
 Holmes, Alice F.  
 Holmes, Harold  
 Hondros, Sherry  
 Hornung, William P.  
 House, Charlie  
 Howard, Sue  
 Howell, Ruth

**J**

Jackson, Ann  
 Jameson, Judith  
 Jenkins, Tina  
 Johnson, Connie  
 Johnson, JoAnne  
 Johnson, Margo  
 Jurmo, Paul

**K**

Kelley, Jean  
 Kingery, Ken  
 Kinker, Judy Bailey  
 Kirk, Nancy  
 Kneeland, Chris  
 Kremer, Nick

**L**

Lamar, Angela  
 Lambert, Susie  
 Landrum, Elaine  
 Langdale, Sharon  
 Lashof, Judith  
 Laycock, Dottie  
 Leach, Millie  
 Legg, Hilda  
 Letzkus, Ruth  
 Lewis, Judy  
 Longnion, Bonnie  
 Lowery, Jim  
 Lussier, Virginia Lee  
 Lynch, Monica

**M**

Malone, Kevin  
 Manley, Donna  
 Marshall, David  
 Martin, Karen  
 Martinez, Marta  
 McCameron, Fritz  
 McCrary, Jean  
 McDaniel, Gloria  
 McEvoy, Ann L.  
 McKee, Susan

McKenzie, Kathleen  
McMillan, Diann D.  
McMillan, Eldridge  
McNeill, Marcia L.  
Mendel, Richard  
Mensah, Donnetta W.  
Merlo, Barbara  
Mertz, David  
Meyer, Pat  
Meyer, Paul  
Mickulecky, Larry  
Miller, Christina  
Miller, Dave  
Miller, Sally  
Miller, Suzanne  
Miolen, Hazel  
Montgomery, Bo  
Montgomery, Melissa  
Morgan, Annette  
Mossberg, Kelley  
Mrowicki, Linda  
Mukadam, Sattar  
Mulcahy, Lois  
Mullarkey, James  
Mullins, Linda

**N**

Nelson, Lucie  
Newcomb, Sarah  
Newman, Awndrea  
Newman, Myles  
Nickles, Ann  
Nurss, Joanne

**O**

Oetting, Joyce  
Osborn, Carl J.  
Owens, Larry

**P**

Parks, Teresa  
Parler, Sonny  
Patton, Herb  
Patureau, Gary  
Perin, Dolores

Perry, Jim  
Pettit, Karin  
Petty, Carol  
Philippi, Jorie  
Phillips, Ruthann  
Pollan, Carolyn  
Price, David  
Price, William C.  
Pritz, Sandra  
Prybylowski, Leo  
Pulling, Lewis

**R**

Red Shirt, Ellen  
Renfrow, Donata  
Reuther, Carol Jean  
Richards, Suzanne  
Richardson, Mikel  
Richardson, Nancy  
Richert, James E.  
Riley, Sherry  
Robertson, Janice  
Robertson, Martha Ann  
Robinson, John C.  
Robinson, Sally  
Rodriguez, Mike  
Roffle, Donald  
Ross, Cynthia

**S**

Sankovsky, Ray  
Sarmiento, Tony  
Shelton, Elaine  
Shepherd, Dann  
Sherer, Ralph  
Silc, Kathleen  
Simms, Shauna King  
Singletary, Jean  
Skvensos, Maxine  
Smith, E. Jimmy  
Smith, Jo  
Smith, Mark  
Spann, Janice N.  
Squeri, Elaine G.  
Stang, Mirni  
Steffens, Janet  
Stephenson, Barbara  
Stevenson, Maxine

Stone, Robert  
Stout, David  
Strubbe, Susan  
Stuckey, Ellen  
Sullivan, Melinda B.  
Swofford, Adair

**T**

Tabbita, Phillip A.  
Taliaferro, Peggy  
Teasley, Luke  
Thomas, Kathy  
Tignor, Beatrice  
Torrescano, Adolfo  
Tyler, Wendy

**U**

Uvin, Johan

**V**

Valentine, Tom  
Van Moorhem, Julie

**W**

Wall, Pam  
Walsh, Daniel  
Ward, Cheryl D.  
Ward, Rex  
Washburn, James  
Westberry, Susan  
Whitaker, Patricia  
White, Randall C.  
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### *Focus of the Conference*

The most important element of planning a conference involves deciding its focus or theme. Not only will deciding a focus for your conference speed decision making later in the planning process, it will also insure the material covered will be appropriate. When priorities are clear, decisions are easier to make. If you do not know what objectives your event should accomplish, it may not accomplish anything. To be effective and to be attractive to participants, the conference must deal with issues or address needs which are important enough for your audience to invest their time and their dollars. Once you have identified the focus, be prepared to explain it in early conference brochures and information.

