This handbook, which is one in a series of handbooks designed to help tech prep practitioners replicate successful materials, projects, or programs that have been developed by Partnership for Academic and Career Education (PACE) consortium members, uses the PACE publication "Tech Prep News" to illustrate the process of developing a tech prep consortium newsletter. The introduction contains background information on the PACE consortium. Discussed next are the history of the "Tech Prep News" and its purpose, regular features, and style. Presented next are answers to the following questions about tech prep newsletters: why consortia should publish them, what they should include, who should receive them, how often they should be published, and the steps in the publication process. Concluding the handbook are tips for producing a successful tech prep newsletter (tips regarding style, balanced coverage, visual aspects, and consortium authors) and tips for new consortia initiating the process of publishing a newsletter. Appendixes constituting approximately 50% of this document include the December 1988 issue of the PACE newsletter and the Fall 1993 issue of the "Tech Prep News." (MN)
PACE

"How To"

Handbooks for

Tech Prep

The

Tech Prep

News

by

Anita J. Turlington
Dissemination Coordinator
Partnership for Academic and Career Education (PACE)
P.O. Box 587, Highway 76
Pendleton, SC 29670
803•646•8361, extension 2107

October 1994

This material was produced with grant funds awarded to PACE/Tri-County Technical College by the U.S. Department of Education. The opinions and information presented herein do not necessarily reflect the positions or policies of the United States Department of Education, and no official endorsement should be inferred.
PACE "How-To" Handbooks: The Tech Prep News

Table of Contents

Introduction .................................................................................................................. 1
The PACE Tech Prep News ....................................................................................... 2
Questions and Answers about Tech Prep News ...................................................... 4
Tips for Producing a Successful Tech Prep Newsletter ............................................ 6
Tips for New Consortia ............................................................................................. 7

Appendices

Appendix A—in PACE Newsletter
Appendix B—Current Issue of Tech Prep News
PACE "How-To Handbooks: The Tech Prep News"

Introduction

PACE "How-To" Handbooks are developed through funding by one of nine model Tech Prep Demonstration grants awarded by the U.S. Department of Education. The two-year grant provides funds for specific dissemination and technical assistance activities. The official name of the federal program through which the grant was awarded is "U.S. Department of Education Demonstration Projects for the Integration of Vocational and Academic Learning Program (Model Tech Prep Education Projects)." The grant is administered locally through Tri-County Technical College in Pendleton, SC.

The handbooks are intended for Tech Prep practitioners to use in order to replicate successful materials, projects or programs that have been developed by PACE Consortium members.

PACE (The Partnership for Academic and Career Education), established in 1987, is a business and education consortium involving the seven school districts of Anderson, Oconee and Pickens counties; local businesses and industries; the Anderson County and Oconee County Business and Education Partnerships; Tri-County Technical College; Clemson University/College of Education; the Career and Technology Center; and the National Dropout Prevention Center at Clemson University. A coordinating board provides leadership for implementing Tech Prep programs in the 16 high schools, 4 career centers, and 1 technical college in the PACE Consortium service area. A small administrative staff, housed on the campus of Tri-County Technical College, provides assistance and support to all participating schools.

The Tech Prep News, first published in March 1988 as in PACE, is the newsletter produced quarterly by the PACE Consortium. In the six years of its publication history, the News has proven to be an effective communication tool for the diverse partners in the Consortium. This handbook will first describe the purpose and philosophy of the PACE Tech Prep News; it will then present a typical edition of the newsletter and answer the following questions:
Why should a Tech Prep consortium publish a newsletter?

What should be included in a consortium newsletter?

How often should a newsletter be published?

Who should receive the newsletter?

What process can be used to produce a newsletter similar to Tech PrepNews?

Note: This handbook assumes familiarity with the basic concepts of newsletter writing, layout, and production. This kind of primary information will not be covered. For assistance with the basics of newsletter publication, refer to another source.
The PACE Tech Prep News

The PACE newsletter now called **Tech Prep News** began in March 1988 as in PACE (Appendix A of this handbook). After only three issues, the decision was made to change the name of the newsletter in order to reflect an emphasis on the Tech Prep program as it was developing in consortium schools instead of on the consortium itself. The purpose of the newsletter is to

- highlight successful practices in consortium schools (i.e. K-14);
- update practitioners on consortium-wide activities;
- inform teachers and counselors about state and national trends and facts that will affect them;
- present information on helpful resources and training opportunities;
- update readers on current information about the changing workplace and "hot" careers (particularly mid-level technology careers).

The philosophy of the **News** is to accomplish these objectives in a format that is visually pleasing and achieves balanced representation of the partnering school districts and college in each issue.

Generally, the current issues of **Tech Prep News** are 6-8 pages long. The articles highlight successful activities and programs in consortium school districts and at Tri-County Technical College. Articles are most frequently written by consortium staff but may be contributed by school staff, business partners, or students. Also included in a typical newsletter is information on resources available in the consortium office; training opportunities; recognition given to the consortium, schools or individuals; updates on consortium activities and publications; and facts and figures on national and local trends.

Regular features in **Tech Prep News** include the following:

- "Meet the Board" profiles a different member of the PACE Coordinating Board in each issue;
- "Counselors Corner" presents information on local programs of special interest to guidance counselors;
- "PACE Updatos provide newsbriefs on new publications, grants, etc. from the
consortium office;

- "Tech Prep Facts and Figures" presents interesting and relevant statistics and quotes on workplace and education trends;

- "Career Profile" profiles a graduate of a local program currently employed in a mid-level technology career.

Appendix B of this handbook contains a current issue of Tech Prep News.

A note on style:

The News is designed to be accessible to a wide range of readers. Therefore, the following style "rules of thumb" are used by the writers and editors:

- The tone of the articles is kept informal, friendly, and conversational;

- Articles are brief, with names and telephone numbers of contact people provided for readers who want more information;

- Headlines are catchy (without being too "cute").
Questions and Answers About Tech Prep News

Why should a Tech Prep consortium publish a newsletter?

One of the most challenging aspects of working in partnership with diverse educational institutions, community agencies and business and industry representatives is that of good communication. In order for all partners to be well-informed about consortium activities and successes, some type of regular publication is needed. In addition, a publication of this type will bolster the idea that partners are working as a team and will reinforce the consortium's sense of identity. Highlighting successful practices and recognition received by schools and individuals will also encourage partners to continue to work together, and it will help to spark ideas for future innovations. Finally, a newsletter provides an excellent opportunity for marketing the various aspects of Tech Prep, both internally (within a school or business) and externally.

