DOCUMENT RESUME

ED 408 454 CE 074 244

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TITLE Success by Choice: A Workshop for Parents on Tech Prep and Mid-Level Technology Careers. Facilitator's Guide.
INSTITUTION Partnership for Academic and Career Education, Pendleton, SC.
PUB DATE 94
NOTE 181p.
PUB TYPE Guides - Classroom - Teacher (052)
EDRS PRICE MF01/PC08 Plus Postage.
DESCRIPTORS Articulation (Education); Career Choice; Career Education; Community Colleges; *Demand Occupations; *Education Work Relationship; High Schools; Labor Market; *Occupational Information; Parent Child Relationship; Parent Role; Teaching Guides; *Tech Prep; Technical Education; *Technical Occupations; Two Year Colleges; Vocational Education; *Workshops
IDENTIFIERS *South Carolina

ABSTRACT

This guide was designed to help high school teachers and guidance counselors present a 2.5 hour or 4-hour workshop on tech prep, school-to-work, and career counseling for parents. It is designed to give parents a brief look at the changing workplace and the training, skills, and experience required to enter and advance; illustrate specific ways that parents can help their children to explore careers; and introduce tech prep, its relationship to the changing workplace, and the opportunities it provides. The guide includes these four topics: (1) definitions of success and an overview of the workshop; (2) the transformed workplace, the skills and education expected of future employees, and new opportunities in midlevel technology career fields; (3) tech prep; and (4) ways that parents can help children explore careers and related educational opportunities. Each topic is divided into major concept, equipment and materials needed, participant learning objectives, and presentation. Four appendixes provide the following: (1) numbered activities; (2) numbered transparencies, transparency masters, and blank transparencies for customized use; (3) workshop handouts and materials for participants' packets; and (4) resources and supplemental reading materials for facilitators, a glossary of terms, suggestions for planning and running a successful workshop, workshop evaluation form, and list of works cited. (KC)

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Success by Choice:

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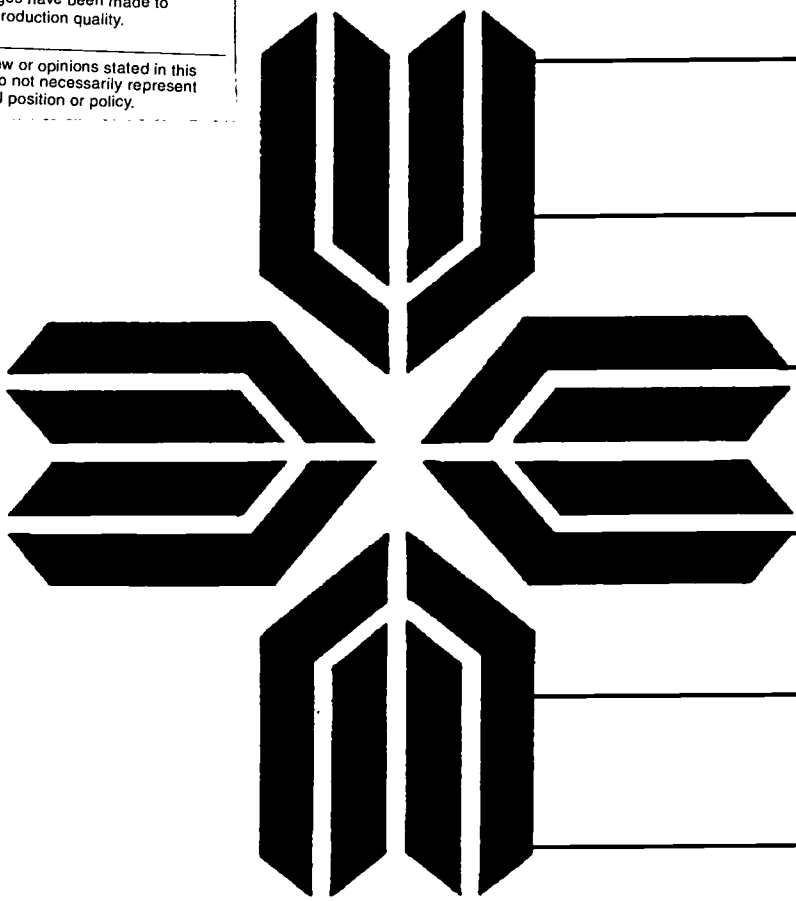

A WORKSHOP FOR PARENTS ON TECH PREP AND MID-LEVEL TECHNOLOGY CAREERS

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Facilitator's Guide

DEVELOPED BY:
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CE074244

Partnership for Academic and Career Education

Anderson, Oconee, Pickens County School Districts
Career and Technology Center
Business/Industry Partners
Anderson, Oconee County Business & Education Partnerships
National Dropout Prevention Center
Clemson University
Tri-County Technical College

Dear Colleague:

Thank you for your interest in the Facilitator's Guide for our new program, "Success by Choice: A Workshop for Parents on Tech Prep and Mid-Level Technology Careers." This material was designed to be used by school personnel in conducting workshops for parents on important elements of Tech Prep, School-to-Work, and career counseling.

When we distributed this material to the district offices, high schools, middle schools and career centers in our consortium, we assembled each Guide into a 2" binder complete with transparencies, transparency masters, handouts and supplemental materials. Because of the time and cost of assembling these Guides, we have provided you with master copies so that you can create your own binder. (We suggest that you use this dissemination copy as a model to develop your own version of the parent workshop guide.) Listed below are directions to help you assemble the final product.

1. Purchase a 2" Panorama binder and insert the color cover sheet and side panel provided.

2. Purchase transparency film in a variety of colors and make transparencies of all the masters provided in Appendix B. (Include copies of the masters after the completed color transparencies.)

   Among other companies, color transparency film may be purchased from:

   Labelon Corporation
   10 Chapin Street
   Canandaigua, NY 14424-1589
   (1-800-428-5566, or in New York, 1-800-523-1009)

3. Purchase flip-frame holders for the transparencies and insert completed copies in the holders. "Flip-Frame Transparency Protectors" are usually available from any office supply store.

4. Purchase clear plastic page protectors for various handouts. These types of page protectors are usually available from any office supply store.

PACE • P. O. Box 587, Highway 76 • Pendleton, South Carolina 29670
Telephone Numbers: (803) 646-8361 • 225-2250 Anderson County • (TDD/VOICE) 1-800-735-2905
882-4412 Oconee County • 859-7033 Pickens County • Extension 2107
FAX # 803-646-8256

5. Make divider pages/tabs for the Topics sections and Appendices:

   Topic I
   Topic II
   Topic III
   Topic IV

   Appendix A
   Appendix B
   Appendix C
   Appendix D

6. Obtain copies of the articles the could not be included with your material because of copyright regulations. (Complete references for the recommended articles are included in your packet.)

7. Assemble the binder in this order:

   - inside cover page, table of contents, introduction, content/suggestions for use, format/page layout

   - (divider tab for Topic I) followed by text pages 1-4
   - (divider tab for Topic II) followed by text pages 5-8
   - (divider tab for Topic III) followed by pages 9-14
   - (divider tab for Topic IV) followed by pages 15-19

   - (divider tab for Appendix A) followed by "What Mask Do You Wear?" (Activity I-A); "When I Think About Success..." (Activity I-B); "High Tech Society" (Activity II-A); "What Changes Have Occurred in YOUR Work Environment?" (Activity II-B); "Business Guest Speaker" (Activity II-C); "How Much Do YOU Know About Mid-Level Technologies?" (Activity II-D); "Local School-to-Work Options" (Activity III-A); "Tech Prep Student Speaker" (Activity III-B); "Identifying Potential Career Interests" (Activity IV-A); "Identifying Your Child's Values and Priorities" (Activity IV-B); "Career Action Planning" (Activity IV-C).

   - (divider tab for Appendix B) followed by color transparencies in flip-frame holders (T:I; T:I-A; T:I-B; T:I-C: T:I-D; T:I-E; T:I-F; T:I-G; T:II-A; T:II-B; T:II-C; T:II-D; T:II-E; T:II-F; T:II-G; T:II-H; T:III-A; T:III-B; T:III-C; T:III-D; T:III-E; T:III-F; T:III-G; T:IV-A), five blank pieces of transparency film in flip-frame holders, and paper master copies of transparencies.

- (divider tab for Appendix C) followed by "Tech Prep: The OTHER Right Choice" brochure in a plastic sleeve; "Tech Prep and Admission to Four-Year Colleges" brochure in a plastic sleeve; Career Planning Flowchart (H:III-B) handout in a plastic sleeve; School-to-Work Options (H:III-C) handout in a plastic sleeve; "20 Ways to Help Your Child Explore Career Interests" handout (H:IV-A) in a plastic sleeve; "Parents' Role in Guiding Career Decision-Making Resource List" handout in a plastic sleeve; "A Career in the Technologies is as Easy as 1-2-3!" in a plastic sleeve; "Fastest-Growing Occupations: Mid-Level Technologies"; "Average Salaries for Mid-Level Technology Careers"; "How to Help Your Child Choose the Right Career"; "Parents Who Listen to, Respect Kids Are Cool"; "What Do You Do All Day at Work?"; "The Best of Both Worlds: Vo-Tech and College"; "Community Colleges";

- (divider tab for Appendix D) followed by "Mid-Level Technology Positions" list; "Tech Prep: Selected Quotes, Statistics and Need Statements"; "Earn up to $38,000: The Best Jobs Now Are in Health Care"; "What Employers Want: A Summary"; "Not Right for College? New Hope for Kids Who Want Other Options"; "Different Paths to Success"; Glossary; "Conducting a Successful Workshop: Ideas and Materials"; workshop announcement flier; evaluation form; list of works cited; references for four transparencies ("Technology's Effect on Education and Employment: In the Past..."; "Technology's Effect on Education and Employment: In the Future..."; "Six Trends Reshaping the Workplace [1-3]"; "Six Trends Reshaping the Workplace [4-6]").

Success By Choice:
A Workshop for Parents on Tech Prep and Mid-level Technology Careers

Facilitator's Guide

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This facilitator's guide was written by Anita J. Turlington, Dissemination Coordinator for the Partnership for Academic and Career Education (PACE), and Diana M. Walter, PACE Executive Director. Other contributors who provided invaluable assistance to the development of this material are members of the PACE Counseling Committee. In addition, appreciation is extended to Sheree Simpson and Clarice Maclay, former PACE Career Advancement/Evaluation Specialists, for their research contributions.

PACE is a business and education consortium involving the seven school districts of Anderson, Oconee and Pickens counties, local businesses and industries, Tri-County Technical College, The Career and Technology Center of Anderson School Districts One and Two, Clemson University, the Anderson and Oconee County Business & Education Partnerships, and the National Dropout Prevention Center at Clemson University. Funding for the development of this guide was provided by a federal Carl D. Perkins grant awarded to PACE by the South Carolina Department of Education and the State Board for Technical and Comprehensive Education. However, the opinions and information presented herein do not necessarily reflect the positions of policies of these agencies, and no official endorsement should be inferred.

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Introduction

"Success by Choice: A Workshop for Parents on Tech Prep and Mid-level Technology Careers" is an interactive workshop designed for guidance counselors and teachers to use in presenting the Tech Prep concept and related career information to parents of middle, junior high and high school students.

All parents want their children to grow up and find a rewarding career, but many do not take an active role in their children's career development process. Some parents are hampered by their lack of information about occupations and stereotyped impressions of what it takes to be successful in future workplaces. Others feel that they have no real influence on their children's career path decision.

Parents can be one of their children's best resources for career selection. However, before they can take a proactive approach to participating in their children's career development process, parents will need up-to-date information about the demands of a changing workplace. They will also need help to acquire career guidance skills to function as "part-time career counselors" for their children. In addition to information on career development processes and resources, this workshop will help parents understand how the world of work is changing, and the resulting impact on careers. They will also learn about the exciting changes taking place in their children's school to provide even better preparation for these new career opportunities.

This workshop is designed to meet the following goals:

1. to give parents a brief look at the changing workplace;
2. to counteract misconceptions about various educational levels, occupational training, skills and experience required to enter and advance in the new workplace;
3. to illustrate specific ways that parents can help their children explore careers;
4. to introduce Tech Prep, its relationship to the changing workplace and the opportunities it provides; and
5. to identify activities for parents that they can use in guiding their children's career development.

Content

This Facilitator's Guide includes the following four topics:

Topic I

"Success by Choice: Introduction"

A discussion of how participants define success, and an overview of the contents of the workshop.

Topic II

"The Changing Workplace"

A description of the transformed workplace, including a discussion of the skills and education expected of future employees, and new opportunities in mid-level technology career fields.

Topic III

"Tech Prep: The Other Right Choice"

A description of the Preparation for Technologies (Tech Prep) program which explains key components including academic and occupational study in high school, advanced standing opportunities in postsecondary programs, school-to-work and work-based learning options, and career/educational advancement potential.

Topic IV

"Planning for the Future"

An illustration of specific ways that parents can help their children explore careers and related educational opportunities.

Suggestions for Use

This guide provides a framework to use in presenting information about career development, mid-level technology careers, and Tech Prep to parents. Facilitators are encouraged to individualize the presentation and supplement materials with their own experience and resources. Two formats are referenced throughout the guide. Format A is designed for a 2 1/2 hour workshop, which should be conducted in one session with a 15 minute break. Format B is designed to include all the activities in Format A as well as additional activities, and should be conducted in 2 sessions of 2 hours each, including breaks.

The median age of participants, educational level, and possible prior exposure to Tech Prep should be considered before selecting materials and topics to emphasize. Facilitators are advised to read through each topic and activity prior to running the workshop. In order to help customize the workshop content, blank transparency film and flip frame protectors are included in APPENDIX B. A planning checklist to help facilitators conduct a successful workshop is included in APPENDIX D.

If copies of the brochures referenced in this guide are to be used in the workshop (see items 4, 5, and 6 on the participants' packet list referenced on the last page of Topic IV), and if your school does **not** have sufficient copies available, please notify the PACE office **at least** three weeks prior to the workshop.

Format

This workshop is divided into four topics which may be presented during a 2 1/2-hour or 4-hour session(s), depending on the number and length of activities selected. Format A contains the materials for the 2 1/2-hour session; Format B contains all the activities and materials for Format A plus some additional ones. Each topic is divided into the following components:

- major concept
- equipment and materials needed
- participant learning objectives
- presentation

Within each topic presentation, sections are included of bold-faced type that suggest actual comments to be used by facilitators. However, facilitators should not feel that they must follow the narrative verbatim. Instead, these comments are intended to be customized to suit their own speaking style.

The following support materials for each topic are provided in the appendices which follow the text:

Appendix A—numbered activities
Appendix B—numbered transparencies and transparency masters; blank transparencies for customized use
Appendix C—workshop handouts and materials for participants' packets
Appendix D—resources and supplemental reading materials for facilitators; a glossary of terms; suggestions for planning and running a successful workshop; workshop evaluation form; and list of works cited.

Prompts for incorporating appendix materials within the presentation appear in bold type.

Page Layout

Each page of text is designed with a narrow column that leaves a wide free margin. Facilitators are encouraged to use the open space in the free margin to make notes or to customize the text to suit their own delivery style.

TOPIC I

Topic I - "Success by Choice: Introduction"

Notes

Major Concept

Caught up in the everyday details of family life, most parents have not had the time to define for themselves and their children what "success" truly means. This workshop is entitled "Success by Choice" for two reasons: 1) parents need to help their children understand that being successful is a choice and 2) parents need help to understand their role in helping their children make the right choices.

Approximate Presentation Time:

Format A: 20 minutes
Format B: 30 minutes

Equipment and Materials Needed:

Overhead projector and screen

Participant Learning Objectives:

At the end of this introduction, participants will be able to

1. Define what they mean by "success,"
2. Understand the importance of their role in their children's career selection, and
3. Understand the purpose of the workshop.

Presentation

Notes

NOTE: Prior to beginning the workshop, display the "Welcome" transparency (USE TRANSPARENCY I: "Welcome..." --APPENDIX B) as participants arrive.

Also before beginning the presentation, remember to introduce yourself and any representatives of the school or district office who may be in attendance!

1.

Format A:

Make the following points:

- **You probably feel like it's all you can do to get the grocery shopping done, to get your kids to the next baseball practice or choir rehearsal, and keep up with which brand of sneakers is currently "cool." But at the same time, you know that your children are making important choices right now that will affect their career opportunities later.**

So... why are you here? (USE TRANSPARENCY I-A: "Why am I here?"—APPENDIX B)

- **Do any of these sound like you? You may identify with one of these statements or be able to say something very similar.**

Format B:

Expand the discussion of parents' concerns by conducting **ACTIVITY I-A: "What Mask do You Wear?"—APPENDIX A.**

2.

Format A:

Make the following points:

- **What or who do you think is the most important influence on your children's career choices? Any guesses? (NOTE: Encourage participants to call out suggestions.) Surprise...it's you! Yes, research shows that parents are the <u>most</u> influential factor in their children's career development process.**

(USE TRANSPARENCY I-B: "Parents Do Influence Career Choices"—APPENDIX B.)

Format B:

- **Another important factor that affects children's career choice, is the influence of television.**

(USE TRANSPARENCIES I-C: "Images of Work: TV versus Reality" and I-D: "TV Presents Images..."—APPENDIX B.)

- **Make the point that one of their challenges as they become more active in their children's career selection process is to counteract the influence of television.**

3.

Format A:

Make the following points:

- **So, if you are the most influential person in your child's career selection process, what exactly does that mean? Well, let's go back to the title of this workshop—"Success by Choice."**

What are the characteristics of a successful person?

(Allow a few minutes of brainstorming among participants; record answers on a blackboard, flipchart or transparency.)

- **Okay, are we saying that we define success as a mixture or balance of both career fulfillment and personal happiness? Maybe we can all agree to define success in this way:**

(USE TRANSPARENCY I-E: "A Full and Successful Life is a Balance of..." AND TRANSPARENCY I-F: "What Success Means"—APPENDIX B.

Format B:

Conduct Activity I-B: "When I think About Success..." —APPENDIX A

4.

Format A:

Make these points:

- **Now that we have arrived at a definition of success that we're comfortable with, let's look at the other key word in the name of our workshop..."choice." Our kids need to understand one very important concept:**

Being successful is a choice.

Notes

- The good news is that there are so many exciting opportunities that can lead to success in today's changing workplace. So there are many good choices, not just one.

- This is where you come in as "part-time career counselors"—to be successful, your kids need to be ready. They have some important choices to make while they're in school. They need to make the best choices they can now in order to have the greatest opportunities later.

- Don't panic if your son or daughter is in high school and you feel he or she may already have made some bad decisions, or taken the wrong path—these choices are not irreversible—they may delay a career goal, but they won't make it unreachable.

5.

So now you know why we have chosen the title "Success by Choice" for this workshop. When you leave here tonight, we hope that you will feel empowered to make a real difference in your child's career selection process by becoming involved now.

Remember...(USE TRANSPARENCY I-G: "People do not plan to fail..."—APPENDIX B)

To assist you with planning, we will provide you with good information and resources, some practical strategies you can use on your own, and some suggested activities to do later.

Notes

TOPIC II

Topic II - The Changing Workplace

Notes

Major Concept:

Changes in technology and management practices have greatly influenced the way we work and the type of career opportunities that are available. This topic will introduce parents to the new workplace and help them understand how technology is changing the way we live and work. The other key points to emphasize in this part of the workshop include the South Carolina future employment outlook and the demand for mid-level technology positions.

Approximate Presentation Time:

Format A - 35 minutes
Format B - 50 minutes

Equipment and Materials Needed:

Format A - overhead projector and screen
Format B - overhead projector and screen, flipchart, markers

Participant Learning Objectives:

At the end of this topic, participants will be able to

1. Describe ways in which technology and new management practices have changed the nature of their lives and work, and the way future employees will work.

2. Define mid-level technology careers and their job skill and education requirements.

3. Define educational requirements and salary averages for selected mid-level technology occupations.

Presentation

Notes

1.

Format A:

Ask participants to imagine how strange our world might appear to someone who lived one hundred years ago. Remind them of how difficult it is to envision the future, and take a minute to share what "America's best minds" in 1893 thought our society would be like in 100 years.

(USE TRANSPARENCY II-A: "America's Best Minds..."—APPENDIX B)

Make the following points:

- **Think about how drastically our world has changed as a result of new technology just in the last 25 years!**

As an activity to emphasize this point, **(USE ACTIVITY II-A: "High-Tech Society"—APPENDIX A).**

Conclude this activity by saying:

So much in our everyday lives has changed because of new technology. Take a look at how technology has changed education and employment...(USE TRANSPARENCIES II-B and II-C: "Technology's Effect on Education and Employment" —APPENDIX B)

At the same time that these changes have occurred, tremendous changes have also been made in the make-up of the workplace.

Go on to make these points:

- **As technology changes, it is changing the way we work. Most of us think we understand the nature of work and the workplace, but the combination of new management practices and the use of computers has revolutionized the way people work.**

- **Let me give you some examples...**

(USE TRANSPARENCIES II-D and II-E: "Six Trends Reshaping the Workplace"—APPENDIX B)

Format B:

Expand this discussion by asking participants what they have noticed changing in their own workplace.

(USE ACTIVITY II-B: "What Changes Have Occurred in Your Work Environment? or ACTIVITY II-C: "Business Guest Speaker"—APPENDIX A)

Okay, it's not just "business as usual" out there in today's workplace. But what does that mean to your kids now?

2.

Format A:

Make the following points:

- **Well, if the workplace is changing so quickly, what kinds of new jobs have been created, and what opportunities do they provide?**

(INTRODUCE ACTIVITY II-D, by using TRANSPARENCY II-F: "According to Recent Research..."—APPENDIX B.)

(CONDUCT ACTIVITY II-D: "How Much Do You Know..."—APPENDIX A.)

After completing the activity, say:

As we continue to discuss some of the aspects of today's workplace, you may find some of your ideas about career choices changing.

3.