A quick survey will help determine current attitudes and needs. Surveying members of related associations and organizations can give you the type of information you need to design an educational meeting. Keeping informed about current legislative and regulatory changes will also assist in determining content. Furthermore, calling and corresponding with funding sources can give you further direction, since priorities can be discussed with those most closely related to the topic.

Be sure to check "acceptable" conference subjects when inviting state or federal employees. Also, some professionals require a very specific list of objectives and goals prior to registration.

### *Coordination*

Conference coordination is critical in that you must be certain that adequate skills will be available and timelines are drawn up. Coordination requires a sense of detail and marketing from those involved. Cooperation and an ability to collaborate with associates who have widely varying agendas of their own is essential.

Coordination can often be done by those actually involved with the program areas as long as they have the assistance of those skilled in conference planning and implementation. If possible make arrangements with a non-profit

organization, such as a university, to assist with logistics. They will be able to save you time and may even be able to generate money to defray the cost of publishing conference proceedings. In many institutions, seed money is not required. Also, their participation could be a measure of support when the organization or the institution is already involved with the subject area.

Most non-profits will charge indirect costs to cover their administrative expenses. They may also need to allocate personnel time for brochure design or registration assistance. Even with these expenses, it would be to the advantage of the conference to identify institutions who can take care of these services and enable the committee to devote greater time to concentrating on the program agenda. In short, let those whose expertise in conference planning plan the logistics of the conference and those whose expertise is in the content areas plan the program. Don't worry about added expenses. You will probably receive more registrations with happier participants and even generate more funds than if doing it yourself.

An element of regional conference coordination which works well and gives a sense of ownership for the conference, is the identification of a coordinator in each state with whom conference planners can work. This state coordinator can identify the important people and organizations for you to contact and even mail conference brochures from their lists. They not only provide leadership within their states, but also serve to garner support for your event. When utilized, state coordinators should receive appropriate recognition and any financial support possible such as a free lodging during the conference and waived registration fees. The use of state coordinators will make your conference truly regional.

Conference coordination seems to be most productive when specific jobs or tasks are given to the regional coordinators. Responsibilities for important parts of the conference being shared with others usually results in a better program and a stronger sense of ownership and thus success.

### ***Audience***

Once you have identified your focus or theme, the next job is to identify your audience. If this is an association

annual meeting, this task is simplified but even then you should think beyond the borders of your membership lists.

Be creative as you define the mailing list. Think of supporting organizations or those who share a similar concern. Think of those who depend upon your subject area. Think of those who directly and indirectly affect the subject through rules, regulations, or dollar appropriations. And then, of course, think of all your close family friends, relatives and those you can "strong-arm" if necessary. (Be sure to put your own name on the mailing list so you can judge the mailing time of brochures.)

### ***Program***

The actual program is probably the component that will sell your conference or influence people to attend. Once you have identified both your focus and your audience, you must decide who and what will best meet their needs, and best meet the expectations you have for the event.

Top-name speakers are usually essential. The number of top-names you ask to attend will depend upon the format that you select. For example, if you decide to use a standard conference with general sessions and break-outs, you will need a greater number of top speakers. People want to hear information from those they consider to be "in the know". Unfortunately, these people are not always the most knowledgeable, so all too often your task becomes slipping the real authorities in with the recognized names. On the other hand, if you are using a work-shop format as the key component, you can use fewer recognized names and provide greater in-depth learning experiences. People like to leave a conference or meeting with the feeling that they have learned something they can implement when they return home.

The *format* will depend to some extent upon the current field of the subject you have chosen and the general levels of expertise that have arisen in that field. In areas where there is a long standing body of knowledge and techniques, a general conference format that will generate ideas is the best choice. In areas where the strategies are still developing, a context to provide common understanding followed by in-depth learning seems to work best. The current trend seems to be away from the general format and into

the more concentrated one. Round-table discussions and activities that allow and encourage discussion and interaction among participants are also very effective, and stimulate networking, ideas and information-sharing.

Another consideration as the program is being designed, is to select the convenors of each session to maximize participation. They should be knowledgeable in the conference topic and be able to provide the expertise participants need. They can serve as an added attraction particularly if the event is an interactive one.

### ***Supporting Organizations***

The use of supporting organizations or associations is important for a number of reasons. First, they lend credibility to the activity. Also, they can provide possible attendees and promotional assistance if they will mail brochures to their members or share their mailing list with you.

Too many supporting groups can be difficult to organize and lead, however. You may find yourself in the situation in which the program or activities are being dictated by the support folks. Avoid that if possible. Since every organization has its pet speaker, you may want to develop your program before you request the assistance of supporting organizations.

### ***Promotion and Attendance***

A good brochure can "sell" a conference. Be sure your conference brochure projects the image you want to get across. Take time to think through content. Include the "tentative" conference agenda, the goals, the logistics such as hotel arrangements, and registration information. Do not put too much information in a brochure. Allow the pages to be pleasing and not a jumble to the eye. Provide enough information to invite interest yet not bore. Decide upon a format very carefully; then, be consistent throughout. Be creative here. Save old brochures that have appealed to you and then use similar formats. If you are working closely with good desktop publishers or typesetters, be sure to give them plenty of time to create, and as the brochure takes shape, to catch errors.