What should be included in a consortium newsletter?

Some suggested topics would include the following:

- Information on exemplary applied academics courses;
- Information on opportunities for training in teaching applied academics courses;
- Examples of activities that stress curriculum integration or career awareness;
- Examples of school-to-work transition programs;
- Examples of postsecondary Tech Prep-related activities;
- Information on specific mid-level technology careers;
- Information on innovative teaching methodologies (e.g. cooperative learning, active learning, authentic assessment);
- Updates on grant opportunities and helpful resources for teachers and counselors;
- Updates on consortium-level activities and publications;
- Descriptions of awards and other recognition given to individuals or schools;
- Highlights of people who are important to the consortium.
How often should a newsletter be published?

There really is no set rule for how often a consortium should publish a newsletter—it will probably depend on the complexity of the publication, budget and the availability of staff and other resources. A relatively simple publication without photographs produced on a desktop publishing system could be done fairly often (bimonthly or quarterly). A more complex publication, however, typeset with color and photographs, is a much more time-consuming undertaking. The best rule to follow is this: Start small. Don't make your publication so complex that it is difficult to maintain and consumes all of your energy.

Who should receive the newsletter?

To take advantage of the potential of a newsletter to enhance communication between consortium partners, it is a good idea to send copies to everyone who might be interested or involved. That will include teachers, counselors, administrators, and district personnel for every member institution. In addition, business and industry representatives should receive copies.

What process can be used to produce a newsletter similar to Tech Prep News?

The following steps outline the process used to produce Tech Prep News.

1. PACE staff members make notes throughout the school year on ideas for newsletter articles based on conversations with teachers and counselors, articles read, activities they participate in, etc.

2. Approximately 1 month to 6 weeks before the publication date for the next Tech Prep News, the editor sends out a memo to staff members asking for articles to be delivered to him in draft form within 2-3 weeks. He may also at this time solicit articles from other authors in the consortium. During this 2-3 week period, photographs are taken to accompany some articles.

3. As articles come in to the editor, they are edited for style, correctness and clarity. Captions are written for photographs.

4. Once articles are in correct draft form, they are given (on diskette) to the PACE graphic artist to be formatted in desktop publishing. Some articles (e.g. "Meet the Board") are sent to individuals for approval.

5. After the newsletter is laid out on the computer, a draft copy is proofread by the
newsletter editor for accuracy.

6. Once any necessary changes have been made and errors corrected, a clean copy of the newsletter is prepared for offset printing.

7. Once copies are printed, consortium office clerical staff members collate, staple, and mail/distribute copies of the newsletter.
Tips for Producing a Successful Tech Prep Newsletter

1. Style

Remember that teachers, counselors, administrators and business people are all busy. Unless a publication "grabs" them right away, it is likely to end up in the wastebasket. Articles need to be written with this idea in mind. The first paragraph of each article needs to be interesting (funny, startling, dramatic, etc.) and needs to have most of the relevant information in it. Headlines and photo captions should be brief and accurate.

2. Balanced coverage

Ideally, all school districts in a consortium should be represented in each edition of the newsletter. If that is not possible, all school districts should certainly be represented at least once within the publication year. This can be done explicitly, with a regular column devoted to news from each district, or it can be done more subtly. This balance will make a tremendous difference in individuals' interest in reading the newsletter and in "buy in" of consortium members.

3. Visual aspects

It is important that a newsletter sent out to all consortium members look as professional as possible. This means that the visual aspect of the newsletter is critical. Use of color is nice, but it is not necessary. Some use of graphics, though, is important, and photographs make a big difference. Involving a graphic artist for attractive and readable layout of the articles is a good idea, or there are now numerous computer software programs that offer newsletter templates. A good way to involve high school partners might be to access their graphic communications programs for help with this aspect of your newsletter.

4. Consortium authors

If you have a small staff, or if you really want to involve consortium partners actively in newsletter production, this can be the answer. You can recruit consortium authors from each partner site to solicit news and even write articles. The only real drawback to this approach is the difficulty in coordinating and organizing numerous authors at different sites. This approach, while it takes pressure off one person or a few people to produce all necessary articles, will require a process for tracking, receiving and editing articles. And, of course, one person will still need to be responsible for moving the newsletter through the publication process.
**Tips for New Consortia**

New Tech Prep consortia trying to produce a newsletter as part of their early development processes face some unique challenges. Here are some suggestions for getting started:

1. Use other newsletters as models—not only Tech Prep newsletters, but all kinds. Collect as many as possible that have ideas and formats that you like, and modify those ideas to suit your needs. Arrange to be placed on mailing lists so that you will receive other Tech Prep newsletters, and don't be hesitant to ask permission to use articles, cartoons, etc. from other newsletters.

2. When you find out about exemplary programs in other Tech Prep consortia, feature those in your newsletter as well as exemplary programs from your own consortium. Publishing this kind of information in your newsletter will provide a resource for practitioners in your consortium to get additional technical assistance and additional ideas.

3. Identify a person from each partner site or school district to be responsible for getting either news or a completed article to the newsletter editor. This process will not only reap the benefits of involving partner sites in producing a consortium-wide publication, but also take some pressure off consortium staff.

4. As a new consortium, you need to acquaint readers with key players in your Tech Prep initiative, so it's a good idea to include a regular feature that will introduce board members, legislators, administrators, business leaders, etc. to the consortium.

5. A good way to strengthen ties with your business partners is to include a regular feature on careers that are in demand locally. You can use your business partners as resources for this information.

6. Remember that you want to give your teachers and counselors as many resources as possible, not only to strengthen their "buy-in" to the Tech Prep initiative, but also to help them get the message to students. A good way to do this in the newsletter is to collect helpful facts and statistics and publish them in an "updates" column.
Appendix A
in PACE Newsletter
Emphasis on Tech Prep intensifies throughout country

From Portland, Oregon, to Washington, D.C., to Anderson, Oconee, and Pickens counties in South Carolina, the Tech-Prep/Associate-Degree Program is broadening its boundaries as high schools and colleges around the country join to improve educational opportunities for students of technology.

In several states, the program has been mandated by state departments of education. Responding to the importance of the program in his state, Rep. William D. Ford of Michigan is sponsoring a Tech-Prep Bill, hopefully to be heard in the next session of the House of Representatives. (See accompanying story.)