Format A:

Make this point:

- **Again, these careers are part of a growing segment of the job market. They are called "mid-level technology careers," and they can be defined this way:**

  Mid-level technology careers typically require a high school diploma with occupational training, up to and including an applied associate degree either to enter or advance in the field.

Let's look at some characteristics of these careers...**(USE TRANSPARENCY II-G: "General Characteristics of Mid-Level Technology Careers"—APPENDIX B.)**

(Mention to participants that there are two handouts contained in their packets that will provide additional information on mid-level technology careers; "Fastest-Growing Occupations: Mid-Level Technologies" and "Average Salaries for Mid-Level Technologies.")

Notes

4.

Format A:

Summarize this topic by saying:

So... are we saying that mid-level technology careers are your child's only option, or that baccalaureate careers aren't worth pursuing? Of course not!

(USE TRANSPARENCY II-H: "What's the Point?"—APPENDIX B)

One way you can help is by understanding the new opportunities available to your son or daughter here at _____.
(name of **your** school)

Note: Consider taking a 15-minute break here!

Notes

TOPIC III

Topic III - Tech Prep—The Other Right Choice

Notes

Major Concept:

With so many changes and new opportunities in the workplace, the good news for parents and students is that school is changing, too, in order to keep up. Tech Prep is an exciting program in high schools in our area, and all over the country, that prepares students to be successful in mid-level technology careers. Tech Prep blends stronger academic courses in math, English and science with occupational courses students take at the high school or career center. This blend of courses makes students more marketable for the workplace and prepares them for options in higher education.

Approximate Presentation Time

Format A - 35 minutes
Format B - 60 minutes

Equipment and Materials Needed

Format A - overhead projector and screen
- your school's/district's Tech Prep and school-to-work materials

Format B - School-to-Work video (school/district or consortium)
- TV/VCR

Participant Learning Objectives

At the end of this presentation, participants will be able to

- define Tech Prep
- describe their high school's Tech Prep curriculum
- understand Technical Advanced Placement and Technical Advanced Standing options
- understand school-to-work and work-based learning concepts and opportunities

Presentation

1.

Format A:

Make the following points:

- **Okay, let's go back to our discussion of the choices our kids will need to make in order to reach that definition of success that we came up with earlier. We've talked about the new opportunities they will have in the workplace and about mid-level technology careers—some of the fastest-growing careers in our area. So the next question is, what are we doing in our school to help your kids prepare for these careers?**

- **The good news is that we are changing, too. To help prepare students for new opportunities in the workplace, we are changing our counseling strategies and our curriculum, and we are making these changes as part of a team.**

(USE TRANSPARENCY III-A: "PACE Flowchart"—APPENDIX A)

- **Our "team" is called PACE—the Partnership for Academic and Career Education, and it includes not only our school, but all other high schools and career centers in Anderson, Oconee and Pickens counties; Tri-County Technical College; the National Dropout Prevention Center; Clemson University's College of Education and numerous business and industry partners.**

- **The changes we are making are part of a new program called "Tech Prep" that is not only in our area, but is part of a statewide and nationwide reform movement.**

(USE TRANSPARENCY III-B: "SC Map"—APPENDIX A)

- **Let me explain what Tech Prep is all about.**

(USE TRANSPARENCY III-C: "What is Tech Prep?"—APPENDIX A)

- **"Tech" Prep does not mean "preparation to get into a Tech school; the "Tech" stands for technologies. Tech Prep prepares students for careers that require some occupational training in high school up to and including an associate degree.**

- **Because 65% of the jobs of the future will require education beyond high school, Tech Prep is designed to link with occupational associate degree programs at two-year colleges. By completing the right courses in high school with good grades, students can avoid taking basic or remedial courses in a two-year college program. They can even earn advanced standing**

Notes

in many areas, which will give them college credit for skills they are already able to demonstrate when they enter an occupational associate degree program.

Notes

2.

Format A:

Using your school's Tech Prep brochure, video, or your career planning guide/curriculum information, discuss the available curriculum options for students. Be sure that parents understand the difference and the similarities between the College Prep and Tech Prep options.

Make the following points:

Let's take a minute and compare the two paths your children can follow in high school. You can see that the main difference in the two curricula has to do with career goal and some of the courses they choose to take. But notice that both pathways emphasize a very strong academic core and good career planning.

Reinforce the pathway options by using TRANSPARENCY III-D: "Two Right Ways"—APPENDIX B

Emphasize that the philosophy of Tech Prep is to encourage every student to take the highest level of academic coursework of which he/she is capable. Therefore, a Tech Prep student might actually take all college prep courses. Emphasize that a student is defined as a Tech Prep student based on his or her career goal, not the courses taken in high school.

Make the following point:

- **One important feature of the Tech Prep program is flexibility. You know how likely it is that some kids will change their minds at the last minute. Well, if they do decide at the last minute that they have changed their career goal to one requiring a four-year degree, they aren't locked out. They have several options.**

(USE HANDOUTS III-A: "Tech Prep: The Other Right Choice brochure and "Tech Prep and Admission to Four-Year Colleges" brochure—APPENDIX C— to discuss the possibility of freshman admission or university transfer option through technical colleges.)

Format B:

An additional activity here would be to give parents a "Career Planning Flowchart" and have them begin to chart their child's progress.

(NOTE: If your school has developed a "Career Planning Flowchart," use that material. If not, use HANDOUT III-B: "Career Planning Flowchart"—APPENDIX C)

Make the following points:

Notes

- **In 1994, the General Assembly passed the South Carolina School-to-Work Transition Act. One of the requirements of this law is that beginning in grade 6, each student must have an individualized career plan, and an alternate, that's developed in consultation with his/her parents or guardians.**

- **One of the goals of an individualized career plan is to help students see themselves on a pathway to a career and a rewarding future. What path has your child been charting so far? Where do you see him/her going? Take a look at this flowchart (or career plan form) and see how much you can fill out.**

Let participants work on the form, and discuss their responses briefly. Then summarize:

You can see how helpful it is to you and to your child to be able to look ahead and see a plan for the high school years and beyond. It really helps students to understand that they aren't just fulfilling requirements, but instead they are preparing for a career.

3.

Format A:

(USE TRANSPARENCY III-E: "What is Technical Advanced Placement?"—APPENDIX B) and make the following points:

- **Technical Advanced Placement, or TAP, is an incentive component of Tech Prep that works like a local version of AP, providing credit toward specific two-year college degree programs. Our school district provides several TAP opportunities through Tri-County Technical College** (NAME OTHER TECHNICAL COLLEGES, IF APPROPRIATE) **for students who demonstrate the necessary competencies. TAP is a good way for counselors and teachers, and for you as parents, to encourage students to do well in their courses, and get a head start on their studies at Tri-County.**

NOTE: Discuss the next section on TAS **only** if your school offers this option.

- **The second special component of Tech Prep is called Technical Advanced Study, or TAS for short.**

(USE TRANSPARENCY III-F: "What is Technical Advanced Study?"—APPENDIX B) and make the following points:

- **Technical Advanced Study provides opportunities for seniors who are selected by their teachers and guidance counselors, and who have their parents' support, to take college courses on the**

campus of Tri-County Technical College. TAS students must provide their own transportation, cover the costs of tuition and books, and be able to fit college courses into their schedule. TAS is another way that students can achieve advanced standing, or a head start, in degree programs at Tri-County.

- **The third special component of Tech Prep is "work-based learning" through what's called the School-to-Work option. Let me define what we mean by school-to-work...**

(USE TRANSPARENCY III-G: "What is 'School-to-Work'?" —APPENDIX B.)

Make these points:

- **School-to-work opportunities are available to <u>all</u> students, regardless of whether they are in the Tech Prep or College Prep curriculum pathway;**
- **These types of opportunities provide students with exposure to careers that they think they might be interested in, or that they <u>know</u> they want to pursue;**
- **Some options provide students with credentials beyond a high school diploma (e.g., Youth Apprenticeship);**
- **Some experiences can lead to full-time jobs after high school with considerable career potential;**
- **Some employers will provide tuition assistance for college study to students who participate in School-to-Work options sponsored by their companies.**

Show the various School-to-Work options **(USE TRANSPARENCY III-H: "School-to-Work Options"—APPENDIX B.)**

Define the essential elements of each option by reviewing the information contained in the handout entitled, "'What Are the School-to-Work Options?'" **(HANDOUT III-C—APPENDIX C.)**

Be sure to discuss your school's and/or district's school-to-work options. If written materials are available, provide copies to participants.

Format B:

Provide additional information on school-to-work options by showing a video. **(USE ACTIVITY III-A: "Local School-to-Work Options"—APPENDIX A.)**

Notes

4.

Format A:

To summarize this topic, make these points:

- **Tech Prep and School-to-Work offer students many opportunities to prepare for great careers, and for a college education.**
- **Students who plan early will be able to take full advantage of all that Tech Prep has to offer, including advanced standing and work-based learning opportunities.**
- **As a parent, you also need to know that at our school, Tech Prep and School-to-Work involves many people in the community as partners in providing the very best education for all of our students.**

Format B:

Invite as a guest speaker an alumnus from your school who has completed (or is in the process of completing) an occupational associate degree, or invite a current Tech Prep/School-to-Work student.

(USE ACTIVITY III-B: "Tech Prep Student Speaker" —APPENDIX A.)

Notes

TOPIC IV

Topic IV - Planning For the Future

Notes

Major Concept

Participants have discussed changes in the workplace, what kinds of careers will be in demand as we approach the turn of the century, and what their children are doing to prepare for those careers in school. But the big question for them as parents is what part they can play as their children go through this learning and decision-making process. This part of the workshop will introduce a career selection process parents can use to identify their individual child's strengths and interests. Then they will go through some activities they can do at home, and they will leave with a long-term action plan.

Approximate Time:

Format A: 45 minutes
Format B: 60 minutes

Equipment Needed:

Format A and B - overhead projector and screen

Participant Learning Objectives:

At the conclusion of this unit, participants will be able to

1. Identify interests, abilities, and priorities with their children and discuss how these relate to career selection;

2. Research occupations and career trends;

3. Assist their children in setting realistic career goals.

Presentation

Notes

1.

Format A:

To introduce this topic, make these points:

- **Now that you have an idea of what changes are occurring in the workplace and what we are doing in school to prepare your child for career opportunities, what can you do at home?**

- **Let's look at a methodical career selection process that can be very useful to you as you think about how to work with your son or daughter.**

(USE TRANSPARENCY IV-A:"Six Steps to Choosing a Career"—APPENDIX B)

Briefly read through the steps, then say,

We're going to use this six-step process to suggest ways you can help your son or daughter to explore a career goal. Let's look at Steps I and II—"Identify Interests and Values" and "Know Your Skills and Strengths." We'll look at these steps together because they are so closely related.

- **Although some may think that career development begins only after high school graduation, your children have actually been developing career "milestones" for years.**

- **These career milestones include subject areas in which they have excelled; extracurricular activities like clubs and sports, music; personal hobbies and interests; part-time or summer jobs.**

- **Using these milestones as a starting place, you can help your child begin to identify his or her interests and strengths. Take a moment to identify what you think are "clues" to your child's interests.**

(USE ACTIVITY IV-A: "Identifying Potential Career Interests Survey"—APPENDIX A).

After participants have completed the activity, say

- **That was probably fairly easy to fill out; after all, you have a pretty good idea of your child's interests and strengths which are, as we've already said, the first 2 steps your child might go through in making a career decision. But how about your child's values and priorities in some less tangible areas?**

(USE ACTIVITY IV-B: "Identifying Your Child's Values and Priorities"—APPENDIX A)

Notes

(NOTE: If you have sufficient copies of the last two quizzes, "Identifying Potential Career Interests" and "Identifying Your Child's Values and Priorities," suggest that parents have their children complete the quizzes at home, and then compare results!)

2.

Format A:

Ask parents the following question:

"Once you know your child's interests, abilities and priorities, do you know what resources are available if you wish to help your child explore potential careers?" Step 3 in our process is "Find Out All You Can about Career Trends and Options."

(USE HANDOUT IV-A: "20 Ways to Help Your Child Explore Career Interests"—APPENDIX C)

Ask participants to review the handout and identify items which relate to step 3 (finding out about career trends and options). Participants should identify items on the handout numbered 1, 2, 6, 7, 8, 11-18. Also, ask participants if they can think of other helpful sources.

3.

Format A:

Make the following points:

- **Now that you know about some good sources of information on careers and employment trends, how can you help your child get some real experience in a career area?**
- **As we mentioned briefly in our discussion of Tech Prep, one new trend in our schools is work-based learning, which gives students the opportunity to experience the workplace firsthand. But you don't have to wait for your son or daughter to become involved in a school program—you can set up this kind of experience yourself!**
- **Take another look at the handout on "20 Ways to Help Your Child Explore Career Interests."** (PARTICIPANTS SHOULD IDENTIFY ITEMS ON THE HANDOUT NUMBERED 3-5, 9, 10, 19-20. ALSO, ASK PARTICIPANTS IF THEY CAN THINK OF OTHER OPTIONS TO HELP THEIR CHILDREN GAIN FIRSTHAND EXPERIENCE.)

4.

Format A:

Make the following points:

The last two steps in the Career Selection Process may seem obvious to you. Your children need to set good, realistic career goals based on what they have learned about themselves, their interests, their skills, and what careers are in demand. And, of course, they should always remain optimistic and persistent—remember, there are many good choices, not just one, but the best opportunities come to those who plan for them.
For the last activity in the workshop, we'd like you to leave with some goals and a long-term plan for working with your children at home.

(USE ACTIVITY IV-C: "Career Action Planning"—APPENDIX A)

Summarize and conclude the workshop by making the following remarks:

We hope that you will take the time to develop this action plan together with your children. Our goal this evening was to inform you about what is happening in the workplace and here at school and to excite you about the many good choices available now to your children.

We also hope that you are going away feeling more equipped to be a part of your child's career selection process and to be a "part-time career counselor" in addition to all the other hats you wear!

Before you leave, let me just take a minute to review with you the materials in your packet....

NOTE TO FACILITATOR: Packets should contain the following materials:

1. "Parents' Role in Guiding Career Decision-Making" Resource List (Appendix C)

2. (Your school or district's Tech Prep or School-to-Work brochures, if appropriate)

3. (Your school's Career Planning Guide, if appropriate)

4. "Tech Prep: The Other Right Choice" brochure (Appendix C)

5. "Tech Prep and Admission to Four-Year Colleges" brochure (Appendix C)

6. "Career in the Technologies is as Easy as 1-2-3!" brochure (Appendix C)

Notes

7. "Fastest-Growing Occupations: Mid-Level Technologies" handout (Appendix C)

8. "Average Salaries for Mid-Level Technology Careers" handout (Appendix C)

9. Article: "How to Help Your Child Choose the Right Career" by Marie Hodge and Jeff Blyskal (**Reader's Digest**, February 1989, p. 146-153.); Appendix C.

10. Article: "Parents Who Listen to, Respect Kids are Cool" by Loraine O'Connel (**Anderson Independent-Mail,** February 20, 1995, p. 1B, 2B.)

11. Article: "What Do You Do All Day at Work?" by Rebecca Shahmoon Shanok (**Parent's Magazine**, June 1993, p. 105-106.); Appendix C.

12. Article: "The Best of Both Worlds" by Janes Arenofsky (**Career World**, February 4, 1994, p. 23-26.); Appendix C.

13. Article: "Community Colleges: In These Economically Tight Times..." by Joannie M. Schrof (**U.S. News & World Report**, October 4, 1994, p. 126-127.); Appendix C.

After reviewing the contents of the packet, ask participants to complete the brief workshop evaluation form **(APPENDIX C)** and to return the evaluation to you before they leave.

Remember to thank participants for attending!

Notes

APPENDIX A

"What Mask Do You Wear?"

Materials Needed:

- masks (3 designs are provided for you in this section.)
- popsicle sticks or flat six-inch sticks
- sample scenarios (3 are provided, or feel free to improvise!)
- scotch tape
- white glue
- index cards (if you write your own scenario)
- felt tip pens (if you write your own scenario)

Process:

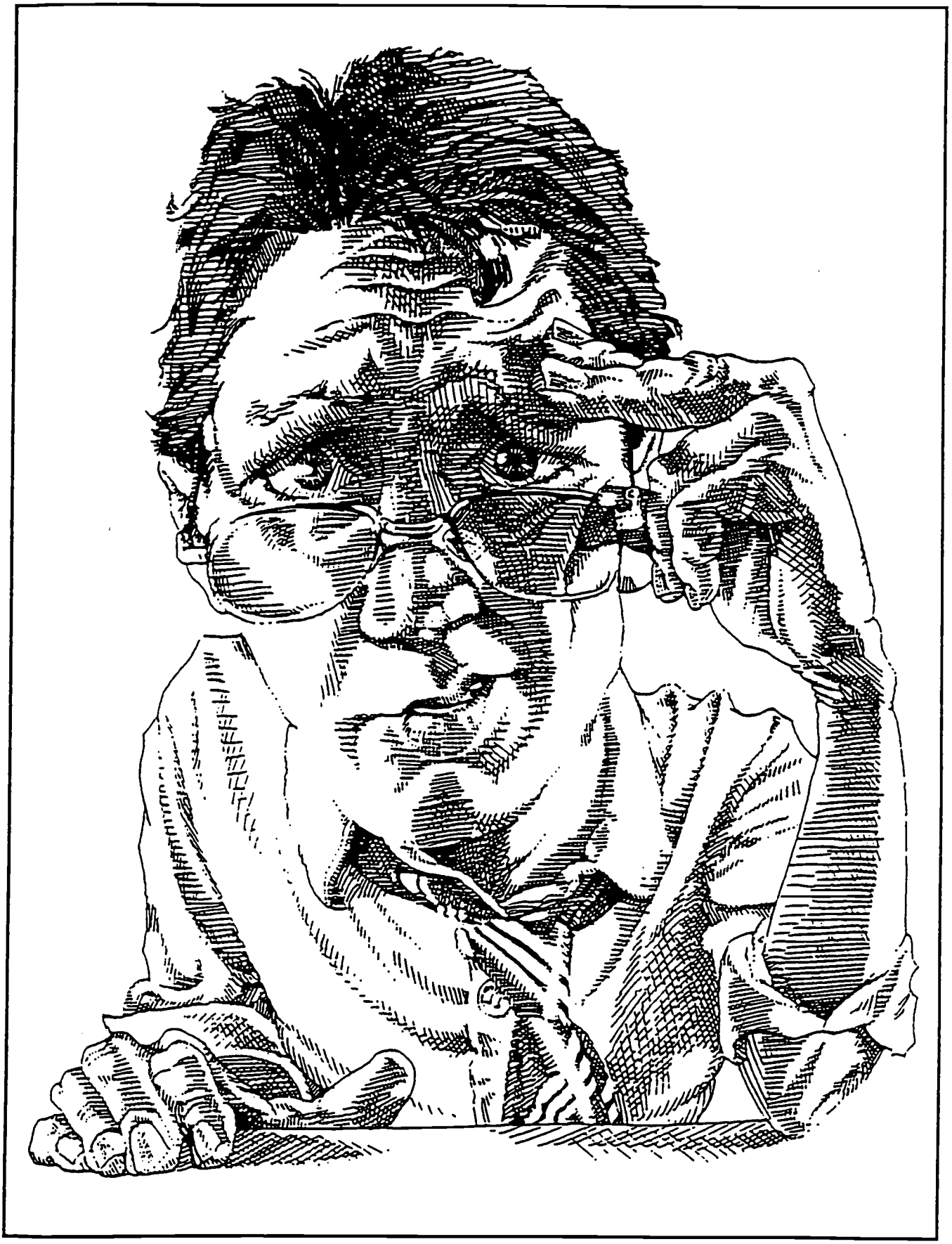
1. Cut out each mask.

2. Cut out scenarios; tape one to the back of each mask.

3. Glue the popsicle stick to the bottom of each mask to use as a handle.

4. Give the masks to three participants and have them come to the front of the room and read their scenario while holding the mask in front of their face.

5. Thank the participants and collect the masks. Then ask the audience, "Do any of these situations sound familiar?" (Facilitate informal discussion based on participants' reaction to the different scenarios.)



"I have always wanted my son to go to college. I have encouraged him to take college prep courses, and he makes average grades. But he seems unmotivated, and when I ask him what he plans to do, he just shrugs and tells me he's going to college and he'll figure out what he wants to do when he gets there."

"My daughter seems to have no ambition at all. She takes the easiest courses she can and does just enough to get by. She seems to be satisfied with the part-time job she has now, and she has no idea what it will really take to get the house and BMW she says she wants. What can I do to wake her up?"

"My son can't make up his mind. He has taken a few courses at the career center, but he can't seem to get focussed. His grades have been average, but he seems generally unmotivated. This is his senior year, and I keep telling him he needs a plan. Help!"

"When I Think About Success..."

Materials Needed:

- participants' answers from brainstorming session referenced in section 3 of Topic I
- "most important elements of success" cards (see accompanying master) or blank index cards

Process:

1. Ask participants to choose a partner. Hand out 6 cards to each participant.

2. Have participants review list of characteristics that define a successful person that have been previously listed on a blackboard or flip chart.

3. Ask participants to write down on their cards the 6 most important characteristics of a successful person, and to place the cards in ranked order.

4. After filling out the cards, partners should "play" one card at a time and discuss their answers until they have compared all 6 cards, explaining why they selected and ranked each characteristic as they did.

The most important element of success is:	The 2nd most important element is:
The 3rd most important element is:	The 4th most important element is:
The 5th most important element is:	The 6th most important element is:

"High-Tech Society"

Materials Needed:

- a copy of the quiz, "High-Tech Society" for each participant
- answer key

Process:

1. Ask participants to work in small groups for about five minutes to guess at the timing of these 20th century technology marvels that were virtually unknown to our grandparents.

2. After five minutes have passed, read the correct answers aloud.

"High-Tech Society Quiz"

Directions: Below are some examples of life-changing technology. See how much you know about these 20th century technological marvels, most of which were virtually unknown to our grandparents!