A date saver card to announce the conference should be mailed at least nine months prior to the conference date. The

full brochure should be in their hands three months prior. If you can establish dates a year or even two years in advance you are even better off. Then folks can save the dates and await brochures.

In addition to mailing brochures to potential conference participants, think about all the organizations who publish newsletters with a focus similar to your conference. Mail them a news release or an explanation and a copy of your brochure, and ask them to note the dates and topic in the next newsletter. There are a vast number of organizations who produce newsletters, and most will be happy to include conference information. In fact, all of your supporting organizations will probably be happy to help in this area.

### ***Mailing Lists***

Your mailing list is your conference, so treat it with care. Update and add to it frequently. Be sure you are aware of all the new post office regulations before you even begin the design of the brochure. Check the information (zip codes) that will be needed and the most effective way to mail.

Depending upon your paper selection, it may be easier to use an ink-jet system for address labels eliminating the need for labor to adhere labels. (Glossy paper will not take ink-jet.)

### ***Lodging and Food***

No decision has more potential to make or break the conference than your decision concerning conference lodging and how to handle food. People like a nice room and good food. If you begin an event with inadequate food or dirty rooms, you will have complaints the entire conference and hear about it for years.

Try to select a setting that meets the needs of the conference program. Sometimes a university setting in which serious learning can take place is the best. Other times a hotel setting is more appropriate. The hotel should be cooperative and willing to be extremely flexible. Watch for charges that you did not anticipate such as room set-up fees. If forced with a decision, the quality of the meeting space should take precedence.

Sleeping rooms and the numbers blocked become important when you must provide rooms for speakers and members of the conference committee. You should be able to negotiate one room per 50 room nights minimum. Try to do better and get a suite included at no charge. If you are able to direct bill part of the lodging try to get lower rates for those rooms also. Since direct billed rooms are sure money for the hotel, you should be able to get a break. Also, check hotel surcharges on telephone calls conference participants make. See if it is possible to waive the charges if you are negotiating for a large group of people. If not, let conference participants know about the charges (you want to try to avoid surprises when your people get their bills), and be sure to share the location of pay phones with your group. Another consideration with the hotel, is parking. No one likes to pay parking when they are already paying large registration fees and hotel bills. Try to negotiate free parking into the hotel contract.

Meeting space prices are calculated different ways. Usually if you have enough catering functions, there will be no meeting charge. However, this is not always the case. Some hotels will want to negotiate on a percentage basis. This can be dangerous for your budget. A flat rate would probably be better for you. You must weigh each offer carefully and decide what your attendance can afford. If adding a few extra meals can eliminate the meeting charge, that would be preferable to a charge higher than the extra uneaten meals.

Food is the second key ingredient. Make sure that it is plentiful or at least looks that way. Breaks should most often be placed near or in exhibit areas if you are having them. This guarantees that folks will walk around the exhibit areas and make the exhibitors happy. Instead of making elaborate suggestions to catering, let the chef make recommendations to you. He/she knows the food business and what menus result in the fewest complaints.

When giving numbers to catering, try to estimate lower for opening and closing events. These usually have lower attendance rates than other conference events. Estimate low for continental breakfasts also. For all other meal events give catering numbers closer to the true numbers. Remember that catering will provide at least 5% more meals, so you can

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always get more food if more people than you were expecting show up. On the other hand, when fewer than expected show, you have to pay for meals requested but not eaten. Using closing coupons or vouchers is another way to help calculate closing meal events. A suggestion for increasing the numbers is to have an awards ceremony at the last function.

### ***Exhibitors***

Exhibitors are often very important to conferences. Including exhibitors in the overall conference program offers attendees an opportunity to see the latest equipment and curriculum items and even to receive some free samples. Including them offers companies potential sales and an opportunity to showcase their wares. And finally it offers the conference committee an opportunity to off-set some costs through exhibitor fees and thus reduce the amount charged for registration fees. Exhibitor fees will vary based upon the type of space and the equipment (pipes and drapes) provided. Be careful about providing too much. You can be "stuck" with a large exposition bill with only 20-25 exhibitors. The quality of the presentation is the important element here. You will need to decide what will work best for your conference.

Be sure and include exhibitors in conference activities. Give them a free luncheon and continental breakfast. Many will have door prize give-aways which are attractive to attendees.

### ***Doorprizes***

Giving away doorprizes to conference participants is, of course, optional. Sometimes it works well and other times not so well. Here you must know your audience. Use doorprizes at the end of the conference to hold attendees or use them on a daily basis to ensure attendance in the exhibit hall.

If the conference is regional, you might want to ask each state to bring an article representative of their state for doorprizes. This will work well as long as all prizes are of equal value.

Good luck!