Schools across the nation are adapting the program’s objectives to their individual needs. Some are focusing on specific areas of technology and developing sophisticated articulation plans between high schools and colleges. Others are broadening the concept to include an enhanced curriculum during all four years of high school rather than just the last two, as first presented in the 2+2 plan. Others are involved in several areas of technology.

However varied the programs around the country become, educators are focusing on the goals of tech prep: to motivate “general” students to stay in school and continue their education; to better prepare students for entry into occupational degree programs at two-year colleges; to help students understand today’s career fields; and to prepare students to successfully enter the workforce. The former “neglected majority,” as Dr. Dale Parnell calls America’s “general track,” is the target group for tech prep.

High school curriculum work in tech prep concentrates on enhanced math, science, and English courses so that no gaps exist between high school and college programs and less remediation is required. Students will be provided courses that offer technical applications so they will recognize a correlation between what they are studying and their future occupation. Relevancy is a key in revising and enhancing curricula.

Objectives adopted locally by the PACE staff and the

Congress to hear Tech-Prep Bill

Rep. William D. Ford of Michigan, the original author of a Tech-Prep Bill, has joined with Sen. Claiborne Pell of Rhode Island, chairman of the Senate Education Subcommittee, to introduce the $200 million bill to Congress after it convenes in January.

The U.S. Department of Education calls the bill “a bold step long overdue” toward the system of vocational/technical education needed to meet a global competition.”

The Ford-Pell Tech-Prep Bill authorizes demonstration grants to technology education partnerships between local educational agencies and community colleges for the development of programs designed to provide a tech-prep education leading to an associate degree.

Based on a five-year plan, the grant would fully fund the first year of planning. In the four program years, the federal share of the costs of the project would cover 80, 70, 60, and 50 percent successively. The declining scale of federal support is intended to narrow the field of applicants to schools and colleges serious about a tech-prep commitment, said a spokesman for Rep. Ford.

The House bill is H.R. 5290, and its companion in the Senate is S. 2883. Educators and others interested in the bill are highly encouraged to contact their local Congressmen to urge their support of the bill.
In the midst of another busy school year, it is gratifying to see the progress that is occurring in the development of our Tech-Prep Program. Thanks to strong cooperation among the tri-county school districts, local industries and Tri-County Technical College, substantive changes are beginning to take place in the curricula of our high schools. These changes will ultimately have significant implications for those students in the general education track who often lack adequate career direction and preparation. The prospect of a more relevant and focused program for these students is exciting.

There is, of course, a tremendous amount of work yet to be done. Curriculum change is a lengthy and arduous process. In addition, the development of a career guidance program, which will be essential to the building of student commitment to a tech-prep academic track, has only just begun. But there is no doubt that we are on the move. Under the enthusiastic leadership of Diana Walter and Fay Brown we are building a program that will not only better meet the academic and career needs of our students but eventually the workforce needs of local businesses as well.

Finally, what we are doing is unique in secondary education in South Carolina. We should all be proud to be a part of this important effort.

Emphasis on Tech Prep, continued

Coordinating Board include: PREParing students for TECHNOlogies by incorporating applications from the world of work into general level math, English, and science courses; emphasizing an understanding of careers which require postsecondary training; promoting the importance of completing high school, encouraging the master of basic skills in math, science, and English; eliminating gaps in competency and avoiding remediation at the college level; and providing opportunities for exemption credit for students enrolled in high school vocational and occupational courses.

Excitement is building in schools implementing tech prep across the United States. For far too long, a majority of students have been unfocused, unguided, and unmotivated. Educators, in many instances, have been just as frustrated as students. But with tech prep, an opportunity to focus on the “neglected majority” is providing innovative educators a chance to put those students in the minority.

PACE Coordinating Board honors Carol Anderson

Carol Anderson, retired founding executive director of the Partnership for Academic and Career Education, was honored Sept. 23 by the Coordinating Board at a luncheon at Liberty Hall in Pendleton.

A native of Belton, Mrs. Anderson retired after a 31-year career in education, 16 years as a classroom teacher at Palmetto High School and 15 years at Tri-County Technical College as part of the faculty and administrative staff.

Mrs. Anderson was named executive director of PACE in October 1987. She is the author of four grants which were secured to fund PACE and the tech-prep initiative in Anderson, Oconee, and Pickens Counties.

Commenting on her early retirement, Mrs. Anderson emphasized that she is not permanently retired, only retired from state work. She plans to join Real Estate Associates in Anderson as a sales agent in January.

Diana Walter named PACE Executive Director

Diana Walter began duties Oct. 1 as the new executive director of PACE. Mrs. Walter was formerly Coordinator of Marketing and Educational Support Projects at Tri-County Technical College.

A native of Syracuse, New York, Mrs. Walter has served in various staff positions at the College since 1980. She holds a master’s degree in education with an emphasis in guidance and psychological services from Springfield College in Springfield, Mass. Her bachelor’s degree in psychology is from Elmira College in Elmira, N.Y.

Mrs. Walter’s background in the educational field includes extensive experience in counseling, teaching, and administration. She currently serves as president of the Tri-County Technical College Education Association and is on the board of directors of the Literacy Association of Anderson County.
"Not just another boring course!"

by Fay Brown

"Where's a student who wouldn't normally sign up for a physics class?" I ask as I scan the room of 21 energetic high school students, looking for potential interviewees.

"Take your pick," answered Crescent High School science instructor Jim Alverson.

Scattered around the physics lab are students in various stages of experimentation, all having a good time, no one looking bored. These students are not college prep oriented; not a one would have ever signed up for a traditional physics class. But here they are, soaking up laws of physics and actually having fun at the same time.

What has captivated these students? - a new applied physics course, "Principles of Technology." It has grabbed the attention of students and teachers around the country through a "hands-on" approach. Rather than reading about principles from a text, students learn them by "doing" and "seeing." Obviously the technique is working.

"I love it! I really like to experiment," said Crescent senior Roland Sigma. Added sophomore Wayne Miles, "It's the fastest class I have. It goes by too quickly."

Senior Travis Crocker, aspiring auto mechanic, replied, "This course is fun. We do more than just study out of books." Travis indicated that the course had really helped him learn how to do the wiring on cars.

Outside the lab in a regular classroom setting, students study the material to be covered in the lab later in the week. They also see a video which shows how a particular concept is used in an area of work. All the material covered in the course is related to the world of work through the videos, which use real technicians and real equipment, emphasizing the connection between what students are studying and what they might be doing someday on a job.