1. In 1982, _____ percent of banking transactions were completed by automatic teller machines (ATM). In 1988, that percentage had risen to _____.
   a. 10, 90 b. 0, 55 c. 25, 75 d. 50, 75

2. In 19 ___, Raytheon/Amana Refrigeration put out its first practical, affordable ($495), compact microwave oven.
   a. 55 b. 71 c. 67 d. 60

3. Facsimile (fax) machines became "standard office" equipment across America in 19 ___.
   a. 80 b. 75 c. 85 d. 90

4. In 1993, ___ percent of U.S. households owned a VCR.
   a. 80 b. 50 c. 75 d. 43

5. The first hand-held calculator became available in 19 ___.
   a. 71 b. 81 c. 85 d. 79

"High-Tech Society Quiz" Answer Sheet

1. In 1982, (b) 0 percent of banking transactions were completed by automatic teller machines (ATM). In 1988, that percentage had risen to (b) 55. (Source: Daggett, W. Future Workplace is Shocking. **North Carolina Education,** November/December, 1990, p. 6.)

2. In 1967 (c), Raytheon/Amana Refrigeration put out its first practical, affordable ($495), compact microwave oven. (Source: Flatow, I. **They All Laughed: From Light Bulbs to Lasers, the Fascinating Stories Behind the Great Inventions that Have Changed Our Lives.** New York, NY: Harper Collins, 1992, p. 60.)

3. Facsimile (fax) machines became "standard office" equipment across America in 1985 (c). (Source: **People Magazine**, March 7-14, 1994, p. 247.)

4. In 1993, 80 (a) percent of U.S. households owned a VCR. (Source: **U.S. News & World Report,** September 13, 1993, p. 19.)

5. The first hand-held calculator became available in 1971 (a). (Source: Usiskin, Z. Lessons form the Chicago Mathematics Projects, **Educational Leadership,** May 1993, p. 14.)

"What Changes Have Occurred in YOUR Work Environment?"

Materials Needed:

- flipchart and magic markers OR
- overhead projector, markers and screen OR
- chalkboard and chalk

Process:

1. Ask participants to identify ways in which their work environment has changed in the past five or ten years. (Have their duties changed? Do they use computers more? What other changes have they noticed?)

2. Summarize responses and write them so the group can see them.

"Business Guest Speaker"

Materials Needed:

- a PACE Guide to Area Business Speakers

Process:

1. Review the speakers listed in the guide (you may want to choose an employee from your school's business partner) and select one who can address technology's impact on the workplace.

2. At least two weeks in advance, contact the speaker to confirm his or her participation. (Be sure to inform the speaker of the type of audience, scope and content of the workshop.)

3. Two days prior to the workshop date, contact the speaker to confirm his or her attendance.

4. A good idea might be to send the speaker some written information about key points that should be made during his or her presentation, and your estimation for how long the presentation should be.

5. After the speaker concludes his or her remarks, facilitate a question/answer session and general discussion with the audience.

"How Much Do YOU Know About Mid-Level Technologies?"

Materials Needed:

- copies of the quiz, "How Much Do YOU Know About Mid-Level Technologies?"
- copies of the Answer Sheet

Process:

1. Ask participants to pair up or work in small groups and hand out copies of the quiz.

2. Read directions aloud; allow approximately 10 minutes to complete the quiz.

3. Pass around copies of the Answer Sheet.

4. Generate brief discussion by asking participants if they were surprised by some of the careers listed and the salaries.

"How Much do YOU Know About Mid-Level Technologies?"

Directions: Match the titles in the left column with the correct job descriptions and salary information from the column on the right.

Example: h automotive technician

___ 1. polysomnographer

___ 2. perfusionist

___ 3. surface mount technology process technician

___ 4. dispensing optician

___ 5. computer numerical control (CNC) programmer

___ 6. engineering technician

___ 7. dental ceramist

a. These professionals operate sophisticated heart-lung machines that allow oxygen-rich blood to flow through a patient's body during heart operations, organ transplants, and certain cancer treatments; average annual salaries range from $30,000 to $60,000.

b. These technicians examine written prescriptions to determine lens specifications, take appropriate measurements, and fit eyeglasses and contact lens according to physician and customer requirements; nationally, salaries averaged about $25,000 a year in 1991, and ranged from $18,000 to $35,000 annually.

c. Working with physicians and other health care professionals, these individuals monitor technical equipment measuring various physiological functions to help diagnose sleep disorders; average annual salaries in South Carolina range from $30,000 to $40,000.

d. These technicians work with automated equipment in the production of computer circuits. They typically monitor the operation of robotic equipment and troubleshoot problems that may occur periodically in the manufacturing process; locally, entry-level annual salaries are about $24,000.

e. These technicians make porcelain and acrylic restorations based on prescriptions provided by dentists; nationally in 1988, salaries for experienced technicians averaged $29,952 annually.

f. These individuals analyze blueprints of new items to be manufactured, analyze various materials which will be used in production, and write the computer code which commands the function of equipment used to produce the item; nationally, average salaries ranged from $27,000 to $37,000 in 1990.

g. These individuals use the principles of science, mathematics and engineering to solve problems in a wide variety of settings. Their duties may include preparing specifications for materials, designing and running tests, and/or determining ways to improve manufacturing efficiency; nationally, salaries averaged about $28,300 and about $38,800 for persons with additional experience and supervisory responsibilities.

h. These technicians diagnose and repair automotive systems including numerous electronic and computer-controlled functions common in today's automobiles; nationally in 1990, skilled automotive technicians employed by automobile dealers averaged $38,729. (Source: **Occupational Outlook Handbook,** 1992-93, pp. 319-321.)

ANSWER KEY: "How Much do YOU Know About Mid-Level Technologies?"

c 1. **polysomnographer**—Working with physicians and other health care professionals, these individuals monitor technical equipment measuring various physiological functions to help diagnose sleep disorders; average annual salaries in South Carolina range from $30,000 to $40,000. (Source: Anderson Area Medical Center, 1993.)

a 2. **perfusionist**—These professionals operate sophisticated heart-lung machines that allow oxygen-rich blood to flow through a patient's body during heart operations, organ transplants, and certain cancer treatments; average annual salaries range from $30,000 to $60,000. (Source: **Occupational Outlook Quarterly,** Winter 1991-92, pp. 4-5, and Medical University of South Carolina, 1992.)

d 3. **surface mount technology process technician**—These technicians work with automated equipment in the production of computer circuits. They typically monitor the operation of robotic equipment and troubleshoot problems that may occur periodically in the manufacturing process; locally, entry-level annual salaries are about $24,000. (Source: PACE Consortium/**Tech Prep News,** Vol. 7 [no. 1], Fall 1993, p. 2.)

b 4. **dispensing optician**—These technicians examine written prescriptions to determine lens specifications, take appropriate measurements, and fit eyeglasses and contact lens according to physician and customer requirements; nationally, salaries averaged about $25,000 a year in 1991, and ranged from $18,000 to $35,000 annually. (Source: **Occupational Outlook Handbook,** 1992-93, pp. 188-189.)

f 5. **computer numerical control (CNC) programmer**—These individuals analyze blueprints of new items to be manufactured, analyze various materials which will be used in production, and write the computer code which commands the function of equipment used to produce the item; nationally, average salaries ranged from $27,000 to $37,000 in 1990. (Source: **Occupational Outlook Handbook,** 1992-93, pp. 217-218.)

g 6. **engineering technicians**—These individuals use the principles of science, mathematics and engineering to solve problems in a wide variety of settings. Their duties may include preparing specifications for materials, designing and running tests, and/or determining ways to improve manufacturing efficiency; nationally, salaries averaged about $28,300 and about $38,800 for persons with additional experience and supervisory responsibilities. (Source: **Occupational Outlook Handbook,** 1992-93, pp. 211-212.)

e 7. **dental ceramist**—These technicians make porcelain and acrylic restorations based on prescriptions provided by dentists; nationally in 1988, salaries for experienced technicians averaged $29,952 annually. (Source: **Occupational Outlook Handbook,** 1992-93, pp. 408-409.)

"Local School-to-Work Options"

Materials Needed:

- (if available) a copy of your school/district video on one or more school-to-work options, **OR**

- a copy of the PACE Consortium's school-to-work video. (Each district office and career center should have at least one copy. You may also obtain a copy through the PACE Office; be sure to allow one week's notice in case supplies are low!)

- TV/VCR

Process:

1. Show the video, and allow sufficient time to answer questions.

2. (if time) Encourage general discussion on the opportunities available through school-to-work and how they are similar/different to the types of opportunities available when participants were in school.

"Tech Prep Student Speaker"

Materials Needed:

- None, really. But you should identify potential student speakers by talking with applied academics teachers, occupational teachers, and/or career center or School-to-Work Coordinators. (For help in identifying postsecondary Tech Prep students, you should contact the PACE office.)

Process:

1. Make arrangements with your student speaker well in advance.

2. Provide the speaker with a list of prepared questions that you would like him/her to address, and an idea of the timeframe for the presentation.

3. You may choose to introduce the speaker this way:

   We've discussed Tech Prep and the opportunities the program can provide for students. I'm sure you are wondering, though, how it really works. Let me introduce _____. He/she is currently a _____ and will describe for you his/her experiences as a Tech Prep student. Afterwards, please feel free to ask _____ questions.

4. Encourage dialogue between the participants and the speaker.

"Identifying Potential Career Interests" Survey

Materials Needed:

- copies of the "Identifying Potential Career Interests" survey. (A master copy follows this page.)
- copies of the Interpretation Guide. (A master copy follows the survey.)

Process:

1. Ask participants to take 5 minutes to complete the survey either individually, or if present, with participating spouse or child.

2. Pass out copies of the Interpretation Guide to each participant.

3. If time permits, generate some discussion concerning participants' responses to the survey, and the possible interpretations of their answers. Otherwise, encourage them to review the results carefully at home.

"Identifying Potential Career Interests" Survey

As a parent, you have insight into your child's skills, strengths, and interests which may be helpful in identifying his/her potential career direction. Take a few minutes to answer these questions. Then read the accompanying handout to understand how your responses may relate to specific career-related interests and skills.

1. What school subjects does your child really like and do well in?
   a. _____
   b. _____
   c. _____
   d. _____

2. What school-related activities is your child involved in?
   a. _____
   b. _____
   c. _____
   d. _____

3. What are your child's interests and hobbies **outside** of school?
   a. _____
   b. _____
   c. _____
   d. _____

4. Have there been any special or unique activities in which your child has been involved? (For example, organizing a lawn mowing service for the neighborhood.)
   a. _____
   b. _____
   c. _____
   d. _____

"Identifying Your Child's Values and Priorities"

Materials Needed:

- copies of the "Identifying Your Child's Values and Priorities" ranking sheet. (A master copy follows this page.)

Process:

1. Ask participants to take 10 minutes to rank the 13 values and priorities listed as they believe their child would. (Participants may work individually or in pairs.)

2. Encourage participants to review their responses and to continue discussion of these issues at home.

"Identifying Your Child's Values and Priorities"

Directions: Review the following personal and work-related priorities that may influence career choice. Rank them as you believe your child would, using a scale of "1" to "13," with 1 being **most** important, and 13 being **least** important.

___ time with family
___ variety of duties
___ recognition
___ job security
___ opportunity to be creative
___ responsibility
___ income potential
___ independence
___ high level of structure/direction
___ opportunity for advancement
___ involvement in church and/or community
___ low stress environment
___ opportunity to contribute or to "make a difference"

"Career Action Planning"

Materials Needed:

- copies of the "Career Action Planning Form." (A master copy follows this page.)

Process:

1. Distribute copies of the "Career Action Planning " form to participants.

2. Review the directions to be sure that participants understand how they might use the planning form.

3. Encourage participants to complete the form at home with their children.

Career Action Planning Form

Directions: Using the "Six Steps to Choosing a Career" identified below, and the resources and information you have received, work with your child to identify activities that either you, your child, or both of you can do, and provide an estimate for when you hope to finish each activity.

This Career Action Plan is for: _____

Example

Step 1: Identify Interests and Values

activity: (what?) *borrow books on different careers from the public library and look through them together*
assigned to: (who?) *Mom*
timeframe: (when?) *next week*

Step 1: Identify Interests and Values

activity: (what?) _____
assigned to: (who?) _____
timeframe: (when?) _____

activity: (what?) _____
assigned to: (who?) _____
timeframe: (when?) _____

activity: (what?) _____
assigned to: (who?) _____
timeframe: (when?) _____

Step 2: Know Your Skills and Strengths

activity: (what?) _____
assigned to: (who?) _____
timeframe: (when?) _____

activity: (what?) _____
assigned to: (who?) _____
timeframe: (when?) _____

activity: (what?) _____
assigned to: (who?) _____
timeframe: (when?) _____

Step 3: Find Out All You Can About Career Trends and Options

activity: (what?) _____
assigned to: (who?) _____
timeframe: (when?) _____

activity: (what?) _____
assigned to: (who?) _____
timeframe: (when?) _____

activity: (what?) _____
assigned to: (who?) _____
timeframe: (when?) _____

Step 4: Explore Options and Gain Experience

activity: (what?) _____
assigned to: (who?) _____
timeframe: (when?) _____

activity: (what?) _____
assigned to: (who?) _____
timeframe: (when?) _____

activity: (what?) _____
assigned to: (who?) _____
timeframe: (when?) _____

Step 5: Set Realistic Goals

activity: (what?) _____
assigned to: (who?) _____
timeframe: (when?) _____

activity: (what?) _____
assigned to: (who?) _____
timeframe: (when?) _____

activity: (what?) _____
assigned to: (who?) _____
timeframe: (when?) _____

Step 6: Be Persistent

activity: (what?) _____
assigned to: (who?) _____
timeframe: (when?) _____

activity: (what?) _____
assigned to: (who?) _____
timeframe: (when?) _____

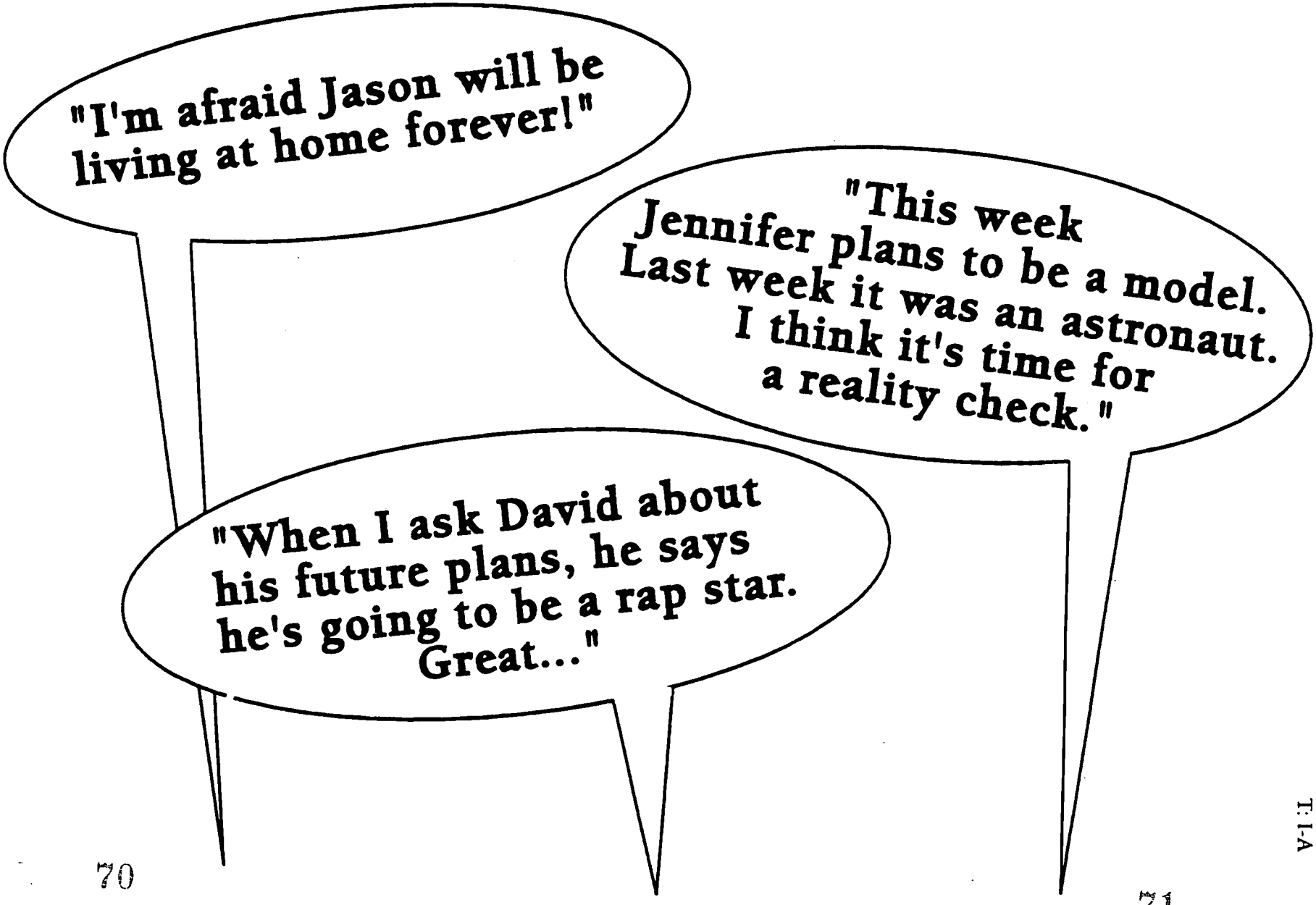
activity: (what?) _____
assigned to: (who?) _____
timeframe: (when?) _____

APPENDIX B

Welcome to

"Success by Choice:
A Tech Prep and
Career Education
Workshop for Parents"

WHY AM I HERE?



T-1-A

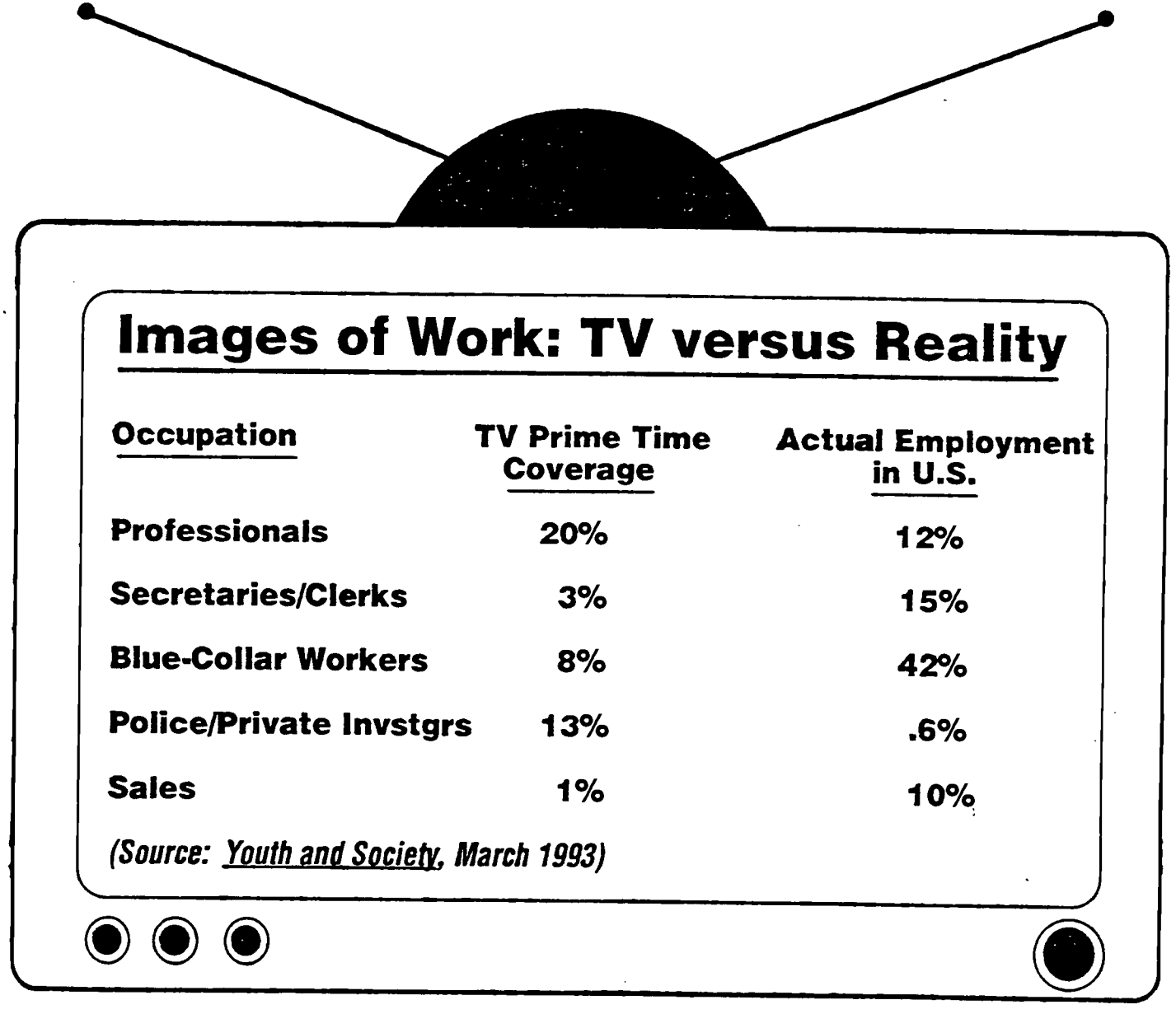
Parents Do Influence Career Choices

"Many studies show that young people cite their parents most frequently as the main influence in their occupational plans. No other group even comes close."

(Shoffner and Klemer, 1973)

"The occupational and educational plans of youth are more closely associated with parents' occupational and educational expectations...than with any other known factor."

(Haller and Portes, 1973)


Images of Work: TV versus Reality
Occupation
TV Prime Time Coverage
Actual Employment in U.S.
Professionals
20%
12%
Secretaries/Clerks
3%
15%
Blue-Collar Workers
8%
42%
Police/Private Invstgrs
13%
.6%
Sales
1%
10%
(Source: Youth and Society, March 1993)

Images of Work: TV Versus Reality

TV presents images that significantly . . .

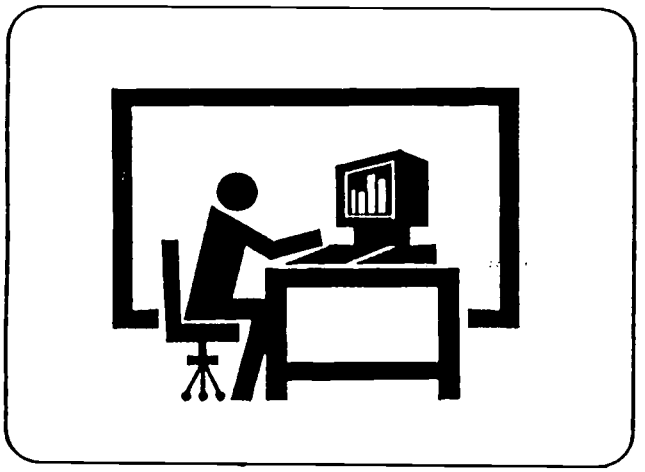
- **overrepresent professional, high-status jobs**
- **emphasize success and status while minimizing the difficulty and time-consuming nature of high-status work**

What's the Impact? . . .

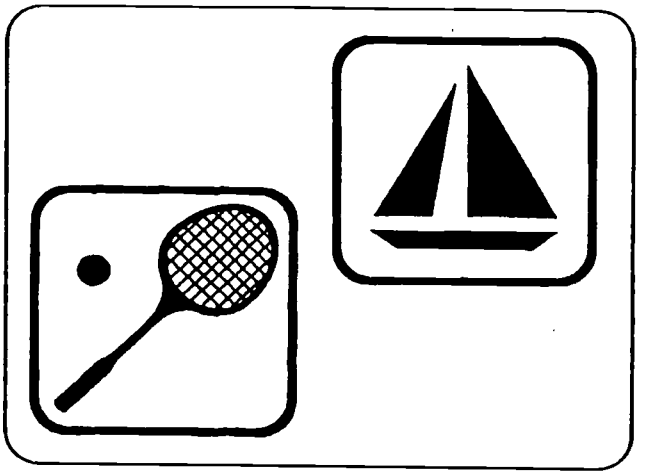
Children grow up with extensive exposure to images of work success that are largely unrelated to work effort.

(Source: Youth and Society, March 1993)

A full and successful life is a balance of. . .

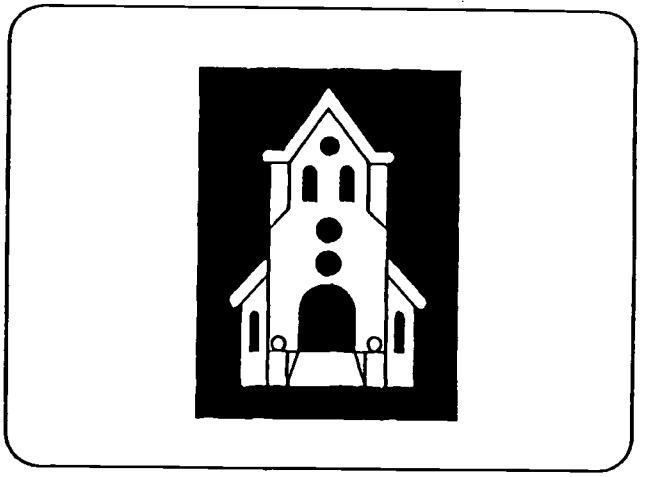


work



leisure

family



community

What Success Means

To laugh often and love much; to win the respect of intelligent persons and the affection of children; to earn the approbation of honest critics and endure the betrayal of false friends; to appreciate beauty; to find the best in others, to give of one's self; to leave the world a little better, whether by a healthy child, a garden patch, or a redeemed social condition; to have played and laughed with enthusiasm and sung with exultation; to know even one life has breathed easier because you have lived - this is to have succeeded.

- Rotary Club Bulletin, Stratford, Ont., Canada, quoted in Anderson Hospice newsletter (from Anderson Independent-Mail, Nov. 1, 1992, p. c1.)

"People do not plan to fail... they simply fail to plan."

(author unknown)

The World is Changing, and Faster Than we Think!

In 1893, America's "best minds" predicted that by 1993:

- **Railroads would provide the fastest means of travel**
- **A typical workday would be only 3 hours long**
- **Laws would be so simplified that lawyers would become obsolete**
- **The federal government would set up colleges to train servants**
- **Marriages would be happy because couples unsuited to each other would be executed**

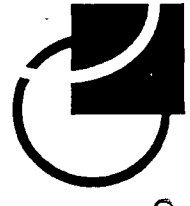
Changes occur at a faster rate now than at the turn of the last century. Can we even imagine what life will be like by 2093?

(Source: Walter, D. Today Then: America's Best Minds Look 100 Years Into the Future on the Occasion of the 1893's World's Columbian Exposition. Helena, Montana: American & World Geographic Publishing, 1992.)

Technology's Effect on Education and Employment

In the past...

- A high school diploma was enough to get a good job at the local factory; a college degree virtually guaranteed life's luxuries.
- Security was based primarily on "doing a good job."
- Advancement was based on seniority.

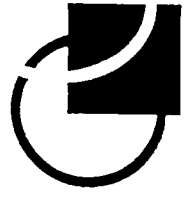


In the future...

- The average job in the Southeast will require almost 14 years of formal education.

- Job security will be based on skills diversity and the ability to adapt to change.

- Advancement will be determined by one's ability to absorb, process, and apply new information quickly and effectively.



Six Trends Reshaping the Workplace...

1. Most companies are employing fewer people due to increased automation

2. Emphasis is shifting from top-down management to self-directed work teams

3. Technology is playing an increasingly important role in work, and technology will change faster every year

Six Trends Reshaping the Workplace...

4. More companies are emphasizing lifelong learning and cross-training in order to remain competitive

5. More emphasis is placed on **high** quality goods and services delivered to customer specifications

6. More companies compete in a global marketplace, which influences the manufacturing, marketing and delivery of products

According to recent research
at Cornell University,
global competition, downsizing, and
the technological revolution
are expected to result in
mid-level technologies
becoming the largest
of all occupational sectors
by the year 2000.

...How much do <u>you</u> know
about these careers?

GENERAL CHARACTERISTICS OF MID-LEVEL TECHNOLOGY CAREERS

- offer wide range of responsibilities, good salaries, and advancement opportunities
- require problem-solving, communications, "teamworking", and technical (job-specific) skills
- often require performance of duties as part of a team
- offer opportunities in more than industrial/ technical fields—many positions exist in health, business, and public service areas
- are becoming more plentiful locally, regionally, and nationally
- require high school occupational training up to an associate degree for entry and/or advancement

So...What's the point?

- the world your children are preparing for is different than the one you were preparing for at their age

- technology and changing management practices have resulted in new career opportunities

- in order tgo help your children make good choices, you have to know what the options are!

PACE

(Partnership for Academic and Career Education)

- school districts(7)
- County Business & Education Partnerships(2)
- The Career & Technology Center
- Tri-County Technical College
- National Dropout Prevention Center
- Clemson University
- business/industry(8)
- State Government

↓

coordinating board

↓

curriculum, counseling, planning, STW committees & task forces

↓

PACE Staff– district/high school/college administration

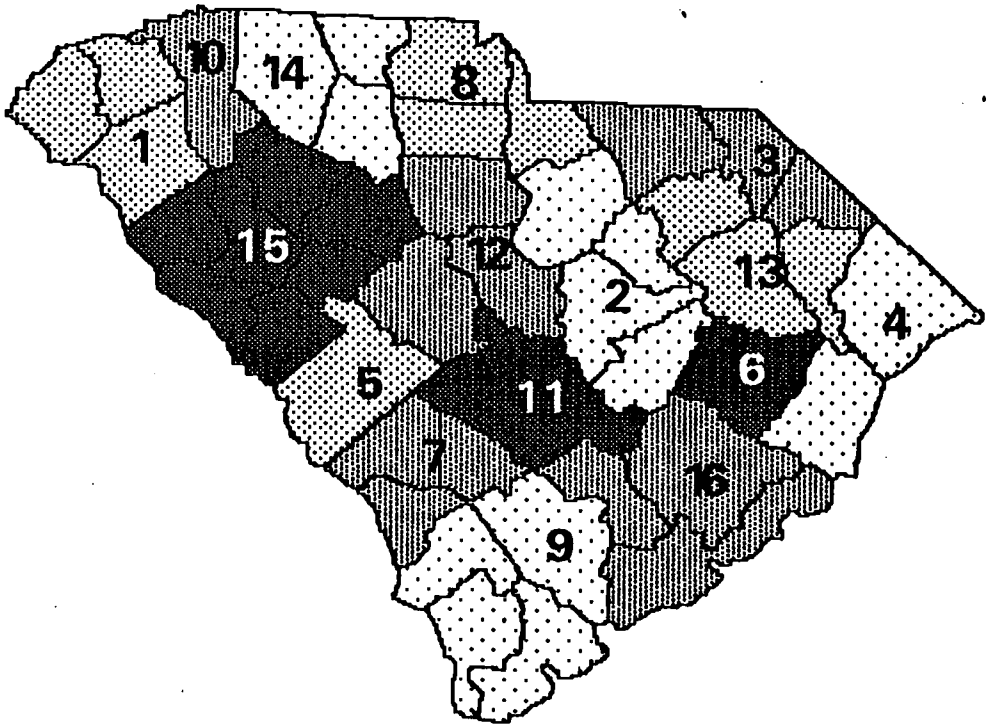
↙ ↘

high school/college faculty ↓ high school/college counselors

TECHPREP

PREPARATION FOR TECHNOLOGIES

South Carolina Tech Prep Consortia



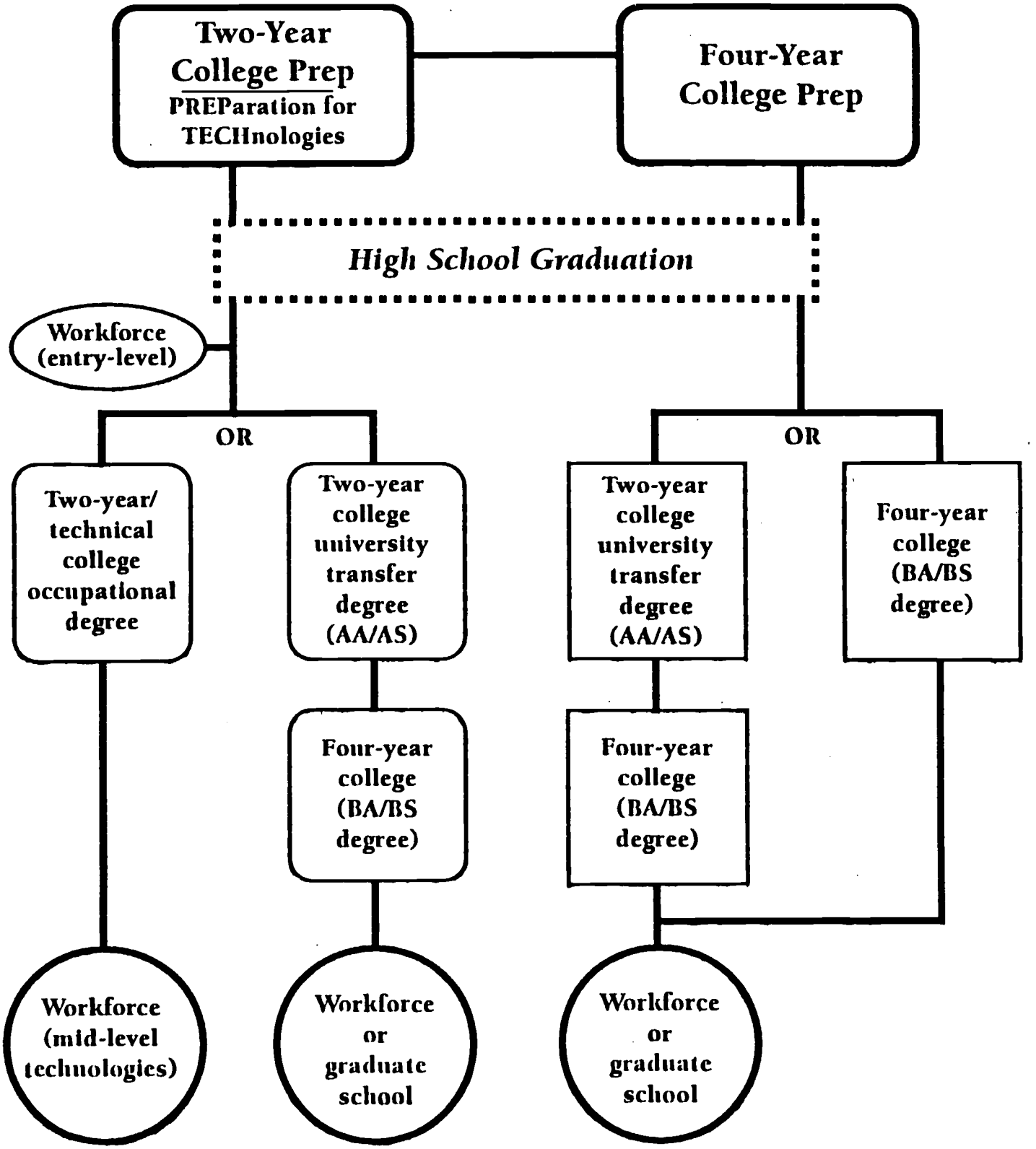
1. Partnership for Academic and Career Education (PACE)
2. Academic and Career Achievement Partnership
3. Chesterfield-Marlboro-Dillon Consortium
4. Life Prep Consortium
5. Aiken County Consortium (ACCESS)
6. Williamsburg County Preparation for the Technologies Consortium
7. Applied Learning Experience Consortium
8. Catawba Technology Education Consortium
9. Lowcountry Tech Prep Consortium
10. Greenville Tech Prep Consortium
11. Orangeburg-Calhoun Tech Prep Consortium
12. Central Midlands Tech Prep Consortium
13. Darlington, Florence, and Marion Counties Consortium
14. Upstate Tech Prep Consortium
15. Piedmont Area Tech Prep Consortium
16. Trident Area Consortium for the Technologies

WHAT IS TECH PREP?

It's PREParation for TECHnologies

- It's new!
- Taking the right academic and occupational classes in high school to prepare for exciting, rewarding careers in:
  - industrial/engineering technologies
  - business technologies
  - public service technologies
  - health technologies
- Opportunities to earn technical college credit while still in high school, saving time and money toward college studies!

Two Right Ways to Prepare for the Future



What Is Technical Advanced Placement?

Part of the Tech Prep program designed to:

- reduce "overlapping" between high school and college courses
- enable qualified students to earn technical college credit based on coursework and completion of specific procedures
- provide an incentive for students to take specific courses while in high school and to do well in those courses
- save students time, money, frustration in college

What is Technical Advanced Study?

- part of Tech Prep that allows qualified seniors to take courses at Tri-County Technical College
- provides a head start on college studies
- requires students to cover costs of tuition and books, and to provide their own transportation
- requires considerable motivation and self discipline

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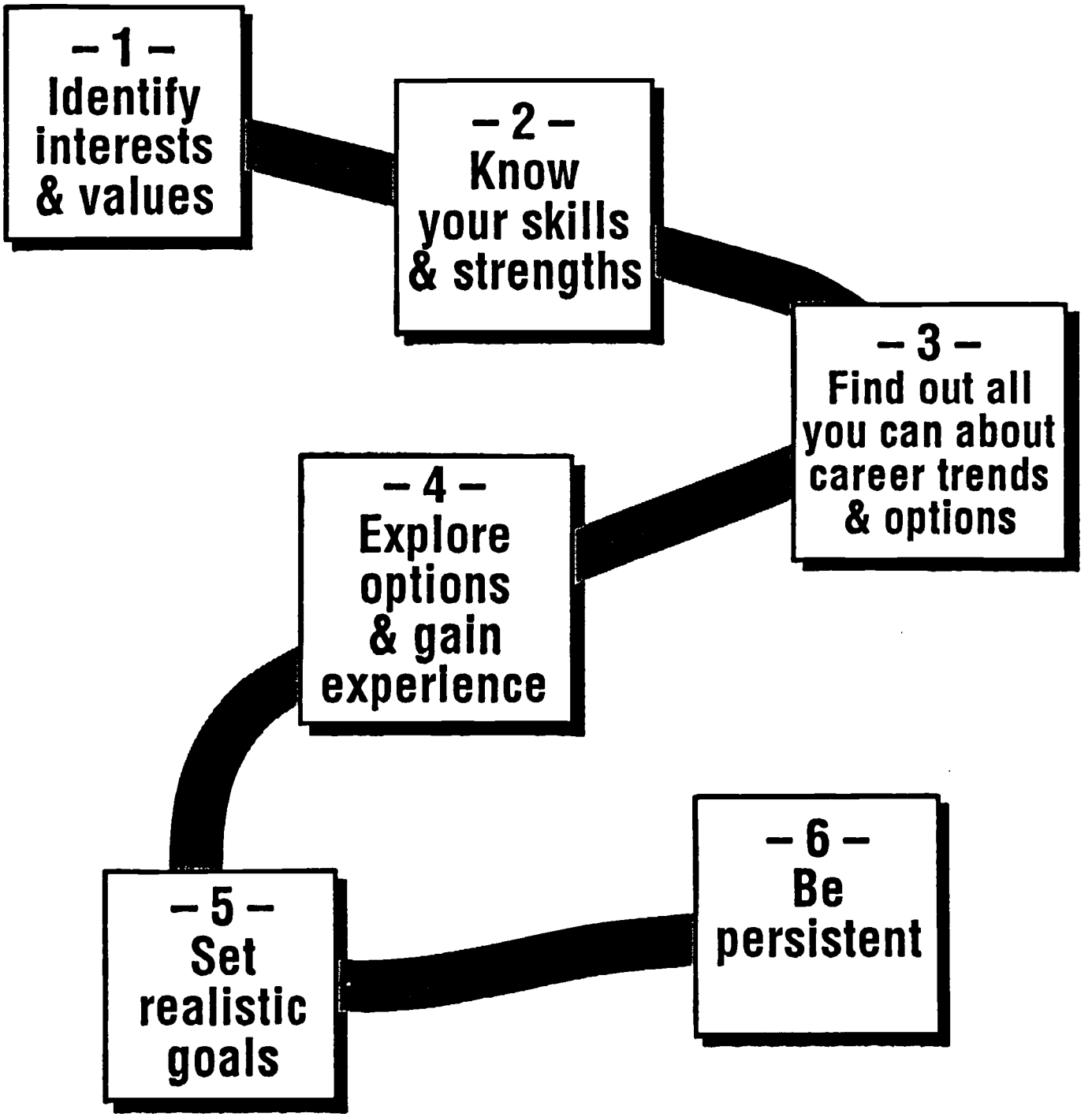
What is "School-to-Work"?

Learning that occurs
in the workplace,
and that is connected
to the student's
classroom instruction
and career goals.

School-to-Work Options

- shadowing
- internship
- co-op
- service learning
- youth apprenticeship

6 Steps to Choosing a Career



APPENDIX C

When this Facilitator's Guide was distributed locally, school contacts were encouraged to use appropriately the articles listed below. Copies of these articles have not been provided here in accordance with copyright regulations.

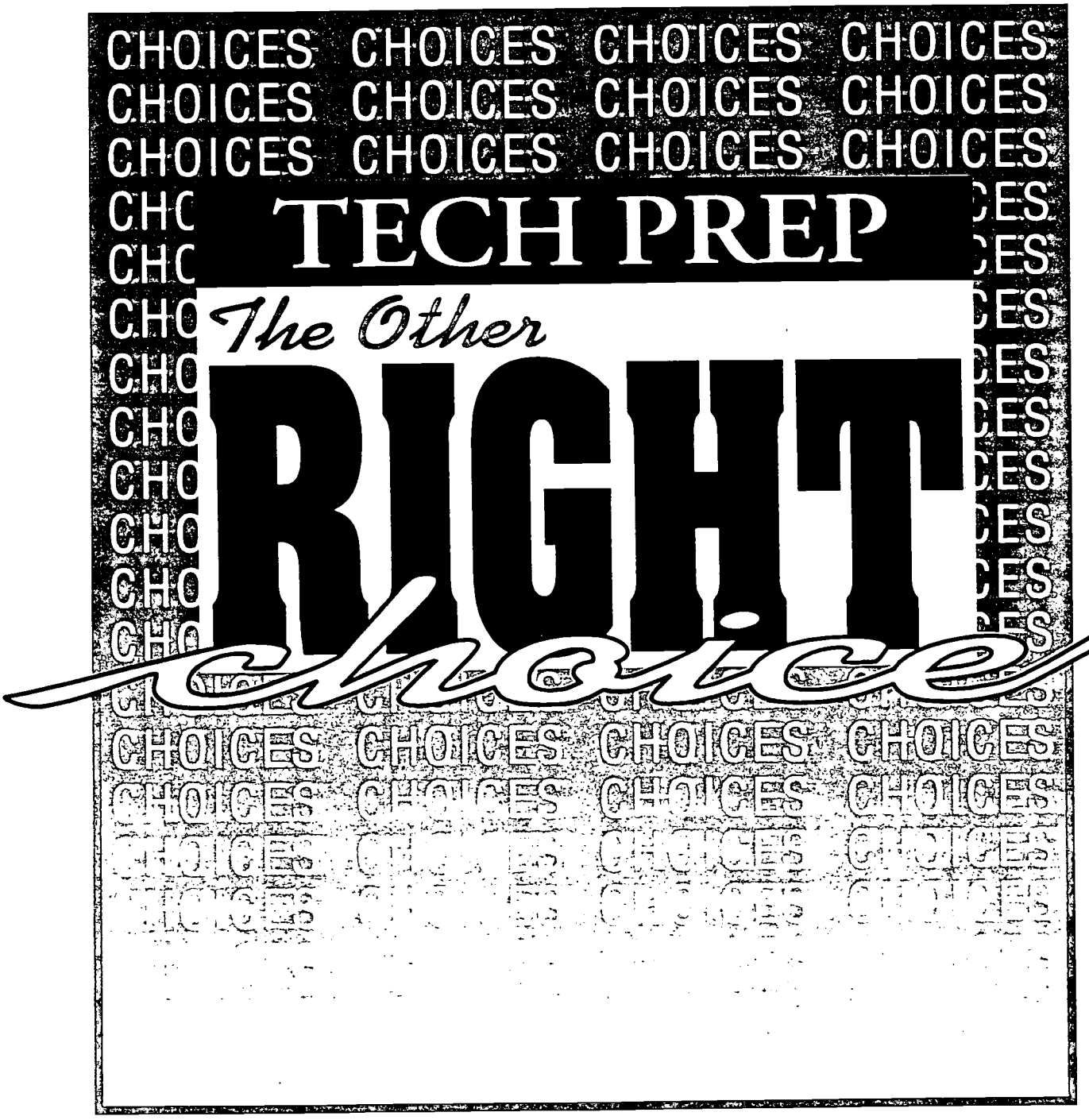
Arenofsky, Janice. "The Best of Both Worlds: Vo-Tech and College," Career World, (no date available), p. 23-26.