Even the non-lab classes are more fun than the typical science class, said sophomore Andrea Starks, the lone girl in

Continued on page 4
Crescent High School physics teacher Jim Alverson assists sophomore Wayne Miles with his lab experiment in Principles of Technology.

Principles of Technology at Crescent. "I want to go into electronics," said Andrea, "and in PT we actually get to do the work and see the principles in action instead of just hearing about them. I learn the material better by actually doing," she added.

As the students conduct their lab work, they record data. They answer questions concerning the data, drawing conclusions about what they have observed.

"These students are getting great exposure to physics concepts," said instructor Alverson. "It's really amazing how good their understanding is. They are definitely motivated."

In the fall of '87 at Crescent, the course was barely off the ground. Approval of the school's grant for lab equipment did not come until summer, thereby eliminating inclusion of the course in the previous registration catalog. Lab equipment continued arriving throughout
Technology, continued

the fall. Five students were enrolled in that initial class. By word of mouth last year, news of the class spread among students, and this year’s class is full.

Jim Alverson feels that Principles of Technology is a real success. “In a couple of years, I believe that we will have the potential to fill five or six sections,” said the teacher, who also teaches college prep physics. He feels very strongly that the course should be taught by a physics instructor. “In instances where the course has been most successful, it has been taught by a physics teacher,” he said.

Students at Crescent give the course an A+. “It’s not just another boring class,” said one.

Finished with my interviews, I prepare to depart the lab. I linger for one last look at the students. I behold the excitement. I want the moment to last. Students excited about learning - education at its best!

Tenth-grader Eric Holmes looks forward to Principles of Technology each day and has expressed an interest in enrolling in another physics course while in high school. Here he measures the pulling force of a plunger.

Being the sole female in the PT course doesn’t bother Andrea Starks. recording information from her experiment onto a data table. The information in the table will be used as the student answers questions about findings which resulted from the experiment.
Active Lions Club Promotes Tech Prep at Tamassee-Salem

The state award-winning Salem Lions Club has chosen Tech Prep as an initiative it will promote at Tamassee-Salem High School, where the club has shown outstanding leadership in education. The group was recognized by Governor Carroll Campbell in Columbia last spring for its volunteer work at the school.

Last year the club focused on 11 different projects at Tamassee-Salem, according to Phillip Bowers, chairman of the club's educational committee. Sam Bass, school principal, said, "The Salem Lions Club is very important in the life of our school. We just couldn't do a lot of things without their help, both physical and financial."

The club's emphasis has been on incentive projects. According to Bowers, the club recognizes achievement in many areas, not just academic. Students are rewarded in a weekly assembly sponsored by the club.

Bowers first learned of the Tech-Prep/Associate Degree Program in October 1987 when he heard Dr. Dale Parnell, originator of the project, speak at a kick-off banquet for Tech Prep. Bowers said, "I believe there are many students at Tamassee-Salem who could greatly benefit from a tech-prep curriculum at the school. Our committee wants to do all it can to educate teachers, students, and parents about the benefits of this project and help get it implemented."

Diana Walter and Fay Brown of the PACE staff manned an exhibit at the school's Open House November 17 to help explain the project and answer questions.

Communication course examined by state committee

Applied Communication, a comprehensive set of learning materials designed to help students develop and refine career-related communications skills, is being examined by a statewide committee of English teachers.

The educators are working to expand the material to include a literature unit, developing the curriculum into a 12th-grade credit English course, according to Jim Horton of the State Vocational Education Office.

Applied Communication was developed by the Agency for Instructional Technology in Bloomington, Ind. The learning materials are divided into 15 instructional modules and include a total of 150 lessons. The modules can be used to broaden existing communication, language arts, or English courses or can be used singly.

Units include: Communicating in the Workplace; Gathering and Using Information in the Workplace; Using Problem-Solving Strategies; Starting a New Job; Communicating with Co-Workers; Participating in Groups; Following and Giving Directions; Communicating with Supervisors; Presenting Your Point of View; Communicating with Customers; Making and Responding to Requests; Communicating to Solve Interpersonal Conflicts; Evaluating Performance; Upgrading, Retraining and Changing Jobs; and Improving the Quality of Communication.

Instructional materials include a teacher's kit with overheads and activity masters; a student worktext; and a video for each unit.

The materials for the first seven units have been completed and are in the PACE office available for review by district personnel.

According to Horton, the course will be available to all schools in the state by the fall of 1990. Leslie Owens, language arts coordinator for Pickens County, serves on the state committee reviewing the course.

In South Carolina, the course must also include the literature component. The curriculum will be completed by summer and will be piloted in Oconee and Cherokee County Schools during the 1989-90 school year.
PACE staff developing counseling committee

The PACE staff is in the process of formulating a counseling committee composed of guidance counselors who will work as advisors for the Tech-Prep/Associate Degree Program.

Members of the committee will help develop career materials and activities, help plan and oversee communication strategies for counselors in the seven local school districts, assist in planning an initial orientation session for area counselors, and provide input into development of promotional materials for high school students and parents.

In addition, the committee will help develop tech-prep guidance materials for counselors which will be easy to use and unique to each school situation, assist in planning registration catalogs, and advise the PACE staff in the evaluation of tech prep in individual schools.

A representative group of committee members will be chosen from high schools, middle schools, vocational centers and two-year colleges.

The committee will be composed of counselors from high schools, middle schools, vocational centers, and Tri-County Technical College.

Five new members join Curriculum Committee

Five new members of the PACE Curriculum Oversight Committee were welcomed to the group at the Oct. 13 meeting at Tri-County Technical College.

Joining the 12 original members of the committee were Dr. Jerry Kirkley, director of the Anderson Districts 1 and 2 Vocational Center in Williamston; Buddy Herring, director of secondary education for Oconee County; Wayne Fowler, administrative assistant in Anderson School District 1; George Reed, vocational director at Pendleton High School; and Pat Seawright, interim principal of McDuffie High School.

The members heard reports of curriculum work done during the summer at several schools. Copies of the revised General Math I and II curricula in Pickens County were available for members to view. Information on Applied Communication, an English course to be piloted in South Carolina in 1989-90, was shared with the group by Fay Brown, PACE curriculum coordinator.

Chairman Jeff Radnor presented retiring PACE executive director, Carol Anderson, a certificate of appreciation. He introduced Diana Walter, an employee of Tri-County Technical College since 1980, as the new director.