Hodge, Marie and Jeff Blyskal. "How to Help Your Child Choose the Right Career," Reader's Digest, February 1989, p. 146-153.

O'Connel, Loraine. "Parents who Listen to, Respect Kids Are Cool," Anderson Independent-Mail, February 20, 1995, p. 1B, 2B.

Schrof, Joannie M. "Community Colleges," U.S. News & World Report, October 4, 1993, p. 126-127.

Shanok, Rebecca S. "What Do You Do All Day at Work?" Parents, June 1993, p. 105-106.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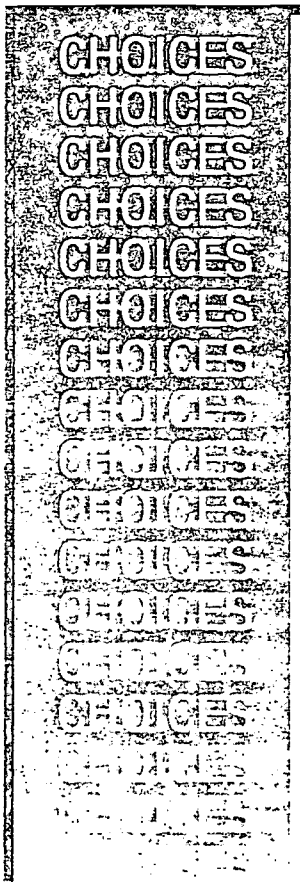
TECH PREP
The Other
RIGHT
choice



PREParation for TECHnologies

Tech Prep Helps Your Child To:

- Select the best blend of academic and occupational courses
- Develop skills in:
  - Communications
  - Teamwork
  - Math and Science
  - Problem Solving
  - Technology
  - Critical Thinking
- Explore and start a rewarding career path
- Prepare for academic success at the postsecondary level
- Earn advanced standing in community/technical college programs
- Prepare for the challenging, demanding workplace of the future

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Two Right Ways To Help Your Child Plan & Prepare For The Future!

Tech Prep: 4 Years of High School + 2 Years of Community/Technical College + transfer option into four-year College/University
Traditional College Prep: 4 Years of High School + 4 Years of College/University

	High School		Two-Year or Four-Year College/University	Educational Goal	Career Goal
Tech Prep (4+2)	CORE COURSES* Strong Academic Program	ELECTIVE COURSE EMPHASIS •Math •Science •Technology & Career •Work-based learning (Apprenticeship)	TYPICAL COURSE BREAKDOWN 1st Year: Major/ Specialization (work-based learning); Liberal Arts 2nd Year: Major/ Specialization (work-based learning); Liberal Arts	Associate Degree	Mid-level Technology Career (or transfer option into 4 yr. college)
College Prep (4+4)	CORE COURSES Strong Academic Program	ELECTIVE COURSE EMPHASIS •Humanities/Fine Arts •Foreign Language or •Math/Science	TYPICAL COURSE BREAKDOWN 1st-2nd Year: Liberal Arts; Major/Specialization 3rd-4th Year: Major/ Specialization; Liberal Arts	Bachelor's Degree	Professional Career (or graduate school)

Both Tech Prep and College Prep emphasize a strong academic core...so what's the difference?

- Students' future plans and career goals are different
- Emphasis in elective courses is different, but all course offerings are available
- Tech Prep students have an advantage of multiple options after high school for combining meaningful work and higher education
- Tech Prep students in two-year colleges start their major/specialization courses immediately

* academic core courses can be college preparatory, applied, or a combination. Students in South Carolina who have taken applied courses can meet freshman admission requirements for public four-year colleges through the exemption clause; see your child's guidance counselor for more information.

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Developed by:

Partnership for Academic and Career Education (PACE)
P.O. Box 587, Highway 76
Pendleton, SC 29670
803-646-8361, ext. 2107
1994

(Sections of this brochure were adapted, with permission, from a publication developed by the CDS Cooperative in Harvey, IL.)

Published by
Tri-County Technical College
in cooperation with
The Partnership of Academic and
Career Education (PACE),
a business and education consortium
promoting Tech Prep/School-to-Work
programs for students
in Anderson, Oconee and Pickens counties
of South Carolina

PACE

P.O. Box 587, 7900 Hwy 76
Pendleton, SC 29670
(803/864 646-8361, ext. 2107)

TECH PREP

ADMISSION TO FOUR-YEAR COLLEGES

Questions and Answers about Tech Prep:

Can I go to a four-year college if I'm a Tech Prep student?

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Anderson College

To transfer from a University Transfer program to Anderson College:

- You may transfer a maximum of 72 semester hours from a two-year institution.
- You must have an overall grade point average of C or better.
- You may transfer a maximum of 12 hours of D work in general education courses only.
- SAT requirement:
  If you've completed 24 transferable semester hours, NO SAT is required for transfer admission. If you have completed less than 24 hours (or are younger than age 21), the SAT IS required for transfer admission.
- Foreign language requirement:**
  NO foreign language is required for admission when you transfer from a University Transfer program.
- High school transcript:
  If you have completed 30 transferable semester hours, your high school transcript is NOT required for admission; if you have completed less than 30 hours, your high school transcript IS required for admission.

CONTACT PERSON:
Mary Jahn, Registrar
Anderson College
316 Boulevard
Anderson, SC 29621
(864) 231-2120

Clemson University

To transfer from a University Transfer program to Clemson University:

- You must have completed at least 30 transferable semester hours.
- You must have a cumulative grade average of C+ or better.
- SAT requirement:
  If you are transferring from a University Transfer program, generally there is NO SAT score required for transfer admission. However, Clemson reserves the right to require the SAT in certain cases if two-year college coursework is borderline.
- Foreign language requirement:**
  If you are transferring from a University Transfer program, NO foreign language is required for transfer admission.
- High school transcript:
  If you've completed 30 transferable semester hours, your high school transcript in NOT required for transfer admission. If you've completed less than 30 transferable semester hours, your high school transcript IS required for transfer admission. Clemson reverves the right to require the high school transcript in special circumstances.

CONTACT PERSON:
Gina Warren, Assistant Director of Admissions
Clemson University
Clemson, SC 29634-4024
(864) 656-2287

Furman University

To transfer from a University Transfer program to Furman University:

- You are not required to have a specific grade point average. However, collegiate GPA is very important.
- You must have a grade of C or better on each course transferred.
- SAT requirement:
  If you have completed 30 transferable semester hours, NO SAT is required for transfer admission. If you've completed less than 30 transferable credit hours, the SAT IS required for transfer admission.
- Foreign language requirement:**
  There is NO foreign language requirement for transfer admission when enrolling from a University Transfer program.
- High school transcript:
  You WILL need to submit your high school transcript to Furman in order to complete transfer admission requirements.

CONTACT PERSON:
Carey Thompson, Director of Admissions
Furman University
Greenville, SC 29613
(864) 294-2000

Lander University

To transfer from a University Transfer program to Lander University:

- You may transfer a maximum of 64 semester hours.
- You must have a grade of C or better in each transfer course.
- SAT/ACT requirement:
  If you've completed 30 transferable semester hours, NO SAT/ACT is required for transfer admission. If you've completed less than 30 transferable semester hours, the SAT/ACT IS required for transfer admission.
- Foreign language requirement:**
  If you've completed 30 transferable semester hours, NO foreign language is required for transfer admission. If you've completed less than 30 transferable semester hours, a foreign language MAY BE required for transfer admission.
- High school transcript:
  If you've completed 30 transferable semester hours, your high school transcript is NOT required for transfer admission. If you've completed less than 30 transferable semester hours, your high school transcript IS required for transfer admission. Students who wish to transfer less than 30 semester hours must meet freshman admission requirements as listed in the university catalog.

CONTACT PERSON:
Jacquelyn Roark, Director of Admissions
Lander University
Greenwood, South Carolina 29649
(864) 229-8307 or 1 800 768-3600

Southern Wesleyan University

(Formerly Central Wesleyan College)

To transfer from a University Transfer program to Southern Wesleyan University:

- You may transfer a maximum of 68 semester hours from a two-year institution.
- You must have a grade average of C or better for major or general education credit.
- You may transfer a maximun of 12 hours of D work as elective credit only.
- SAT requirement:
  If you've completed 30 transferable semester hours, NO SAT is required for transfer admission. If you have completed less than 30 semester hours, the SAT IS required for transfer admission.
- Foreign language requirement:**
  NO foreign language is required for admission when you transfer from a University Transfer program.
- High school transcript:
  If you've completed 30 transferable semester hours, your high school transcript is NOT required for admission; if you've completed less than 30 hours, your high school transcript IS required for transfer admission.

CONTACT PERSON:
Tim Wilkerson, Dean of Enrollment Management or
Christina Walker, Senior Admissions Counselor
Southern Wesleyan University
Central, South Carolina 29630-1020
(864) 639-2453 or 639-4099

**Foreign language may not be required for admission when you transfer into a four-year college or university, but many times foreign language is required to graduate from the four-year school. Although foreign language is NOT required for admission to technical college University Transfer programs, it is recommended that you take foreign language in high school. With that background, you will be better prepared to take foreign language courses in college.

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YES! You know that as a Tech Prep student, by taking a combination of applied academics classes with an occupational specialty at your high school or career center, you are already preparing for a rewarding career in one of the many mid-level technology careers that will be in great demand in the coming years. These careers typically require specialized training or an associate degree from a two-year college.

But what if you change your career goal, and you need to get a bachelor's degree from a four-year college or university? What are your options?

Well, you can follow three paths from your Tech Prep program to a four-year college:

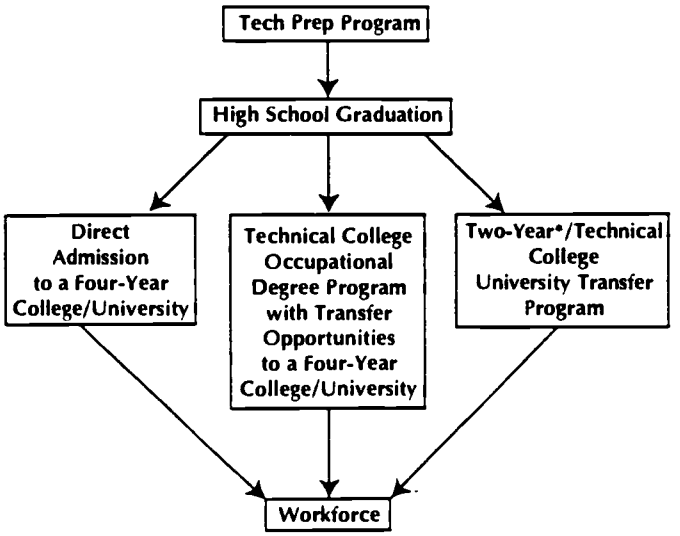
- If you meet all of the other requirements for freshman admission to a four-year college, you may qualify to be admitted **directly** into the college or university of your choice. Your guidance counselor can help you explore this option.
- You can take advantage of the "university transfer" (associate in science or associate in arts) program at a two-year technical college.
- You can complete an occupational associate degree in many subject areas at a two-year technical college and then transfer your credits into a related four-year college/university program.

What are the advantages of a University Transfer program?

- a high-quality education at a manageable cost,
- small classes and personalized instruction,
- up to two years of credit towards a bachelor's degree, and
- acceptance into any South Carolina four-year college or university based on your satisfactory performance at a two-year technical college.

For more information on university transfer, see your high school guidance counselor or contact the admissions office of your local technical college.

TECH PREP Pathway Options to a Four-Year Degree



Listed inside this brochure is information on transfer admission requirements for some area colleges and universities for students who have completed coursework in a University Transfer program.

Career Planning Flowchart

START HERE

Step 1
List your job / career choice:

_____

_____

Step 2
Check all education and/or training required:

_____ 1. High School diploma
_____ 2. Vocational training in high school
_____ 3. Other career training: _____
_____ 4. Associate degree (2-year college)
_____ 5. Bachelor's degree (4-year college)
_____ 6. Professional degree (master's, doctorate)

Step 3
If your career choice requires more than vocational training, list area colleges or educational institutions that offer degree programs in your area of interest:

_____

_____

_____

Step 4
Plan your high school courses

A. List all courses you plan to take during grades 9 - 12 and any other supporting activities that will help you reach your career goal.

B. Check the courses which may qualify you for advanced placement at area two-year colleges or universities (AP, TAP, etc.) Enter your checkmarks on the left column beside the course title.

C. **Remember:**
Planning the right academic and vocational courses in preparing for a rewarding career!

Freshman Year

	Course	Grade
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

Other Activities: _____

_____

Sophomore Year

	Course	Grade
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

Other Activities: _____

_____

Junior Year

	Course	Grade
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

Other Activities: _____

_____

Senior Year

	Course	Grade
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

Other Activities: _____

_____

Step 5
Checklist for Seniors headed for four-year colleges:

____ apply for admission and have transcripts and test scores mailed
____ visit campuses
____ apply for financial aid

Checklist for Seniors headed for two-year colleges:

____ plan to take co-op through the Career Center
____ apply for admission
____ apply for financial aid
____ apply for advancd placement
____ apply for college co-op and/or special tuition assistance programs

Checklist for Seniors headed for the workplace:

____ meet with job placement coordinator
____ brush up application and interview skills
____ check into company's policies for paying college tuition in case you want to continue your education later

Step 6
Complete training at:

_____

(college choice)

Congratulations, you did it!
You're now ready to begin a rewarding, exciting career !

School-to-Work Options

Shadowing

A short-term career exploration experience where a student observes an employee in his/her work environment for several hours up to one full day.

Internship

An extended assignment in which a student explores broad areas of a career field and gains valuable hands-on work experience. Internships may last several weeks or months, and often occur during the summer.

Co-op

A work assignment where the student gains specific skills and experience in a targeted career area, which is usually associated with his/her second year of occupational study in high school. Co-op assignments usually last one or two semesters.

Service Learning

A short-term assignment combining career exploration, work experience and community service. Service learning may occur on the school campus, with a social service agency or in the community. Assignments may last a few hours up to several weeks or months.

Youth Apprenticeship

A long-term experience that combines classroom study and work-based learning as well as secondary and postsecondary education, and that features progressively more sophisticated work experiences guided by school and workplace mentors. Youth apprenticeship may begin in grade 11 or 12 and continue through at least one or two years of postsecondary education.

"20 Ways to Help Your Child Explore Career Interests"

1. Share what you know about different careers with your child.

2. Read the want ads together from the Sunday paper; discuss openings and skill requirements.

3. Take your child to work with you, or arrange for a good friend or relative to host him/her for the day.

4. Take a "learning vacation" and point out various career opportunities.

5. Encourage your child to volunteer in an agency, or to accept a part-time job with a company that would expose him/her to various careers.

6. Borrow books or videos from the school library and review them together.

7. Assist your child with career-related school assignments; or encourage your child to select topics for papers that would involve career research.

8. Attend a community or school Career Fair with your child.

9. Encourage your child to enroll in a career-related summer activities like computer camp.

10. Encourage your child to be an entrepreneur by starting a small business at home (e.g., lawn care service).

11. Tour your district's Career Center, or a regional technical college, and discuss career opportunities available to graduates.

12. Assist your child to learn to use a computer-based career information system (e.g., SCOIS, SIGI, C-Lect, or others that are typically available through your school's guidance office).

13. Encourage your child to write to the personnel office in large area companies and request career information. (In our area, Duke Power, Michelin and Milliken all publish such brochures.)

14. Encourage your child to contact professional associations, like The American Society of Clinical Pathologists, and request career materials. (Association addresses may be obtained through local libraries.)

15. Have your child interview friends and relatives about their jobs.

16. Monitor the TV listings each week to identify programs that feature different careers. (Public Broadcasting, A&E and the Discovery Channel are all good sources!)

17. Watch for special editions of **Forbes**, **Time**, **Newsweek**, **Fortune**, and **U.S. News & World Report** relating to career trends. (Many of these special editions appear during May and June during graduation time!)

18. Encourage your child to bring home copies of any career magazines that may be available through the guidance office; review contents of these magazines together.

19. Encourage your child to enroll in career exploration courses in school, and occupational courses with opportunities for work-based learning.

20. Identify school, church or community-based activities through which your child can explore career interests and opportunities (e.g., Explorers, VICA, Future Teachers of America, 4-H, Habitat for Humanity).

Developed by:

Partnership for Academic and Career Education (PACE)
PO Box 587, Highway 76
Pendleton, SC 29670
(803) 646-8361, extension 2107

(June 1994)

PARENTS' ROLE IN GUIDING CAREER DECISION-MAKING

RESOURCE LIST

The following resources are available for loan through the Library at Tri-County Technical College, or may also be available through local public libraries. (Several area bookstores, such as the Open Book in Clemson, can also order these items for individuals wishing to purchase them.)

America's Top Technical and Trade Jobs compiled by J. Michael Farr. (Indianapolis, IN: JIST Works, Inc., 1992. ISBN: 1-56370-041-7.)

Careers Without College: Cars by Michelle Krebs. (Princeton, NJ: Peterson's, 1992. ISBN: 1-56079-221-3.)

Careers Without College: Computers by Linda Williams. (Princeton, NJ: Peterson's, 1992. ISBN: 1-56079-224-8.)

Careers Without College: Fashion by Kathleen Beckett. (Princeton, NJ: Peterson's, 1992. ISBN: 1-56079-220-5.)

Careers Without College: Fitness by Maura Rhodes Curless. (Princeton, NJ: Peterson's, 1992. ISBN: 1-56079-223-X.)

Careers Without College: Health Care by Susan Gordon and Kristin Hohenadek. (Princeton, NJ: Peterson's, 1992. ISBN: 1-56079-222-1.)

Careers Without College: Music by Ted Greenwald. (Princeton, NJ: Peterson's, 1992. ISBN: 1-56079-219-1.)

Careers Without College: No B.S. Necessary by Jo Ann Oritt Russo. (White Hall, VA: Betterway Publications, Inc., 1985. ISBN: 0-932620-60-4.)

Discover What You're Best At by Barry and Linda Gale. (New York, NY: Simon and Schuster, 1982. ISBN: 0-671-41754-1.)

The Fifty-Minute Career Discovery Program by Elwood N. Chapman. (Los Altos, CA: Crisp Publications, Inc., 1988. ISBN: 0-931961-07-6.)

Great American Learning Adventures by Harriet Webster. (New York, NY: HarperCollins Publishers, Inc., 1994. ISBN: 0-06-273167-X.)

How to Help Your Child Choose a Career by Luther B. Otto. (Columbia, SC: South Carolina Occupational Information System, 1989.)*

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* Parents wishing to purchase a copy of this material should contact SCOIS, P.O. Box 995, Columbia, SC 29202; telephone number (803) 737-2733.

How to Help Your Child Land the Right Job (Without Being a Pain in the Neck) by Nella Barkley. (New York, NY: Workman Publishing Company, Inc., 1993. ISBN: 1-56305-152-4.)

Peterson's Summer Opportunities for Kids and Teenagers by Peterson's Guides, Inc. (Princeton, NJ: Peterson's Guides, Inc., 1993 and annual updates. ISBN: 1-56079-176-4.)

The Real-Life Aptitude Test by Maya Pilkington and the Diagram Group. (New York, NY: Pharos Books, 1987. ISBN: 0-88687-411-4.)

VGM's Handbook of Scientific & Technical Careers edited by Annette Selden. (Lincolnwood, IL: VGM Career Horizons, 1992. ISBN number not available.)

Your Child's Career: A Guide to Home-Based Career Education by Garth L. Mangum, G. Donald Gale, Mary L. Olsen, Elwood Peterson, and Arden R. Thorum. (Salt Lake City, UT: Olympus Publishing Company, 1977. ISBN: 0-913420-75-1.)

A career in the technologies is as easy as 1-2-3!

Identify your interest and options

Get the facts

Start preparing now!

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Think about your interests and options!

Follow these three easy steps to finding a technology career that is right for you...

Identify your abilities, likes and dislikes:

- Take a career interest test. Your counselor may have some suggestions, or contact your area technical college, or look for the book, The Fifty-Minute Career Discovery Program by E.N. Chapman (1988).
- Take half an hour of uninterrupted time and write down all the characteristics that interest you about a job or career (like working with people, tasks that involve math, working with computers, etc.).
- Talk with someone you trust about your likes and dislikes and about career areas that might be best suited to you.

"Working in electronics is a real challenge! I have a lot of room for advancement. It took me a while to find a career that was right for me, but I'm really happy with my decision to go into electronics technology."
—Carol R. Findley
Instructional Support Technician
Applied Microelectronics Center
Tri-County Technical College

Investigate different careers! Look for these opportunities:

- shadow or mentoring programs at school;
- field trips, guest lectures, or career fairs where you can ask questions of people in different jobs;
- computer-based career information systems like SCOIS, available in many schools, or career books in your library or guidance office;
- visit your area career center and different departments at local two-year colleges, talk with teachers and students about courses, labs, and the types of jobs and salaries available to graduates;
- talk with neighbors, relatives, or friends who hold jobs that interest you—ask them what their jobs involve and what they like most about what they do;
- determine the kind of education you'll need to enter the career areas that you've identified.

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Experiment!

- Take high school vocational or occupational courses in areas that interest you.
- Volunteer in hospitals or other service agencies to gain first-hand knowledge about health care, public service, or similar career areas.
- Get involved in something—join a club, school newspaper staff, community organization, etc. to give you more exposure to different career-related activities.

Get the facts-

Watch out for the six most-common career preparation myths:

Myth #1
"There are plenty of good jobs for people who finish high school."

Fact:
By the year 2000, the average job in the Southeast will require almost 2 years of education beyond high school.

Myth #2
"To qualify for a really good job, I need a 4-year college degree."

Fact:
You can earn high salaries ($25,000 and higher in some cases!) with a two-year college degree in challenging positions with a variety of responsibilities.

Myth #3
"Technology jobs aren't for everyone; females have trouble finding jobs."

Fact:
There's a place in the technologies for everyone! In fact, projections are that females and minorities will have better opportunities than ever in technology fields—all that's needed is the right training and a will to succeed!

Myth #4
"If all I need is a two-year, technical college degree, then I can relax because it doesn't matter what I take in high school."

Fact:
Preparing for a career starts in high school. Taking the right academic courses, and combining them with vocational courses can save you time, money, and frustration in college and may qualify you for advanced placement!

Myth #5
"I don't know anything about electronics or other technical subjects, and I'm terrible in math. I'd never make it in a technology career."

Fact:
Technology careers are not only in technical fields, they can be in health, business, or public service areas too. While it's true that having some vocational background is helpful, two-year college programs start with basic courses and build up—so you don't have to know all the answers when you begin! And as for math, if you haven't taken the right high school courses, or need to brush-up, you can enroll in a technical college and gain the skills you need to be successful in any major.

Myth #6
"I know two-year colleges aren't as expensive as universities, but there's no way I can afford it."

Fact:
There are many opportunities to finance a two-year college education. In addition to grants and scholarships, several area companies now sponsor programs where your work part-time and receive funds for tuition and books! Where there's a will, there's a way, so find out what's available—talk with your counselor or the financial aid office at the two-year college you plan to attend.

Start preparing now for an exciting career in one of the technologies...

Starting early is important because your middle/junior high and high school studies are the foundation for success in any technology career. When you plan your high school studies, follow the course recommendations for the Tech Prep (PREParation for TECHnologies) program described in your school's career planning or registration guide. Here are some general planning tips:

- Take four units of mathematics and three units of science.
- Always take the highest level course you are capable of handling successfully.
- Take some occupational courses. Computer courses are particularly helpful for any college major, and with your occupational coursework, you may qualify for college credit through such programs as Technical Advanced Placement (TAP) available at Tri-County Technical College.
- Take a foreign language in high school and continue your studies in college. (Because many area companies are now international, skills in any foreign language can be a real advantage in the job market!)
- Apply yourself in all courses, learn to study and manage your time effectively, and do your very best in English classes. (The ability to communicate, especially in writing, will be one of your most valuable college, career, and life skills!)
- Talk with your high school counselor, vocational teacher, or area two-year college counselor about special options to finance a college education, including "earn while you learn" opportunities such as co-op, technical scholars/apprenticeship programs, work-study, and others!

Start your course and career planning today!

What's so great about mid-level technology careers?

- They offer good salaries, interesting work, and opportunities for advancement.
- They represent a large portion of the job growth in South Carolina and throughout the country.
- They involve many different fields such as industrial and engineering technology, business, allied health, and public service.
- They typically require some vocational training in high school up to completion of an occupational associate degree, either for entry or advancement, **and...**

You can start preparing for a technology career in high school. In fact, your high school studies may qualify you to earn credit at area technical colleges and provide you with opportunities to receive tuition assistance to help pay some or all of your college costs!

"This is a great program! I enjoy what I'm learning in class and our lab projects are really interesting. Thanks to a special scholarship program with the ROBERT BOSCH corporation, all my college expenses are taken care of, and I have a great part-time job that relates to what I'm learning in class."
—Robin Suggs
Student, Machine Tool Technology

"I'm convinced that a two-year college degree can lead to some great jobs and many possibilities for advancement. As an associate degree graduate myself, I know firsthand that this type of education can be a real plus in the job market!"
—Marcel Robinson
Personnel and Training Representative
Phillips Fibers Corporation

"After working for a while in a nursing home, I realized that to get anywhere I'd need more education. I really enjoy my studies in nursing and I know I'll have some good job opportunities after graduation."
—Gary L. Stancil
Student, Practical Nursing

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NUFACTU
SUPERVISOR
e an immediate need for an experienced first
pervisor for our evening shift operation. The
candidate will preferably have a two yea
gement degree with a minimum of five year
intensified supervisory experience. The abi
effectively deal with people is essential, alo
adhering to, an FDA work environment.
competitive salary is offered as well as an
nding fringe benefit package.
or immediate consideration please submit
sume or letter to include pay history in confi

PRODUCTION SUPERVISOR
Flexible Technologies has an opening for a Production Supervisor on 3rd shift in our plastic process department.
Candidates must have strong leadership capabilities along with exceptional people skills. We will accept a minimum of an associates degree or equivalent technical experience. Experience in plastic extrusion and/or injection molding a big plus.
We offer an excellent salary/benefit package and a progressive, people-oriented environment. If qualified, send resume to:
Division

ACCOUNTING SPECIALIST
Local Fortune 500 Co. seeks individual with strong accounting background to perform various accounting duties. Previous experience should include bank and general ledger account reconciliation, processing of financial statement preparation, 2-3 years accounting experience or technical school degree with emphasis in accounting. PC and Lotus 1,2,3 proficiency preferred. IBM system 38 knowledge a plus.
We offer an excellent benefits package which includes dental, medical, life and dependent insurances. Other benefit include paid vocation, 9 paid holidays, retirement plan and savings and investment plan. If you possess

Technical Writer
KEMET, one of the world's lea manufacturers of capacitors, has an ing for a Technical Writer to work Equipment Engineering Departmen person selected will need to passe ability to write descriptions of equi operations, maintenance proce troubleshooting guides, and

PROGRAMMER ANALYSTS
Our client has 3 openings for exp a VAX, C, FORTRAN Programmer Analysts. Candidates should have exp. in distribution/warehousing operations & at least a 2 yr. degree. Salary in the mid $30's plus bonus oppt'y. Send resume to:

ACCOUNTANT
Full time position available f Accounting Manager. Succe candidate should have a mini of 2 year degree in accounti business administration. 1 yea perience required, preferably cluding hospital accounting. F tion assimilates, prepares and reports financial data in accorda with generally accepted accou ing practices and corporate gui lines. Under direction of Contr ler, supervises operation of counting department. Knowled of Lotus 1-2-3, calculator, ledger journals and typewriter a must. Excellent salary and benefits. Send inquiries to:
Ka
Director of
Charter Ho
2700 E

DIRECTOR OF GRAPHICS
CLEMSON UNIVERSITY
Requires: An associate degree in art and three years experience in graphics programs, one of which must have been in a supervisory capacity; or an equivalent combination of education, training or experience necessary to perform the work. Thorough knowledge of

Associate I
C.R. Bard, Inc., a progre of medical devices, has Manufacturing Engineer an Associate Engineer.
Position requires a A degree with five - plus yr ence in the areas of ma mechanical systems, m etc. Must be ion preferred. hydraulics, components re
end resume' ar

NCR
Surface Mount Technol
Process Technicians
The candidate(s) will be responsible for Control and equipment troubleshooting ta ing edge Surface Mount Technology A fine. Challenges exist in establishing proc ables/controls and in state-of-the-art pr equipment maintenance and programmi have an associates degree in electronic ing with two years of experience.
offers an extensive benefits pa ellent work environment. For c technical growth opportunity, e ations may be completed at our esumes with salary requiremer dress listed below.

CINCINNATI MILACRON
NEEDS AN ENGINEERING DESIGNER/DRAFTSMA
The ideal candidate should have:
- 2 years Associate degree (minimum
- 3-5 years mechanical design/ drafting experience
- Ability to take concepts and make finished layouts and details on CAD
- Ability to conduct investigations of

INSTRUMENT TECHNICIANS
Up to $17. pr/hr. pkg. + subsist ance for out of town assignments.
Florida based firm is seeking Instrument Technicians for long term employment opportunities os field representatives in the the following states: NC, SC, GA, & ALA. Minimum qualifications are:
•AS degree or equivalent experi

LAB TECHNICIAN
SENIC LABO TECH
National Starch and of specialty chem excellent opportun Applications Lab for
The qualified applica

COMMUNITY HEALTH NURSI
Registered nurse to provide nurs services, counseling and support services to chronically mentally ill clients. Requires degree in nursi and state licensure. Prefer 2-4 yea of psychiatric nursing experienc Work hours are 8:30-5:00, Monday Friday. (All state employee benefits Salary range $21,262-$31,894).
Please send resume by November 20 to Dale Van Wagner, Columbia Area Mental Health Center, 1801 Sunset Drive, Columbia

CRYOVAC
to continuing expansion, CRYOVAC has immediate opening for the following posi-
ACCOUNTING CLERK
ies are centered primarily in cost and general counting. Associate degree in Business or Account- and a minimum of 2 years experience or a total of or more years of experience. Exposure to automa- systems, job costs, general ledger data collection stems, billings, etc. is required. Highly developed personal computer skills are desirable.
RYOVAC offers a benefit package that includes a competitive salary structure, medical and dental cov- rage, a 401K savings plan, salary continuance, re- ment and life insurance plans.

PACKAGING TECHNICIAN
Candidate must be high sch graduate with some college and technical school knowledge packaging techniques and mate als.
Must be computer literate usi PC's to prepare reports, cost da and packaging specs.
Must have good written and or communication skills.
Will report ing Engin ble for mo menting niques and

Clemson University
Food Service
Manager
Clemson University Outdoo Laboratory Permanent positio with state benefits; Grade 2 Duties include menu develop ment, ordering, food prepar tion and service, personn scheduling, and other manag ment duties; summer ca food service; food for conf ence center users during res year.
Qualifications: An Assoc Degree in food service man or dietetics and two y ence in quantity ooking, including supervisory capa school graduatio of experience i ality cooking, ear in a super Experience i eration and pe nt is require ons wit

METRO MOBILE
The Cellular Phone Co.
MARKETING COORDINATOR
Growing and exciting industry is seeking a marketing coordinator. Candidate must possess the following qualifications:
- 2 yr. degree in marketing or business administration preferred, will consider equivalent degree in a plus.
- Previou
- Lotus/F

DIRECTOR OF BUILDINGS AND GROUNDS
QUALIFICATIONS: (1) A high school diploma is required. Degree from a technical or four year college or university preferred. Minimum ten years technical skil three years supe istrative experie
LENGTH OF EM months
SALARY: Minimu
APPLICATION April 30, 1991

STERILE PROCESSING TECH III
Certified surgical Technologist or experienced sterile processing Tech. Experience in surgical case carts and instrument assembly preferred. Full time positions in sterile processing. Hours 11 PM to 7AM Monday thru Friday.

FIRE/SAFETY MARSHAL
Position available for experienced person with 2 year degree in Fire/Safety or equivalent experience. Must be knowledgeable in techniques of fire prevention and inspection, and in federal, state and local regulations pertaining to OSHA, Right-To-Know, SARA, HEW and JCAHO. Healthcare safety background essential. Salary commensurate with experience. Excellent benefits.

LABORATORY PROCESSING TECHNICIA
Anderson Memorial Hospit seeking a Processing Techni to join our Outpatient Diagno Laboratory. Successful candid should possess a MA, CLT, or A degree with computer experie helpful. Will consider individu with Phlebotomy backgrou Position is full-time with compe tive compensatio package provided.
Interested candida resume to or contac

ENGINEERING TECHNICIA
Southeast Paper Manufacturing Compa Dublin, Georgia, has an immediate openi for an ENGINEERING TECHNICIA Applicants must be a High School gradu or equivalent with at least two years technical or vocational school training. addition, applicants should have a mimimum of two years experience with the Intergraph Computer Aided Design/ Drafting Systems and one year of process industry design experience.
Send

CUSTOMER SERVICE ENGINEER
Anther International, LTD., a leader in the manufacture & design of electronic publishing, finishing equipment, is seeking a Customer Service Engineer for assignment in the Greenville South Carolina area.
Reporting to the Director of Engineering and Field Service, this position will be responsible for the installation and repair mechanical paper candidate will have minimum of 2 years assembly and repa electro-mechanical competent and be
Extended travel salary and bene

CLEMSON UNIVERSI
HISTOLOGY TECHNOLO
Qualifications: High graduation and two (2) years experience as a Histology Technician; or an associate degree in Histology (preferred) and (6) months experience in Histologic techniques. Supervisory experience is preferred. Experience with plastics would be helpful. State Pay Grade 26 (65) with benefits Closing Date: December directly or send a letter of application and resume to:

Technical
MANUFACTURING TECHNICIAN
KEMET Electronics, a wo leading manufacturer of el tronic capacitors, has a need f a Mixing/Casting Technician (3rd shift in our Fountain in Plant:
Qualified applicants should possess a 2-4 year technical degree or equivalent manufacturing experience. Mechanical and electro-mechanical skills required. Knowledge of IBM PC with Symphony or Lotus 1-2-3 is also a requirement. Candidates must be willing to direct h employees in daily job as and lead team meeti rator fit testing and monitoring required. bal and written com skills are required.
KEMET Electroni competitive salary

APPLICATIONS ENGINEER
Well established Easley, SC based hydraulic manufacturer has immediate opening for Applications Engineer serving as technical sales support for the hydraulic control pump and motor product candidate will have c two year technica related ex

Executive Secretary
Successful, local operation of German textile pany is looking for an experienced, executive s tary. Experience in the use of commonly used software packages is essential. Fluency in Gen le; shorthand experience would

St. Franc Hospita

TEACHER ASSISTANT/ ACTIVITY THERAPIST
Qualifications: Associate degree in Human Services with minimum of 2 years experience working with emotionally handicapped students is preferred. Duties

PHARMACY TECHNICIAN
be experienced in all administra well with limited supervis least 1 yr. exper. at strong macy Tech year degree & 3 PM - 11 must. The ri possess good resour cell
Dept.

POLICE LIEUTENAN
The City of Greer will accep cations for the position of Lieutenant thru 5PM, 4/3/ ory range: $21,869-$29,523. requires a highly motiva lessional with a min. of progressively responsible forcement, supervisory exc. leadership skills. Bachelor's Degree preferr combination of education ence will be considered. didates will be require plete a
TAX SPE
Greenville based time position in ment requiring corporate, part ual income to edge of medi plus.

NCR
TECHNIC
NCR's Workstation Produ for a Technical Illustrator Department.
Duties of the position inc
- design and create, us quality illustrations information in comp
- coordination and ma microfiche manuals

This brochure was published by the Partnership for Academic and Career Education (PACE), a business/education consortium promoting Tech Prep programs for students in Anderson, Oconee and Pickens counties of South Carolina. Funding for this brochure was made possible through a Carl Perkins grant awarded to PACE by the South Carolina Department of Education and the State Board for Technical and Comprehensive Education.

(**PACE**, P.O. Box 587, Pendleton, SC 29670, 803-646-8361, ext. 2107)

Veterinary Technician
Full Time Position
Send Resume To:
Industrial Electronics Technician

Fiber Optic Electronic Technician
ALCOA FUJIKURA LTD
Alcoa Fujikura Ltd., an American-Japanese (joint venture engaged in the manufacture and marketing of state-of-the-art fiber optic communication cables and systems, is seeking a field

Rehabilitation Specialist
This is responsible technica work of considerable difficul ty in the inspection and reha bilitation of substandard housing and other buildings. Will be responsible for eval uating structures

RATING AND BILLING ASSISTANT
Major local trucking company seeks aggressive individual to assist in maintaining rating system files on System 38 for van and bulk shipments in order to ensure accurate freight charges for customers as quoted. Monitor all rate quotes to ensure operating authority

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FASTEST-GROWING OCCUPATIONS: MID-LEVEL TECHNOLOGIES

Listed below are the fastest-growing careers in mid-level technology fields projected for state of South Carolina. These careers typically require some vocational training in high school up to and including an occupational associate degree either to enter the job or to qualify for advancement. Also included are careers which require some formal or specialized training after high school available through employers, proprietary schools or other agencies. Careers are listed in descending order of projected growth.

INDUSTRIAL AND ENGINEERING TECHNOLOGIES

Position	Increase by the Year 2000 (projected)
Machinists	68%
Electrical & Electronic Technicians	61%
Numerical Control Machine Tool Operators	51%
Industrial Machinery Mechanics Technicians	43%
Water & Waste Treatment Plant Operators	41%
Automotive Body, Related Repairers	40%
Drafters	39%
Electricians	38%
Data Processing Equipment Repairers/Technicians	47%
Tool & Die Makers	37%
Heating, A/C, Refrigeration Mechanics	36%
Plumbers, Pipefitters, Steamfitters	36%
Automotive Mechanics	34%

BUSINESS TECHNOLOGIES

Position	Expected Increase by 2000 (projected)
Computer Programmers*	79%
Receptionists, Information Clerks	67%
Property & Real Estate Managers*	63%
Computer Programmer Aides	62%
Medical Secretaries	62%
Brokers & Sales Agents, Real Estate*	52%
Insurance Sales Workers	52%
Bill & Account Collectors	51%
Computer Operators, except peripheral equip.	45%
Insurance Adjusters, Investigators	42%
New Account, Loan, Credit & Adjustment Clerks	42%
Insurance Policy Processing Clerks	40%
General Office Clerks	37%
Loan Officers and Counselors*	35%

HUMAN AND PUBLIC SERVICE TECHNOLOGIES

Position	Expected Increase by 2000 (projected)
Child Care Workers	111%
Legal Assistants, Technicians & Paralegals	106%
Guards	73%
Food Service & Lodging Managers*	69%
Legal Secretaries	64%
Teachers' & Education Assistants	39%
Police Patrol Officers	37%
Teachers, Preschool & Kindergarten*#	36%
Hairdressers and Cosmetologists	35%

HEALTH TECHNOLOGIES

Position	Expected Increase by 2000 (projected)
Medical Assistants	92%
Surgical Technicians	86%
Radiological Technologists & Technicians	78%
Dental Assistant	57%
Registered Nurses*	55%
Dental Hygienist	55%
Licensed Practical Nurse	48%
Emergency Medical Technician	37%

* Persons in these positions may have either an associate or a bachelor's degree.

Persons with appropriate credentials and/or a postsecondary diploma or an associate degree may teach in preschools or private kindergartens in South Carolina.

NOTES: The information in this list compares the 1986 employment figures against projected change by the year 2000. Only mid-level technology occupations showing at least a 33% increase were included in the list. It should also be understood that these are statewide projections. Because there are differences across the state, demand for a particular career area may be very high in the Upstate but lower in other parts of the state which will result in a lower overall percentage for projected growth.

(Source: South Carolina Employment Security Commission. Palmetto Perspective 1990: South Carolina's People and Jobs in the Year 2000. Columbia, SC: Author, 1990. NOTE: This was the latest information available from the state as of June 1992.)

June, 1992

AVERAGE SALARIES FOR MID-LEVEL TECHNOLOGY CAREERS

Listed below are just a few examples of AVERAGE salaries for mid-level technology careers* in the Upstate South Carolina MSA (Metropolitan Statistical Area) region or for the state as a whole. Again, the salaries listed are AVERAGE figures—some people earn considerably more depending upon their experience and the particular company with which they are employed. While the original salary figures reported by the S.C. Employment Security Commission were in hourly rates, they have been converted here to annual rates and rounded to even numbers.