PACE Grant supervisor to visit

David Arnold, project director for the Fund for the Improvement of Postsecondary Education (FIPSE), U.S. Department of Education, will visit the PACE office Jan. 27, 1989, and will be a guest at a meeting of the PACE Coordinating Board.

Arnold oversees the PACE program as well as several other educational projects funded by FIPSE around the country.

Staff attends annual meeting

Diana Walter and Fay Brown of the PACE staff attended the annual meeting of the program directors of the Fund for the Improvement of Postsecondary Education held in October at the Grand Hyatt in Washington, D.C.

More than 300 administrators of educational programs funded through national grants attended the meeting. The PACE staff members attended various sessions dealing with innovative educational programs. PACE is one of only two tech-prep projects funded by FIPSE in the United States. The other program is at Portland (Oregon) Community College.

Two summer events planned for teachers, counselors

Two popular events sponsored by PACE last summer are in the planning stages for 1989. The Summer Institute and Topics in Mathematics (Math for the Technologies) will again be offered if interest is shown by local teachers and counselors.

During the Summer Institute, participants will learn more about technology in the workplace, career trends toward the year 2000, non-traditional career opportunities for women, and other topics of interest in technology. Tours of local industry and business and through the technology labs at Tri-County Technical College will be included.

The Institute is open to curriculum coordinators, teachers and counselors. Participants will receive 4.5 undergraduate hours (three semester hours) in Psychology 202. The credit can be applied to recertification.

The mathematics course emphasizes technical applications in traditional high school math courses. Participants will share curriculum material to use within their own classes. They will also tour technology labs at the college.

Cost for the Institute will be covered by funds from the Carl Perkins Act. Enrollment will be limited. The math course will be offered at a cost of $80.50 for tuition and $30 for the textbook.

Additional information is available by calling the PACE office. (Phone numbers on page 8 of newsletter.)
By the year 2000...

The body of knowledge will have doubled four times since 1988.

Graduates will have been exposed that year to more information than their grandparents were in a lifetime.

Only about 15% of jobs will require a college education, but nearly all will require job-specific training after high school.

Women's salaries will have grown to within 10% of men's.

Ninety percent of the labor force will work for companies employing fewer than 200 people.

Children born in 2000 will live to be 81 years old on average (83.5 for women and 78.5 for men), compared with 74.9 years for children born in 1986 (78.5 years for women and 71.5 for men).

Minorities will be the majorities in 53 of the 100 largest U.S. cities.

In South Carolina...
Nonfarm employment in South Carolina is expected to increase 29 percent, representing nearly 389,000 workers.

The greatest industrial growth will be in machinery, lumber and wood products, paper and allied products, food and kindred products, and fabricated metal products. Manufacturing will still be a major contributor to South Carolina's economy in 2000.

Service providers (transportation, public utilities, wholesale and retail trade, finance, insurance, real estate, government, and other services) will add over 345,000 jobs over the 1986-2000 period, or almost 90 percent of new jobs).

In South Carolina growth will be in professional, technical, managerial, and sales jobs. These jobs require more education than others and place a premium on higher-level literacy skills (e.g. problem solving, comprehension, creativity).

From The Futurist, November-December 1988, and Palmetto Perspective, South Carolina's People and Jobs in the Year 2000, South Carolina Employment Security Commission.

PACE Board Members

Superintendents
Dr. William Chaiken, chair, Anderson District 4
James Brown, Oconee County
Roger Burnett, Anderson District 2
Dr. Karen Callison, Anderson District 5
Dr. Reginald Christopher, Anderson District 1
Roy Herron, Anderson District 3
Dr. David Sawyer, Pickens County

Business/Industry representatives
Dave Headrick, Michelin Tire Corporation
Jerry Pendley, Gerrish Milliken
Michael Tuckman, Oconee Nuclear Station
T.E. Welborn, Singer Motor Products

Agency representatives
Tom W. Lewis, Tri-County Technical College
Dr. John V. Hamby, National Dropout Prevention Center
Dr. Betty Watkins, ACCtion Consortium

PACE Staff
Diana Walter, executive director
Fay Brown, associate director/curriculum coordinator
Neil Cook, high school liaison
Debra Cummins, secretary

Telephone: 646-8361 • 882-4412 • 225-2250 • 859-7033

in PACE Newsletter
P. O. Box 587
Pendleton, SC 29670
Appendix B
Current Issue of Tech Prep News
"Put away your literature books, class. Today we need some novices," stated Mrs. Mary McAlister, English teacher at Westside High School. Someone walking by this class might wonder what in the world is going on. Westside's Communications for the Technologies and College Prep classes know exactly how to answer that question.

Ryobi Motor Products, Westside's business partner, is continually searching for new ways to improve the products they manufacture for Sears. "An important part of a product," says Tom Magnuder, manager of human resources, "is the instruction manual. Ryobi produces several Craftsman tools for Sears. One of the most popular of these is the Craftsman electric drill." After reviewing the instruction manual of the drill, a group of marketing experts considered revising the manual in order to improve customer satisfaction. The marketing specialists agreed that because of their continuous work with the drill, they needed some novices to evaluate the drill. Those novices would give a much better evaluation of the manual than the experts because of their lack of familiarity with the product.

Ryobi approached Westside for assistance. When Mrs. McAlister learned of Ryobi's request to have students review the manual, she was delighted her students would participate in a real life exercise. "It wasn't designed by a teacher. It was a way our students could provide a valuable service to the business world," said Mrs. McAlister. Teachers were also thrilled to learn that Ryobi would donate $500 for any classroom equipment that Westside needed. Freshmen, sophomores, and seniors participated and most found the exercise to be a healthy break from routine study. Tammy Whitten, Senior Communications student, said, "Everyone took the activity seriously and willingly participated."

Problems associated with the manual ranged from small print to an unclear explanation of how to hold the drill. Students also reported that there was a lack of consistency in the terminology and there were several words that needed to be defined. A group of educators from Duluth, Minnesota, were visiting Westside to learn more about the Tech Prep program and to observe the Communications for the Technologies courses. One of their main questions involved the interaction of Westside's business partner. Fortunately, the drill exercise was being conducted on the day of their visit, which provided sound proof of the benefits of a business partnership. This is only one example of the benefits associated with a business partner. Also, Ryobi awarded scholarships in the amount of $500 each to three Westside students at the Awards Day Ceremony in May.
Teacher Training

1993 PACE Summer Institute: Seven Years and Counting

by Rick Murphy

Where else can you receive teacher recertification credit by learning to dance the Electric Slide; tour an industrial plant which produces anti-lock braking systems; and learn how to raise your students' self-esteem, all in two weeks!? Where else but at the PACE Summer Institute!

Since PACE began sponsorship of its summer institute over seven years ago, some of the activities have changed in order to improve the quality of the program, which is designed to increase teachers' and counselors' awareness of technical career opportunities in the tri-county area. But the goal of all of the activities has remained the same: to assist teachers and counselors in meeting the needs of their students, who are faced with a constantly changing workplace. Through the PACE Summer Institute, educators have been able to witness firsthand the changes taking place in our community.

One constant component of each summer institute is its close ties with area business and industry partners. Each year, summer institute participants have the opportunity to hear and visit with representatives from several different local industries, as well as to tour the plant operations. Industry presentations, usually given by mid-level technology employees, include such subjects as Total Quality Management and self-directed work teams. Participants use this information to develop classroom-based projects incorporating the new information and concepts which they have learned through the institute. The eighth annual summer institute, scheduled for June 1994, has already been funded through a South Carolina Department of Education Sex Equity grant. Additional information will be available through the PACE Office in early spring.

Career Profile

Opportunities in Surface Mount Technology

by Sheme S. Simpson

Many students, aware that promising careers exist in mid-level technology fields, are preparing to pursue positions as technicians and technical specialists. But how many aspire to be surface mount technology process technicians? The PACE Consortium is fortunate to have in its service area the Liberty facility of NCR Corporation's Workstation Products Division, where the company's 700 employees design, develop, and manufacture workstation and small server products for the United States and international markets. Numbered among the NCR employees is Robert J. Selch, a surface process mount technician with 20 years of technical experience in this area.

Mr. Selch earned his associate degree in electronics engineering technology from Gulf Coast Community College in Panama City, Florida. A native New Yorker, he has been employed for five years in his present position at NCR, where he supervises an area with seven automated surface mount machines, used to place components on circuit boards. His job responsibilities include training operators, performing preventive maintenance, handling repair problems, and making minor program changes on the machines when necessary. His knowledge in both the mechanical and electrical fields is important in his day-to-day duties. In addition, he works with his operators, as well as with the research and development department, where his skills in technology, communication (both oral and written), teamwork, problem solving, and creative thinking all come into focus.

Mr. Selch finds both excitement and reward in striving to meet daily production deadlines, noting that job stress is usually related to production deadlines, as is the case in any production facility.

A person beginning employment as a surface mount technology process technician could earn between $11 and $11.50 per hour, for an annual salary of almost $24,000. Anyone interested in such a career should have an associate degree in electronics engineering technology or the equivalent military experience. Electromechanical skills are also important, with an emphasis on mechanical ability, according to NCR's Mr. Selch.

(The PACE staff thanks Mr. Selch for his help in providing information for this article.)
A Challenge to Home Economic Teachers: Ideas For Integration
(Yes, There is a Place for Home Economics in Tech Prep!)

by Donna Smith, Home Economics Teacher, Liberty High School

The following vision statement for the future of home economics has been agreed upon by professional leaders from 38 states: Vocational home economics education empowers individuals and families across the life span to manage the challenges of living and working in a diverse global society. The relationship between work and family is our unique focus.

Match this vision with Foundation Skills for Workplace Know-How from the Secretary's Commission on Achieving Necessary Skills (SCANS) and with basic academic skills, and the result is a blueprint for integrating home economics in the Tech Prep curriculum. Competencies at the core of workplace readiness—problem solving, teamwork, and self-management—form the basis for much of the home economics curriculum. These workplace readiness skills need to be emphasized.

Several possibilities would enhance the role of home economics in comprehensive Tech Prep programs. One approach would be to operate each course like a business, stressing management, safety, business etiquette, teamwork, and personal responsibility. Home economics concepts taught within this framework complement and reinforce work-related concepts introduced in other classes.

The interconnection between work and family cannot be dismissed. Balancing work and family life is crucial in our society to both employee and employer. Home economics must emphasize interdependence of work and family, managerial and relationship skills, mental health of the family, acceptance of responsibilities, and individual development.

Utilizing science materials to supplement the study of foods and nutrition is perhaps the most common integration of home economics and academics since nutrition itself is an applied science. But science is not the only concept to include. Workplace readiness skills are a natural fit in foods and nutrition courses. Home economics instructors must not fail to have students make a connection between performance and safety in both workplace and nutrition studies. Food labs also offer ideal situations for teaching time management, financial management, organizational skills, work simplification, and etiquette. In addition, learning about food customs of different cultural groups helps prepare students for experiences in a global society.

A project-oriented approach, often used in teaching clothing and textiles, is in itself a learning experience, as well as a method for teaching suitable business attire, wardrobe management, market analysis, cost factors, planning, procurement, management, and work simplification. Some teachers will claim that they are doing most of these things already. But are they emphasizing to the students the workplace skills that are being developed?

One method of reinforcing what students are learning is to have the students publish a newsletter about their class activities. This practice not only reinforces subject matter and writing skills, but also publicizes the workplace readiness skills being taught in home economics.

Home economics has a strong background of Tech Prep-related teaching strategies. Through the years, the progression has been from basic skills to challenging content through applied academics; from lab and home experiences to hands-on, practical applications; and from group work to cooperative learning. Therefore, home economics teachers already have the expertise for teaching workplace readiness skills. The task remains to ensure that co-workers, administrators, and, most of all, students know that home economics courses are teaching crucial components of Tech Prep.

(The PACE staff thanks Ms. Smith for contributing this article as part of her summer internship program with the consortium office.)
College Activities

Morrison Career Day a Big Success

by Anita Turlington
Postsecondary Tech Prep Coordinator, Tri-County Technical College

May 21, 1993, Clemson, SC. The theme from Jaws was playing in my mind. We were all at our stations and ready...and here they came! Twenty-sixth graders came roaring into the cafeteria. They scattered—some to the photographer, some straight outside to the "big rig," some to the electronics technicians, others to the forester, the travel agent, the model, or the graphic artist. What was going on here?

This organized chaos was Morrison Elementary School's first Career Day. Most Career Day activities in the tri-county area take place in Junior high and high schools, but more and more elementary school teachers and administrators are building in career awareness activities to prepare their students to make better decisions later. Carol Peterson, one of the sixth grade teachers who helped to organize the career day, said, "We've had a wonderful response from parents and others in the Clemson community. People have been willing to give up part of their business day to come and speak to students and answer their questions. A variety of professions were represented," she explained. "We wanted to respond to students' interests and bring in representatives of careers they were interested in, but we also wanted to present a balanced picture for them. Some of the careers they learned about will require a two-year degree, some a bachelor's degree, and some graduate school. Our students are diverse, so we wanted to present a diverse and realistic program."