INDUSTRIAL/ENGINEERING TECHNOLOGIES

Position	Average Annual Salary
Aircraft Mechanics+	28,000
Automotive Body and Related Repairers	22,000
Automotive Mechanics Technicians	22,000
Brick Masons	26,000
Bus/Truck Mechanics & Diesel Engine Specialists	29,000
Carpenters	19,000
Chemical Technicians/Technologists	24,000
Civil Engineering Technicians	31,000
Data Processing Equipment Repairers	29,000
Drafters	24,000
Electrical and Engineering Technicians	28,000
Electricians	27,000
Heating, Air Conditioning and Refrigeration Mechanics and Installers	21,000
Machine Tool Operators (Metal/Plastic)	27,000
Mechanical Engineering Technicians	34,000
Machinery Maintenance Mechanics	26,000
Machinists	22,000
Nuclear Technicians/Technologists+	28,000
Numerical Control Machine Tool Operators (Metal/Plastic)	26,000
Programmers (Numerical, Tool, Process Control)	30,000
Supervisors (First-Line), Mechanics	35,000
Surveying and Mapping Technicians	30,000
Tool and Die Makers	28,000
Welders and Cutters	23,000

BUSINESS TECHNOLOGIES

Position	Average Annual Salary
Accounting Technicians	16,000
Announcers+	14,000
Billing, Posting, Calculating Machine Operators	15,000
Bookkeeping, Accounting and Auditing Clerks	18,000
Broadcast Technicians+	17,000
Brokerage Clerks	17,000
Combination Food Preparation & Service Workers	11,000
Cooks, Institution or Cafeteria	11,000
Cooks, Restaurants	10,000
Computer Programmers@	33,000
Computer Operators, except peripheral equipment	21,000
Data Entry Keyers, except composing	16,000
Dispatchers, except police, fire and ambulance	24,000
Food Service and Lodging Managers@	19,000
Hairdressers, Hairstylists and Cosmetologists	15,000
Insurance Policy Processing Clerks	18,000
New Accounts Clerks	16,000
Payroll and Timekeeping Clerks	19,000
Personnel Clerks, except payroll	19,000
Production, Planning and Expediting Clerks	29,000
Real Estate Brokers+@	75,000
Receptionists and Information Clerks	15,000
Sales Supervisors, First-Line	22,000
Secretaries	19,000
Stenographers	21,000
Supervisors, Administrative Support Occupations	30,000
Travel Agents+	17,000
Typists, Word Processing Equipment	20,000

HUMAN AND PUBLIC SERVICE TECHNOLOGIES

Position	Average Annual Salary
Biological, Agricultural and Food Technicians+	16,000
Child Care Workers	11,000
Detectives and Investigators, except public@	17,000
Firefighters%	20,000
Funeral Directors and Morticians@	27,000
Guards, Security+	16,000
Human Services Workers+	14,000
Library Technicians%	19,000
Occupational Therapy Assistants%	18,000
Paralegal Personnel	26,000
Police Officers	21,000
Pre-School Teachers+@	13,000
Psychiatric Aides+	11,000
Social Service Aides%	22,000

HEALTH TECHNOLOGIES

Position	Average Annual Salary
Dental Assistants	17,000
Dental Hygienists	33,000
Emergency Medical Technicians+	13,000
Licensed Practical Nurses	20,000
Medical Assistants	19,000
Medical and Clinical Laboratory Technicians	24,000
Medical Records Technicians	18,000
Nursing Aides, Orderlies, and Attendants	10,000
Pharmacy Technicians	21,000
Physical and Corrective Therapy Assistants	22,000
Precision Dental Laboratory Technicians+	25,000
Radiological Technicians	18,000
Registered Nurses@	27,000
Surgical Technologists and Technicians+	20,000
Veterinary Technicians%	21,000

CURRENT SALARIES FOR OTHER OCCUPATIONS

Listed below are AVERAGE salaries for selected occupations other than mid-level technologies. These career fields and salary figures are provided for comparison purposes.

PROFESSIONAL LEVEL (Bachelor's Degree or Higher)

Accountants, Auditors & Other Financial Specialists	31,000
Aircraft Pilots and Flight Engineers+	34,000
Architects, except landscape and marine	40,000
Electrical and Electronic Engineers+	39,000
Medical and Clinical Laboratory Technologists	24,000
Operations and Systems Researchers & Analysts	32,000
Pharmacists	46,000
Physical Therapists+	37,000
Recreational Therapists+	13,000
Social Workers, Medical and Psychiatric	26,000
Systems Analysts, Electronic Data Processing	34,000
Teachers, Secondary	35,000
Writers and Editors	26,000

SEMI-SKILLED (On-the-job Training)

Bus Drivers	9,000
Cashiers	11,000
Cooks, Fast Food	9,000
Highway Maintenance Workers+	22,000
Janitors and Cleaners, except maids	13,000
Motion Picture Projectionists+	11,000
Salespersons, retail	13,000
Service Station Attendants	10,000
Tire Repairers and Changers+	14,000
Vehicle and Equipment Cleaners	12,000
Waiters/Waitresses	6,000

* Mid-level technology careers are those that typically require some high school vocational training up to and including an occupational Associate Degree either to enter the job field or to qualify for advancement.

Annual salaries are calculated by taking the hourly rate and multiplying by 2080 hours per year.

+ These figures are AVERAGES for the state of South Carolina. Salaries for the Upstate region were not available.

@ Persons in these positions may have either an associate or a bachelor's degree.

% Local figures unavailable from the Employment Security Commission so salaries reported were taken from statewide reports. (Source: South Carolina Occupational Information System, COIN Educational Products, 1991.)

(Source: S.C. Employment Security Commission, Labor Market Information Division. The South Carolina Wage Survey. Columbia, SC: Author, 1991; and local Employment Security Commission offices, 1992. Information contained in The South Carolina Wage Survey is based upon results of questionnaires sent to nearly 3000 employers across the state between February 1991 and June 1991.)

June, 1992

APPENDIX D

When this Facilitator's Guide was distributed locally, school contacts were encouraged to use the articles listed below as general references. Copies of these articles have not been provided here in accordance with copyright regulations.

"Different Paths to Success," U.S. News & World Report, September 26, 1994, p. 115-116.

Marquardt, Deborah. "Earn Up To $38,000: The Best Jobs Are in Health Care," Family Circle, February 1, 1994, p. 28, 35.

Marshall, Paula, "Not Right for College? New Hope for Kids Who Want Other Options," Better Homes and Gardens, February 1994, p. 58-60.

Revised 9-15-94

MID-LEVEL TECHNOLOGY POSITIONS

The position titles listed below were taken from want ads found in local papers (i.e., The Greenville News, Anderson Independent-Mail, The Clemson Messenger, The Seneca Journal-Tribune.) All the position titles were listed in job ads which indicated education requirements ranging from vocational training through an associate degree. Original copies of the job ads are on file in the PACE office. (Note: These job titles should not in any way be considered as a complete listing of mid-level career opportunities.)

Account Analyst*
Accountant, Accounts Payable**
Accountant, Cost*
Accounting Clerk
Accounting, General
Accounting Specialist
Accounting Supervisor**
Accounting Technician
Accounts, Manager**
Administrative Assistant
Administrative Assistant, bilingual
Administrative Assistant, Human Resources
Administrative Captain
Administrative Coordinator
Administrative Specialist
Administrator, Account
Administrator, Credit
Administrator, Insurance Claims
Aircraft Maintenance Instructor
Air Monitoring Technician
Apparel Standards Technician
Appraiser, Property**
Assistant, Administrative
Assistant, AG Science
Assistant, Buyer
Assistant, Director of Nursing
Assistant, Environmental Planner
Assistant, Marketing Coordinator
Assistant, Mayor
Assistant, Molding Supervisor
Assistant I, Paralegal

Assistant, Personnel
Assistant, Rehabilitation
Assistant, Store Manager
Associate Development Director
Associate Engineer
Associate Manufacturing Engineer
Audio/Video Technician
Auditor, Quality
Auditor, Senior supplier QA
Autocad Operator
Automated Manufacturing Technician
Automation Controls Programmer/Technician
Automotive Instructor
Biology Technician
Bookkeeper
Brick Mason
Building Inspector
Business Analyst**
Business Associate
Buyer
CAD Designer
CAD Drafter
CAD Operator
Calibration Technician
CNC Machine Technician
CNC Machine Operator
CNC Programmer
Carpenter
Case Manager
Chemical Handler
Chemical Laboratory Technician
Chemical Mixer
Chemical Plant Operator
City Treasurer
Claims Administrator, Group Health Insurance
Clerk
Clerk, Administrative (marketing)
Clerk, Cost Accounting
Clerk, Data Entry
Clerk, Deputy
Clerk, Engineering
Clerk, Human Resources
Clerk, Materials Management

Clerk, Production
Clerk, Receiving
Clerk, Safety
Clerk, Senior Benefits
Clerk, Technical
Clinical Laboratory Technician
Codes Specialist
Collector
Communications Director, Emergency
Communications Technician
Computer Coordinator
Computer Operations Support
Computer Operator
Computer Resource Coordinator
Computer Support Analyst
Computer Technician
Construction Specialist
Contracts Coordinator
Control Systems Technician
Coordinator, Information Center
Coordinator, Marketing**
Coordinator, Public Works Solid Waste Management Recycling
Coordinator, S. C. Indian Employment Program
Copier Technician
Counselor, Independent Living Program**
Credit Analyst*
Customer Service Coordinator
Customer Service Professionals
Customer Service Representative
Data Base Programmer
Data Coordinator
Delinquent Tax Collector
Dental Assistant
Deputy Building Official
Design Technician
Designer, Architectural Autocad
Designer, Electrical
Designer/Draftsperson, Injection Mold
Designer, Mechanical
Designer, Piping
Designer, Structural
Designer, Technical
Director, Buildings and Grounds

Director, Child Care Center**
Director, Community Service Employment Program**
Director, Emergency Communications Director, Emergency Medical Services
Director, Executive*
Director, Graphics**
Director, Greenville S. C. Senior Community Service Employment**
Director, Registration/Election Department*
Dispatcher, Emergency Services
Distribution Manager
Drafter
Drafter, Electrical
Educator, EMS
Electrical Design Drafter
Electrical Engineer*
Electrical Maintenance Technician
Electrician
Electromechanical Technician
Electronic Control Specialist
Electronic Designer Technician
Electronic Imaging Systems Analyst**
Electronic Repair Technician
Engineer, Applications*
Engineer, Field*
Engineer, Traffic Operations*
Engineering Assistant
Engineering Laboratory Technician
Engineering Technician
Engineers/Programmers, CATIA N/C*
Engineers, Facilities*
Engraving Edit Trainee
Environmental Sampling Technician
Environmental Technician
Equipment Resource Technician
Export Service Coordinator
Extruder Operator
Facilities Technician
Field Scientist**
Field Service Engineer*
Field Service Representative
Field Service Technician
Fire/Safety Marshal
Fireman, Captain
Food Service Director

Food Service Supervisor
Forensic Evidence Technician
Graphics Artist
Graphics Director**
Hardware Support Technician
HVAC Foreman
HVAC Mechanic
HVAC Technician
Health Care Specialist
Illustrator, Technical
Incinerator Operator
Industrial Electrician
Industrial Electrical Maintenance
Industrial Electronics Technician
Industrial Hygiene Technician
Industrial Safety Specialist
Information Center Specialist
Inside Sales Technician
Instructor, Apprentice
Instructor, Automotive
Instrument Technician
Instrumental (electrical) Repairman
Integraph Operator
Investigator, Senior*
Labor and Delivery Technicians
Laboratory Analytical Specialist**
Laboratory and Quality Assurance Manager**
Laboratory Processing Technician
Laboratory Technician
Landscaping Maintenance Supervisor
Lead Motors Technician
Library Serials Acquisitions Assistant
Line Technician
Loan Collector
LPN/Medical Technician
LPN, Physician's Service Coordinator
MIS Operations specialist
Machine Operator
Machining Production Specialist
Machinist
Machinist, Chart
Maintenance Electrician
Maintenance, Landscaping Supervisor

Maintenance Mechanic
Maintenance Supervisor
Maintenance Technician
Maintenance, Team Leader
Manager, Accounts**
Manager, Collections
Manager, Convenience Store
Manager, Credit
Manager, Dietary
Manager, Fast Food
Manager, Food Production
Manager, Mobile Mammography
Manager, Restaurant
Manager, Retail
Manager, Trainee
Management, Rent-A-Car
Manual Machine Operator
Manufacturing Foreperson
Manufacturing Operator
Manufacturing Supervisor
Manufacturing Technician
Mason Consultant
Master Control Operator
Master Craftsman
Materials Development Technician
Mechanic
Mechanic, Stamping
Mechanical Design Draftsperson
Mechanical Design Engineer*
Mechanical Engineering Technician
Mechanical Set-up Technician
Mechanical Technician
Medical Equipment Specialist
Medical Laboratory Technician
Medical Transcriptionist
Meltblown Technician
Microbiologist Technician
Microprocessor Technician
Microwave Field Technician
Minicomputer Technician
Modelmaker A
Mold Maker
Mortgage Loan Processor*

NC Programmer
Network Services Technician
Nurse, Community Health
Nurse, Licensed Practical
Nurse, Occupational Health
Office Administrator
Office Skills Center Instructor/Manager
Operational Support Analyst*
Ophthalmology Assistant Technician
Packaging Technician
Payroll Administrator*
Pharmacy Technician
Phlebotomist
Physical Therapy Assistant
Pipe Welder
Planning Scheduler
Plastics Plant Engineer*
Plumber
Police Chief
Police Lieutenant
Police Officer
Precision Tool Grinder
Prevention Program Coordinator
Prevention Specialist, Alcohol/Drug
Process Engineering Technician
Process Piping Designer
Process Technician
Product Development Technician
Product Specialist
Product Technicians
Production Engineering Technician
Production Equipment Technician
Production Mechanic
Production Planner
Production Set-up Persons
Production Specialist
Production Supervisor*
Production Technician
Program Consultant, Arts & Crafts Marketing
Program Coordinator I, Student Services
Programmer Analyst**
Programmer, RPG
Promotions Assistant

Public Information Assistant
Public Information Specialist
Public Safety Officer
Purchasing Agent
Quality Assurance Clerk
Quality Assurance Coordinator
Quality Assurance Technician
Quality Auditors*
Quality Control Analyst*
Quality Control Technician
Quality Control Lab Technician
Quality Control Supervisor*
Quality Electronic Technician
Quality Engineer*
Quality laboratory Technician
Radiology Receptionist/Coordinator
Radiology Technologist
Rehabilitation Assistant
Rehabilitation Consultant
Rehabilitation Specialist
Rehabilitation Technician
Regulatory Compliance Coordinator
Research Technician
Respiratory Home Care Technician
Respiratory Technician
Restaurant Manager
Revenue Collector
Revenue Officer, Assistant
Sales Counselors
Salesman
Secretary
Secretary, Administrative
Secretary, Bilingual
Secretary, Confidential
Secretary, Engineering
Secretary, Executive
Secretary, Human Resources
Secretary, Industrial
Secretary, Legal
Secretary, Manufacturing Engineering
Secretary, Medical
Secretary, Operations Management
Secretary, Paralegal/Legal

Secretary, Personal
Secretary, Plant Manager
Secretary, Public Works
Secretary, Quality Assurance
Secretary, Surgical Services
Secretary, Tax
Security Manager
Senior Laboratory Technician
Service Technician, Computers
Shipping/Receiving Specialist
Sleep Technician
Software Installer
Software Support Technician
Software Technician
Software Test Technician
Specification/Development Technician
Statistical Technician
Sterile Processing Technician
Supervision Specialist II
Supervisor, Building
Supervisor, Food Service
Supervisor, Machine Shop
Supervisor, Maintenance
Supervisor, Material Control
Supervisor, Manufacturing*
Supervisor, Molding
Supervisor, Purchasing*
Supervisor, Paint/Powder*
Supervisor, Production*
Supervisor, Quality Control
Supervisor, Solid Waste Disposal/Recovery*
Supervisor, Word Processing
Surface Mount Process Technicians
Surgical Technician
Surgical Technologist
Systems Technician, Marketing
Tax Collector (delinquent)
Tax Paraprofessional
Tax Specialist
Teacher (child center)
Technical, Instructor
Technical Service Representative
Technical Trainer

Technician
Technician, Automated Placement
Technician, Automotive
Technician, Bio-Medical Electronic
Technician, Customer Specification Engineering
Technician, Hardware Support
Technician, Engineer Resident
Technician, Industrial Hygiene Chemistry Laboratory
Technician, Manufacturing
Technician, Maintenance
Technician, Medical
Technician, Meltblown
Technician, Production Setup
Technician, Quality Laboratory
Technician, Senior Quality Assurance
Technician, Specification/Development
Technician, Telecommunications
Telecommunications Network Manager
Telecommunications VAX operator
Television Engineering Technician
Test Technician
Tool and Die Maker
Tool Designer/Draftsman
Trades Supervisor I
Traffic Signal Technician
Traffic Operations Engineer
Transport Analyst**
TV Engineering Technician I
Ultrasonographer
Utilities Clerk
Utilities Maintenance Technician
Utilities Technician
Utilization Review Coordinator
Vendor Scheduler
Veterinary Technician
Wafer Fabrication Process Technician
Warranty Technician
Weft Insertion Supervisor
Welders, Pipe
Welding Department Head
Welding Production Specialist
Writer, Technical

*Some employers use in-house job titles such as "engineer," "counselor" or "accountant" for positions that do not require a four-year degree. However, professional/licensed engineers **always** have at least a bachelor's degree. The same is true for scientists, systems analysts (programming), counselors (psychological) and other professionals.

Position for which the employer listed **either a two- or four-year degree as sufficient.

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(Revised 9-15-94; replaces edition dated 9-10-93)

Tech Prep

...SELECTED QUOTES, STATISTICS AND NEED STATEMENTS

This document contains quotes and other statements concerning the need for Tech Prep programs. References are given in parentheses following each statement.

1. "By the year 2000, the average job in the Southeast will require almost fourteen years of formal education."
(United States Department of Labor. The Southeast's 21st Challenge. Atlanta, GA: U.S. Department of Labor, Employment and Training Administration, 1990.)

2. In South Carolina, technician and service jobs requiring a postsecondary education, such as that offered in two-year colleges, will increase 50%.
(From 10/89 phone call to Mr. William Dealy, Jr. Regional Management Analyst and Coordinator for Research, Demonstrations, and Evaluation, U.S. Department of Labor, Atlanta, GA based on his research outlined in: The Southeast's 21st Challenge. Atlanta, GA: U.S. Department of Labor, Employment and Training Administration, 1990.)

3. Employment is expected to grow faster for technicians and related support occupations than for any other major occupational group between now and the year 2000.
(Davis, S.J. The 1990-91 Job Outlook in Brief. Occupational Outlook Quarterly, Spring 1990, pp. 8-45.)

4. "The average new job being created here in South Carolina requires about 14 years of formal education...that means entrants are expected to: 1) be able to reason through a variety of work situations without standard solutions; 2) interpret instructions involving written, oral and diagrammatic form; 3) perform arithmetic, algebraic, and geometric operations; and 4) read, write, and speak on a variety of subjects of considerable complexity."
(from a speech delivered to the Anderson, Oconee, and Pickens County Personnel Associations, August 22, 1989 by William A. Dealy, Jr., Regional Management Analyst and Coordinator of Research, Demonstrations, and Evaluations for the U.S. Department of Labor, Employment and Training Division, Atlanta, GA.)

5. Of the new jobs available in the Southeast by the year 2000, a two-year college education will be required by 21% of new private sector jobs, and an average of two years of postsecondary education will be required by 45% of new public sector jobs.
(United States Department of Labor. The Southeast's 21st Challenge. Atlanta, GA: U.S. Department of Labor, Employment and Training Administration, 1990.)

6. Students who think they don't need many skills to work in textiles or other manufacturing industries will be disappointed. "...high school grads are having trouble getting jobs in manufacturing...companies are setting more sophisticated requirements for blue-collar jobs."
(Mandel, M.J. Economic Trends: The High Cost of Not Going To College. Business Week, May 1, 1989, p. 20.)

7. "...60% of current jobs require a high-school diploma or less, only 25% of all jobs created between now and the year 2000 will require so little education."
(United Way of America. The Future World of Work: Looking Toward the Year 2000. United Way of America, 1988.)

8. "Students are eager for knowledge...but they haven't been allowed to study what interests them. It's the classic case of the kid who computes and knows 200 batting averages and flunks math...or the kid that can assemble a car and doesn't even take physics. Learning is remembering what you're interested in."
("Are We a Nation of Nitwits?" USA Today, February 13, 1989, p. 2D.)

9. "I take attendance, then ask the students to pass in the homework, a worksheet on Act I of "Romeo and Juliet." I receive about nine papers. When I ask the rest of the class why they didn't do their homework, one girl replies," I had more important things to do." Another boy says, "School isn't cool." It takes about five minutes to get everyone settled down, then I begin the day's discussion. When I ask a question about the play, the same three girls always answer. It's obvious that the rest of the class did not read the assignment, and doesn't plan to. Several times during the lesson, I have to stop mid sentence to reprimand various students for talking, not paying attention or sleeping...I became a teacher because I was anxious to share my love of language and literature with young people. But at the end of the day...I wonder...was I a teacher?"
(Butson, A.R. "Inside the Classroom." Newsweek, June 5, 1989, p. 8.)

10. "...the future of...education in American secondary schools requires a shift of curricular attention...to career-relevant academic skills."
(Dunn, J.A. The Future of Secondary School Vocational Education: Curriculum Reform or Retrenchment--Basic Academic or Technical Skills. Journal of Studies in Technical Careers, 1988, vol. 10(4), pp. 372-383.)

11. "...basic academic skills are rapidly becoming the new content of vocational education curricula."
(Dunn, J.A. The Future of Secondary School Vocational Education: Curriculum Reform or Retrenchment--Basic Academic or Technical Skills. Journal of Studies in Technical Careers, 1988, vol. 10(4), pp. 372-383.)

12. "Virtually all subjects taught now in elementary and secondary school were taught in 1920."
(Dunn, J.A. The Future of Secondary School Vocational Education: Curriculum Reform or Retrenchment--Basic Academic or Technical Skills. Journal of Studies in Technical Careers, 1988, vol. 10(4), pp. 372-383.)

13. "...half of all young American workers...do not attend college. And in the upcoming decade, the economy will depend as much on this diverse group of less skilled workers as it will on the nation's software programmers and rocket scientists."
(Whitman, D. "The Forgotten Half." U.S. News & World Report, June 16, 1989, pp. 44-53.)

14. "Despite the obvious economic consequences of ignoring half the work force, businessmen and educators persistently pay scant attention to non baccalaureate America."
(Whitman, D. "The Forgotten Half." U.S. News & World Report, June 16, 1989, pp. 44-53.)

15. "While two-year colleges are generally ignored outside the trade press, they enroll roughly half of all entering freshmen."
(Whitman, D. The Forgotten Half. U.S. News & World Report, June 16, 1989, pp. 44-53.)

16. "...jobs for technicians will grow by 38% by the year 2000--faster than any other major occupational group. As automation expands, companies need smarter, more flexible employees who can perform a variety of tasks from installing and monitoring welding robots to reprogramming them if production rates drop. This will result in a new breed of employees--"Blue-and-white-striped collar workers--production employees who are paid to think."
(Perry, N.J. The New, Improved Vocational School. Fortune, June 19, 1989, pp. 127-138.)

17. "Though only half of those who enter high school go on to higher education, American schools persist in treating non-college-bound students like second-class citizens. So, many drop out. Quality...programs can motivate students to stay in school--and maybe even go to college--by making academics more palatable..."
(Perry, N.J. The New, Improved Vocational School. Fortune, June 19, 1989, pp. 127-138.)