Morrison sixth graders spent May 20 learning about programs available at B.J. Skelton Career Center. On May 21 they had the opportunity to choose their career areas to learn about, as well as to attend the "career carnival" in the cafeteria. A number of Tri-County faculty and staff participated in the Career Carnival, including Rodney Engram (graphics), Butch Merritt (counseling), Ted Simpkins and Eugene Grant (electronics), and Freddie Morgan (truck driver training). Bud Starnes, an engineer with Duke Power and a Morrison parent, organized the career day with assistance from Anita Turlington, Tech Prep coordinator at Tri-County Technical College.

National Conference

PACE National Workshop: Focus on Practitioner-Based Sharing

by Marcie Rehg

A unique educational event, the PACE National Workshop for Tech Prep Educators, is scheduled for Sunday evening, October 17, through Tuesday noon, October 19, at the Hyatt Regency in Greenville, South Carolina. Co-sponsored by the Partnership for Academic and Career Education (PACE), BellSouth Foundation, and Tri-County Technical College, the conference offers educators an opportunity for the exchange of materials and strategies related to Tech Prep/Youth Apprenticeship programs. "This will be a one-of-a-kind opportunity for participants," states PACE Executive Director Diana Walter. "I think they'll benefit from the practical, workable ideas which our practitioners will share with them. The presenters will be those who have actually developed and implemented their programs in our diverse school settings across the consortium. They'll present their experiences firsthand, including their challenges, successes, outlooks, and goals."

Attendees will include secondary/postsecondary academic and occupational faculty, as well as counselors, Tech Prep coordinators, community college educators, business persons, state-level administrators, and school superintendents. "We have focused on a sharing format in planning our sessions," comments Ms. Walter. The kinds of sessions will include lessons-from-the-field; roundtable discussions; and panel discussions.

The national workshop is made possible through funding support by PACE's U.S. Department of Education demonstration grant and the BellSouth Foundation. Because of this sponsorship, workshop materials are provided at no charge to the participants. The registration fee of $105 covers the costs of food and refreshments during the conference. Registrations are limited and will be accepted in the order received. The registration deadline is Friday, October 8.

(For more information on the workshop, or to receive a copy of the conference brochure, call Kathy Young, PACE administrative assistant, at (803) 646-8361, ext. 2457.)
The PACE Consortium and the BellSouth Foundation presented the 2nd Annual Joint Staff Development Workshop on May 5, 1993, at the Clemson Ramada Inn. Among the sessions attended by industry personnel, career counselors, and PACE staff members was a presentation, "Counseling Today's Students for Tomorrow's Careers." Information discussed included trends in the changing workplace and their impact on careers.

A lively discussion was held on television's tremendous impact on students' career choices. Misguided by the career images represented on television, many students aspire to be professional athletes, musicians, or fashion models—career goals which only a fraction of students will ever attain. During the counseling session an illustration was given showing how TV significantly over-represents workers in professional and high status roles.

The following data from Youth and Society, March 1993, were shared with the attendees:

<table>
<thead>
<tr>
<th>Employee Category</th>
<th>TV Representation (% of Total Workforce)</th>
<th>Actual Representation (% of Total Workforce)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Professionals</td>
<td>20</td>
<td>12</td>
</tr>
<tr>
<td>Blue-Collar Workers</td>
<td>8</td>
<td>42</td>
</tr>
<tr>
<td>Secretaries/Clarks</td>
<td>3</td>
<td>15</td>
</tr>
</tbody>
</table>

Research shows a correlation between TV viewing and the desire for high-status employment. This dramatic relationship indicates that our children grow up with extensive exposure to images of work success that are largely unrelated to work effort.

As teachers, counselors, and parents, we MUST become more proactive in helping our students investigate career fields that realistically address their skills, talents, and interests. The opportunities exist; the stereotypes must be overcome. We must encourage our students to seek realistic career goals in the changing workplace of our geographical region, where mid-level technology career opportunities are growing.

Another important part of the counseling session at the joint staff development workshop was the sharing of a recently developed PACE handout titled Fifty Ways to Increase Students' Understanding of Careers. This handout lists activities and other methods to facilitate students' proactive exploration of career options.

To receive a copy of this new resource or to learn more about research on the connection between TV viewing and career aspirations, contact Sheree S. Simpson in the PACE Office at (803) 646-8361, ext. 2448.

Applied Academics

1993 PT Competition Biggest Ever!

The room was so quiet you could hear an electron drop. The air was thick with tension as team was pitted against team. Teachers, watching, waited nervously for their students to finish...Wait a minute. Does this sound like a fun time? As our students would say...NOT!

Actually, the fourth annual statewide Physics for the Technologies Competition held May 10 at Tri-County Technical College looked anything but tense. Thirteen teams of PT students from all over South Carolina converged on the college to participate in the statewide competition. They worked together to solve problems creatively and then wrote up their results. When they finished, they went on to a "fun physics" competition and a pizza lunch. The results were:

**First place:**
Union High School, Union, SC

**Second place:**
T.L. Hanna High School
Anderson, SC

**Third place:**
Wren High School, Piedmont, SC

Schools participating for the first time included Lugoff-Elgin High School, T.L. Hanna High School, Fort Mill High School, Union High School, and Aiken High School. Tri-County will host the 1994 PT Competition in spring of 1994, and all South Carolina high schools will be contacted to participate. Stay tuned for more information in the next edition of TECH PREP NEWS or call Anita Turlington at (803) 646-8361, ext. 2137.

TECH PREP NEWS is distributed to all middle schools, junior high schools, high schools, and career centers in Anderson, Oconee, and Pickens counties, as well as to Tri-County Technical College. The newsletter is also distributed to approximately 900 educators and business and government officials across the United States.
Programs Showcased

Local Educators Present Sessions at National Tech Prep Conference

Three staff members from area high schools and the PACE associate director made presentations as consortium representatives during the National Tech Prep Network Conference held in Anaheim, California, on May 3-4, 1993. Presenting a session titled "Encouraging Curriculum Integration through Academic and Vocational Faculty Exchange Programs" were Steve Marlowe, assistant director of the Career and Technology Center (Anderson Districts One and Two); Lawton Williams, biology teacher from Palmetto High School; and Peggy Wright, Medical Careers teacher from the Career and Technology Center. The session presented ideas and concepts to facilitate curriculum integration when occupational and academic programs are housed at different locations. Johnny Wallace, PACE associate director, presented two sessions at the conference. One session was "Building Confidence and Competence: Issues in Teacher Training for Applied Academics." The other was a preconference session on the Tech Prep initiative in Anderson, Oconee, and Pickens counties. Making a presentation at a national conference, thus sharing information with Tech Prep educators from across the country, is an exciting opportunity for these four representatives of the PACE Consortium. This activity, and other types of dissemination and technical assistance activities, are made possible by the U.S. Department of Education Model Tech Prep demonstration grant awarded to PACE in January of this year. The PACE staff hopes to have other representatives from our area present sessions at future National Tech Prep Network conferences. If you would like to learn more about any of these sessions, contact Johnny Wallace in the PACE Office at (803) 646-8361, ext. 2247.

Meet the Board

Now beginning his sixth year as the director of the Career and Technology Center, Dr. Jere Kirkley has seen some important changes in the last few years. "I believe that Tech Prep is proving to be the greatest boost to vocational education that we have seen in many years," he said. "The new name of our facility reflects some of the changes that we are seeing. Students are much more open now to taking courses here, and I think some of the old stereotypes and stigmas attached to vocational education are disappearing. We have always had some important contributions to offer all students, and the Tech Prep initiative has allowed us to promote our programs more effectively." Dr. Kirkley is a strong supporter of one of the newest emphases of Tech Prep, integrating the academic and vocational curricula. Under his direction, Steve Marlowe, assistant director of the Career and Technology Center, is working with vocational and academic faculty in Anderson Districts One and Two who are teaming up to teach appropriate lessons in each other's classrooms. The students in the classes then learn both practical applications for academic skills as well as reinforced academic content. Currently residing in Powdersville, Dr. Kirkley came to the Career and Technology Center after serving as director of Darlington Career Center in Darlington, SC. He holds a B.S. in Distributive Education from the University of South Carolina, an M.Ed. in Vocational Guidance from Clemson University, and an Ed.D. in Vocational and Technical Education from Virginia Polytechnic Institute and State University. "These are exciting times for vocational educators," he said; "we have great opportunities to prepare students for very rewarding careers. I look forward to the challenge!"
In July, the PACE Consortium received a $229,978 grant from the State Department of Education/Office of Occupational Education and the State Board for Technical and Comprehensive Education. This continuation grant will provide support during 1993-94 for expanded Tech Prep program development in Anderson, Oconee, and Pickens counties. Each district in the consortium, as well as Tri-County Technical College, has its own activity plans, related budgets, and designated contact person(s). PACE and the other 15 Tech Prep consortia in South Carolina received implementation grants to continue program development activities.

Twelve teachers, eight administrators, and two PACE staff conducted 23 sessions at the South Carolina Tech Prep Conference held July 25-28 in Columbia. Topics included the Tech Prep model at Walhalla High School, the Applied Communication curriculum at Pendleton High School, Youth Apprenticeship at B.J. Skelton Career Center, and Postsecondary Tech Prep initiatives at Tri-County Technical College. Total attendance at PACE Consortium presentations numbered about 1,465 participants. (This number includes persons who attended more than one session.)

In July, PACE staff completed work on a professionally printed, four-color poster promoting post-secondary Tech Prep education opportunities available through South Carolina technical colleges. The poster project was part of the 1992-93 state grant and was designed in collaboration with members of the PACE Counseling Committee. Posters will be distributed to schools in Anderson, Oconee, and Pickens counties this fall.

PACE Executive Director Diana Walter was appointed by Governor Carroll Campbell in July to serve on the South Carolina Council on Vocational and Technical Education. The council is now affiliated with the S.C. Commission on Higher Education.

The State Department of Education/Office of Occupational Education recently named 10 recipients of the Barbara H. James Award for outstanding contributions to South Carolina’s Tech Prep Initiative. The following three recipients of the award are from the PACE Consortium: Mr. John Hostetler, Walhalla High School—principal category; Ms. Jenny Elliott, West-Oak High School—academic instructor category; and Ms. Diana Walter, PACE staff—Tech Prep coordinator category.

Meet the New PACE Staff Member

Cindy Stephenson joined the PACE staff last April as the graphic designer. This position was made possible through a combination of both the state consortium grant and the U.S. Department of Education Model Tech Prep grant. Cindy’s duties involve the design and creation of all graphic support materials, including transparencies, handouts, workbooks, and brochures.

Prior to joining the PACE staff, Cindy served as the publication account manager for The Publication Department, a contract publishing firm in Indianapolis, IN. Cindy is a graduate of Butler University, where she earned a bachelor of science degree in public and corporate communications.

A native of Indianapolis, Cindy moved to the Upstate in December when her husband was transferred with his employer, Allied Signal Laminate Systems. They reside in Seneca.

Share Your Ideas!

If you would like to submit an article for Tech Prep News, or if you have an idea for something you would like to see covered in the newsletter, please call us! Our newsletter editor is Johnny Wallace, and you may reach him at extension 2247 in the PACE Office (toll-free telephone numbers are listed on the back page.) We are particularly interested in articles which feature successful classroom and counseling practices, collaboration between faculty or schools and the business community, techniques for academic and vocational integration, and other topics that highlight successes with Tech Prep on the secondary or postsecondary level.
Ninety-seven percent of parents responding to a recent national survey expected their children to finish high school; 70 percent expected that their children would complete a four-year college degree. The parental projections for college completion are almost triple the actual rate.

*(Newsweek, May 17, 1993)*

Changes in technology and management practices are causing secretaries to assume more responsibilities. Since 1988, national trends show that secretaries are handling more administrative duties, such as purchasing, using software to access databases and manipulate spreadsheets, and booking travel arrangements.

*(HR Focus, May 1993 and USA Today, April 21, 1993)*

Recent analyses of vocational education research conducted over the past decade showed the following results:

- Over 60 percent of vocational students pursue postsecondary education.
- These students have higher rates of employment and earnings after high school than their peers without vocational coursework.
- Investments in vocational education pay off significantly by reducing future social costs.

*(Vocational Education Journal, January 1993)*

According to the Bureau of Labor Statistics, "45 percent of the jobs which pay more than $50,000 in today's labor market are held by workers who do not have a four-year college degree."