18. "Schools are experimenting with new teaching methods that integrate academics with hands-on learning...and they are forming closer ties to businesses and community colleges so that students can easily make the transition to work or college."
(Perry, N.J. The New, Improved Vocational School. Fortune, June 19, 1989, pp. 127-138.)

19. "...many people learn academic subjects better in a context they can understand...we're talking about kids who hate math. But if you can show them they need it for blueprints, they'll do it."
(Perry, N.J. The New, Improved Vocational School. Fortune, June 19, 1989, pp. 127-138.)

20. "If we could take the methods of vocational education and combine them with the content of academics, we could really make progress in education."
(Perry, N.J. The New, Improved Vocational School. Fortune, June 19, 1989, pp. 127-138.)

21. "I hated school when I started high school. It was the worst thing in my life. Now I can connect school-work to my interest in computers. It gives a purpose to learning."
(Perry, N.J. The New, Improved Vocational School. Fortune, June 19, 1989, pp. 127-138.)

22. "General education is the enemy...roughly 30% of high school students...take general education, or the general studies program, picking up a math credit here, a woodworking elective there, and finding themselves at graduation equipped for neither college nor work."
(Perry, N.J. The New, Improved Vocational School. Fortune, June 19, 1989, pp. 127-138.)

23. "Around the country, schools are trying to steer [general track] students, who tend to consider the high school diploma the end of their formal education, into a new "technical track" that provides a clear path to college...I'd like to see general studies dropped and [Tech Prep] programs become the standard."
(Perry, N.J. The New, Improved Vocational School. Fortune, June 19, 1989, pp. 127-138.)

24. "Millions of jobs beckon high school graduates with skills. The diploma alone is not enough: Between 1967 and 1987, says the Bureau of Labor Statistics, high school graduates accounted for 60% of the growth in unemployment."
(Perry, N.J. The New, Improved Vocational School. Fortune, June 19, 1989, pp. 127-138.)

25. According to a study conducted by the William T. Grant Foundation released in 1988, the "real median income of families headed by 20- to 24-year olds with high school diplomas plummeted 28% from 1973 to 1986. The drop is roughly equivalent to the income loss Americans suffered in the Great Depression."
(A Vocational Void: Hard Times for High School Graduates. USA Today, July 31, 1990, pp 1D, 2D.)

26. "When the class of 2000 graduates, only 15% of jobs will require a [four-year] college education, but nearly all will require job specific training after high school."
(Cetron, M.J. Class of 2000: The Good News and the Bad News. The Futurist, Nov-Dec 1988, pp. 9-15.)

27. The average monthly income of a worker with an associate degree is almost three times that of a worker with only a high school diploma ($1,188 per month versus $415 per month).
(Wall Street Journal, March 17, 1988, p. 27.)

28. 40% of the 1992 graduates from South Carolina's public schools chose NOT to pursue any type of postsecondary education immediately following their high school graduation.
(Preliminary report, South Carolina Department of Education, S.C. Department of Education Annual Report [Columbia, South Carolina: Department of Education, forthcoming, November, 1993.])

29. 52.1% of first-time freshmen enrolling in South Carolina's two-year colleges needed remedial studies.
(Southern Regional Education Board. Issues in Higher Education: Remedial Education in College: How Widespread Is It? Atlanta, GA: SREB, no. 24, 1988)

30. Only 17% of Americans 25 years or older have attained a bachelor's degree. Even with a dramatic increase in the number of bachelor's degrees awarded in the next decade, at least 75% of public school students are unlikely to earn a four-year degree.
(Parnell, D. The Neglected Majority. Washington, D.C.: The Community College Press, 1985, p. 4.)

31. "And while the work force gets less qualified and our education system gets worse, our products and technologies are growing more complex. We'll have technology able to take voice commands, but people who won't know what they're talking about. We'll have machines that recognize handwriting, but people who can't write." (Gerstner, L.V. "The Workforce Challenge", remarks by the president of American Express at the American Express Company Senior Management Conference, October 13, 1988.)

32. "The old South provided vocational and higher education for some, but neglected basic education for many...the new Southern economy will have to built on the mental strengths of its labor force, and depend on the skills, knowledge, and creativity required for more technically sophisticated work stations." (Growth Policies Board, Commission on the Future of the South. The Report of the Committee on Human Resource Development, 1986.)

33. "It will remain important for high schools to provide a curriculum where theory can be applied to work situations, but the basic competencies must undergird the practical applications..." (Growth Policies Board, Commission on the Future of the South. The Report of the Committee on Human Resource Development, 1986.)

34. "...grades 13 and 14 are the new minimum for a person to succeed in a highly technological society." (Welch, F.G. IE Should Have a Valued Role in Education's Changing World. School Shop, April, 1989, pp. 24-25.)

35. "The college-preparatory curriculum was for students who were heading for a four-year college degree, yet less than 20 percent of those students actually graduated from a four-year college. The largest percentage dropped out during or at the end of their first year." (Welch, F.G. IE Should Have a Valued Role in Education's Changing World. School Shop, April, 1989, pp. 24-25.)

36. "...education is the engine that drives our whole economy and will determine our future in an increasingly interdependent world. It's a short step from neglect and failure in schools to economic failure." (from Kiplinger Washington Letter referenced in: Welch, F.G. IE Should Have a Valued Role in Education's Changing World. School Shop, April, 1989, pp. 24-25.)

37. Of the ninth grade students enrolled in South Carolina's public schools in 1988-89, 36.7% did NOT graduate with their class in 1992. This percentage, known as the "non-completion" rate includes dropouts, deaths, transfers to other providers of secondary education within the state, etc. (The figures on which this percentage is based do not eliminate students who transferred in to the S.C. public school system between the 9th and 12th grade years.) (S.C. Department of Education Annual Report 1988-89 and the 1991-92 graduation rates as stated in the S.C. Department of Education Annual Report, forthcoming, November, 1993.)

38. "For business, helping schools is no longer just a "civic duty." It's a matter of self-interest, perhaps even self-preservation. At stake is quality of future employees...the bread and butter of business, the need for people who can communicate, handle math and technical skills. Companies have no choice...either improve local grade and high schools now or spend billions in the years ahead to make the unemployable employable. There's growing recognition that schools are EVERYONE's responsibility."
(from Kiplinger Washington Letter referenced in: Welch, F.G. IE Should Have a Valued Role in Education's Changing World. School Shop, April, 1989, pp. 24-25.)

39. Only about 25% of all high school graduates...complete college within 5 years after receiving their diploma."
(Baxter, N. Careers 101: Occupational Education in Community Colleges. Occupational Outlook Quarterly, Spring, 1991, p. 13.)

40. "A lot of teachers, consciously or unconsciously, reinforce the idea that education is pointless unless you are going on to college...schools need to do better representing the new reality of the job market to these kids. We need a kind of cultural change all across the system, to sell young people on the relationship between good jobs and skills."
(quote appearing in "Schools trying to link good jobs and skills." The New York Times EDUCATION, September 27, 1989.)

41. "Many dropouts say now that they might have stayed in school if they had had more vocational opportunities, more real work experience while still in high school."
("Schools trying to link good jobs and skills." The New York Times EDUCATION, September 27, 1989.)

42. "Percentage of current jobs requiring education beyond high school: 54%

Percentage of future jobs (1984-2000) requiring education beyond high school: 65%

Percentage of new jobs that can be filled by people with the lowest skill levels: 4%

Percentage of high school class that does not go on to college: 61%"
(American Society for Training and Development. Training America: Learning to Work for the 21st Century. Alexandria, VA: Author, 1989.)

43. "General and vocational education students make up about 61% of the high school population. This "other half" of the class is receiving poor basic skills education and outdated preparation for work. The work of upgrading the "other half" to give them skills that will increase their effectiveness on the job falls to junior colleges, vocational schools, technical schools, the military, and to employers."
(American Society for Training and Development. Training America: Learning to Work for the 21st Century. Alexandria, VA: Author, 1989.)

44. "Only 15% of all four-year college students graduate within four years and only half finish within six years according to a new study based on high school graduates of 1980."
(Education and Work. Career Opportunities News, May/June, 1990, p.4.)

45. Currently, only 16.2% of all adults in the United States has completed a four-year college degree.
(Education and Work. Career Opportunities News, May/June, 1990, p.4.)

46. Only 16.6% of South Carolinians, aged twenty-five years or older, have completed four or more years of college according to the 1990 census.
(South Carolina Budget & Control Board/Division of Research & Statistical Services, South Carolina Selected Social Characteristics: 1990., State Budget & Control Board Newsletter, Summer 1992.)

47. "...secondary and postsecondary educational institutions should establish permanent 'forums' which allow the exchange of ideas between employers and teachers. The employer/education connection must move beyond simple 'adopt-a-school' and 'career day' programs to more in-depth interchange and cooperation."
(United States Department of Labor. The Southeast's 21st Challenge. Atlanta, GA: U.S. Department of Labor, Employment and raining Administration, 1990.)

48. "Jobs are becoming more demanding, more complex. But our schools don't seem up to the task. They are producing students who lack the skills that business so desperately needs to compete in a global economy. And in doing so, they are condemning students to a life devoid of meaningful employment."
("The Knowledge Gap," The Wall Street Journal Reports: Education, February 9, 1990, p. r-2.)

49. "By the year 2000, according to the U.S. Labor Department, the bulk of the labor-pool growth will come from minority-group students, although nearly 40% of those students now are considered functionally illiterate."
("Wanting Workers," The Wall Street Journal Reports: Education, February 9, 1990, p. 1-10.)

50. "...technology will probably become increasingly more sophisticated in the future. And that will result in automated equipment that's easier to operate. But it will also mean that more things can go wrong that are harder to remedy--creating the need for more highly skilled technicians."
("The Workplace Revolution, The Wall Street Journal Reports: Education, February 9, 1990, p. r-7.)

51. "In most studies, between 10 and 13 percent of lifetime earnings among Americans can be attributed to the initial earnings that take place in school...but academic preparation leverages learning on the job...[workers with only] a high school diploma are not likely to get on-the-job training...[people with a diploma] plus two years of formal education have a 20 percent greater chance of securing such training. And those who have some college education have a 50% greater chance."
(Carnevale, Anthony P. et. al., Workplace Basics: The Skills Employers Want. The American Society for Training & Development and the U.S. Department of Labor, 1988, p. 5.)

52. "During the last recessionary period, high school dropouts experienced a staggering 40 percent decline in earnings, the earnings of those with a high school degree, some college, or a college degree declined by 30 percent, 26 percent and 11 percent respectively. Between 1960 and 1984, the earning differences between high school graduates and dropouts increased from 30 percent to 60 percent."
(Carnevale, Anthony P. et. al., Workplace Basics: The Skills Employers Want. The American Society for Training & Development and the U.S. Department of Labor, 1988, p. 5.)

53. According to a recent study conducted through the University of Florida, "people who earned associate degrees earned about the same or more money as bachelor's degree holders" in five of the eight employment categories studied. [However], "it is not a matter of whether a two- or a four-year degree is better...each has a distinct value within the job market."
("Earning by Degrees: The Financial Benefit of the Associate Degree," The Community, Technical and Junior College Times, October 9, 1990, p. 7.)

54. According to former Education Secretary Lauro Cavazos, the nation's education system should be restructured, using community colleges as "brokers" for the educational reform process. "You [community colleges] are the broker. You're the fulcrum. You have that communication with elementary/secondary [education]. At the same time you have contact with with higher education and the business community. The flexibility that we see in community colleges should also be in the elementary and secondary schools," said Mr. Cavazos.
("Cavazos Emphasizes Role for Community Colleges in Meeting National Education Goals," The Community, Technical and Junior College Times, October 9, 1990, p. 7.)

55. "Had the power of educational technology (not in the laboratory but in common use) advanced at the same pace over the past four decades as that of computer technology, a high school diploma--which still takes 12 or 13 years at a cost of about $50,000--could be produced in seven minutes at a cost of five cents... this statistic underscores how rapidly the gap is growing between the technology of education and the technology of the rest of the world."
(Perelman, Lewis. The Learning Revolution. Chalkboard, Fall/Winter, 1989, pp. 12-20.)

56. "The classroom of the future is one that integrates academic and technical knowledge and skills...This model makes good educational and economic sense and will prove, as the history of educational reform is written, to have been a most valuable design."
(Kolde, R. Integrated Learning for a Competitive Work Force. Kappan, February, 1991, pp. 453-455.)

57. "If (the GED) were employed as a test for high school graduation, the cut-off score now in use would deny a high school diploma to approximately 30% of graduating seniors."
(Pipho, Chris. "The Unbridled, Undebated National Test." Kappan, April, 1991, pp. 574-575.)

58. "(Tech-Prep/Associate Degree programs) benefit students by decreasing the amount of material they must go over twice, once at each school (high school/community college). This saves both time and money. Students are also better motivated in such programs because they see where their education is leading them...The (U.S. Department of Education) sees Tech Prep as giving students a strong foundation in liberal arts and basic academics as well as intense technical preparation...Tech Prep programs are strongly recommended."
(Baxter, N. Careers 101: Occupational Education in Community Colleges. Occupational Outlook Quarterly, Spring, 1991, pp. 17-18.)

59. "The need for the kind of training provided in community colleges has been growing recently. In occupations such (as those for which 1-2 years of college are required), pay is often closer to that of jobs requiring a degree from a 4-year college than to jobs that require no training...Frequently, these occupations also offer better prospects for advancement than do occupations that require no training."
(Baxter, N. Careers 101: Occupational Education in Community Colleges. Occupational Outlook Quarterly, Spring, 1991, p. 13.)

60. "Technology will continue to transform the workplace, eliminating the least skilled jobs and demanding ever higher levels of communications, mathematical, and analytical skills. In fact, more than half of the new jobs created between now and the end of the century will require education beyond high school. Education beyond high school, however, doesn't necessarily mean a 4-year college degree."
(Cavazos, L.F. The Role of Technical Education. Occupational Outlook Quarterly, Spring, 1991, p. 23.)

61. "In his 1985 book, The Neglected Majority, Dale Parnell advocated tech-prep programs as a way of making 'winners of ordinary students.' His logic has proven persuasive. Today, tech-prep programs are 'sweeping the country because the idea simply makes good sense.'"
(Willis, S. Vocational Education: Applied Academics, Tech-Prep Programs Serve the "Forgotten Half." ASCD Curriculum Update, September 1991.)

62. "The U.S. invests less than half as much for each work-bound youth as it does for each (four-year) college-bound youth...There is increasing acknowledgment that our traditional education focus on college-bound youth needs to change."
(Warnat, W.I. Preparing a World-Class Work Force. Vocational Education Journal, May, 1991, pp. 22-23.)

63. "Baccalaureate education continues to hold the place of honor in the education and employment communities, even though it is recognized that the skills and knowledge needed by the vast majority of the workforce are less than baccalaureate level."
(Warnat, W.I. Preparing a World-Class Work Force. Vocational Education Journal, May, 1991, p. 25.)

64. "...the skills deficit has already cost businesses and taxpayers $20 billion in lost wages, profits and productivity. Another estimate frequently bandied about is that corporate America is spending $300 million a year on remedial three R's training for employees."
(Zemke, R. Workplace Literacy: Shall We Overcome? Training, June, 1989, p. 35.)

65. "At a minimum, most jobs of the future will require good communications skills, competency in math and reading, the ability to give or receive directions, and an aptitude for solving problems. In particular, the ability to interact with other people, customers and co-workers, will be a key element to employment opportunities in the 21st century."
(DeVita, C. America in the 21st Century: Human Resource Development, December, 1989.)

66. Between 1984 and 1987, average monthly earnings increased 8.6% for high school graduates, 22.7% for associate degree graduates, and 18.8% for bachelor's degree graduates.
(U.S. Department of Commerce, Bureau of Census, Current Populations Reports, 1990.)

67. "The average person finishing high school today is expected to change jobs 10 times and change careers three times."
(Education and Work. Career Opportunities News, March/April, 1990, p.4.)

68. "Associate degree holders clearly have an advantage over people who do not complete a postsecondary credential. Students who attend college without earning a bachelor's degree would do better to finish an associate degree program rather than leave college without a credential."
(Reported in the AACJC Letter, April 1, 1990, based on: American Association of Community and Junior Colleges. "Where America Goes to College." Washington, D.C.: Author, 1989.)

69. "...Community colleges, once shunned as little more than post-graduate vocational schools for those unable to make the grade at "real colleges," are becoming a global model for democratic higher education in the 21st century."
("Academia's Other Half." U.S. News & World Report, October 16, 1989, p. 82.)

70. "Ten million new jobs are expected to be created in the Southeast by early in the 21st century. Half will require post-high school technical training. Another third will require a four-year degree. That leaves a jobs pool of 15 percent on the lowest-paying rung of the service sector. Now consider this: Only one of three South Carolinians who entered first grade in 1971 has made it into post-high school training."
("State Must Reverse College Funding Slide" (editorial), The State, September 6, 1991, p. 10A.)

71. "Although over 80 percent of all jobs do not require a four-year college degree, the students unlikely to enroll in college directly after high school receive little in the way of systematic assistance to prepare for and find jobs when they leave school."
(Moore, G. "Let's Get Over That Bridge." Work America, November, 1991, pp. 1-6.)

72. Every day, 1,512 teenagers drop out of school across the United States.
(source: Children's Defense Fund, 1990, as reported in: "Local Schools Want Values Put Back in the Classroom." The Greenville News, December 8, 1991, p. 1A, 5A.)

73. "A report from the Department of Education's National Center for Education Statistics indicates that a much smaller proportion of those who were high school seniors in 1982 went on to earn a postsecondary diploma, certificate or degree than was the case for those who were seniors in 1972. Half of the 1972 high school seniors completed another level of education within 4 years after leaving high school. Only 20 percent of the 1982 senior class did. Seven years after their senior year, 58% of the 1972 group had completed another educational level; only 37% of the 1980 group had done so. Data for the 1982 group are not available." (Occupational Outlook Quarterly, Summer 1990, p. 53.)

74. "On average, less than half of all South Carolina high school graduates go on to college, a rate lower than the Southern and national averages. The statistics do not account for the roughly one-third of all students in South Carolina who drop out of school before graduation."
(Faris, J. "State Hopes to Boost College-Bound Ranks." The Greenville News, December 12, 1991, p. 1A, 11A.)

75. According to a national ranking of education statistics reported in the Chronicle of Higher Education, the (annual) high school dropout rate in South Carolina in 1990 was 11.7% and the percentage of adults in 1990 with four or more years of college was 16.6%.
(The Chronicle of Higher Education Almanac, August 25, 1993, p. 6.)

76. "The high school dropout rate in the Southeast continues to be one of the highest of any region in the country. Almost thirty-six percent of students entering high school in the ninth grade fail to graduate with their peers at the end of the twelfth grade...The economic loss to the individual dropout is high since the average annual income for a person with less than a high school education is thirty-seven percent less than for a high school graduate. The overall lifetime cost of each dropout to the region's economy, in terms of lost tax revenue, welfare and unemployment expenditures, crime prevention funds, and lost productivity to employers is estimated at $60,000. This means an economic loss to the region's economy of some $84 billion between now and the turn of the century."
(United States Department of Labor. The Southeast's 21st Challenge. Atlanta, GA: U.S. Department of Labor, Employment and Training Administration, 1990, p.6.)

77. "Fifty-five percent of all consumer banking transactions in 1988 were done with an automatic teller machine. What percentage of transactions were they used for in 1982? Zero. Why? Because few ATMs existed in 1982. What has happened to the number of cashiers and tellers in the banking industry in America in the last six years? They have been reduced by 40%. This number is projected to decline by an additional 40 percent between now and 1993...What are the banks scrambling for today? Technicians that can run the ATM systems."
(From a speech made by Dr. Willard A. Daggett contained in the article, "Future Workplace is Shocking," North Carolina Education, November/December, 1990, pp 2-9.)

78. "In America, our college drop-out rate is over 50%."
(From a speech made by Dr. Willard A. Daggett contained in the article, "Future Workplace is Shocking," North Carolina Education, November/December, 1990, pp 2-9.)

79. "Are your dreams for your children that they'll go to high school and drop out, or go to high school in the general track and not make it, or go on to a postsecondary experience and drop out and not make it? Those scenarios represent 60 percent of the young people in this country. Therein lies the problem in American education. We focus on the 40 percent who make it and forget the 60 percent. I think we have to make some major changes in our system."
(From a speech made by Dr. Willard A. Daggett contained in the article, "Future Workplace is Shocking," North Carolina Education, November/December, 1990, pp 2-9.)

80. For the 1992 high school graduating class in the tri-county area, 31.3% of Anderson County graduates entered a four-year college and 32.5% entered a two-year college*; 29.1% of Oconee County graduates entered a four-year college and 29.4% entered a two-year college*; and 26.3% of Pickens County graduates entered a four-year college and 23.4% entered a two-year college*.
(Preliminary report, South Carolina Department of Education, S.C. Department of Education Annual Report [Columbia, South Carolina: Department of Education, forthcoming, November, 1993.])
* "Two-year colleges" are defined as two-year, associate degree-granting institutions such as the two-year USC branches, or technical colleges which award diploma, certificate or associate degrees.

81. "American schooling sequesters students from the real world, breaks knowledge down artificially into theoretical disciplines, breaks disciplines down into component pieces, and demands that students commit fragments of knowledge to memory. Applications are reserved for pen-and-paper exercises at the back of the chapter. Interdisciplinary applications are rare, and applications in the context of working groups are even more rare."
(Quote from Anthony Carnevale, chief economist and vice-president of national affairs for the American Society for Training and Development contained in: Hull, D. "Tech Prep: Practical Education for America's Work Force." School Shop/Tech Directions, March 1992, p.17.)

82. "The 1.25 grade-level-equivalent decline in the academic achievement of high school seniors between 1967 and 1980 lowered the nation's productivity by $86 billion in 1987 and will lower it by more than $200 billion annually by the year 2010. American students' academic decline can be attributed in part to their correct assessment of the lack of connectedness between work and schools."
(Bishop, M. "Why U.S. Students Need Incentives to Learn." Educational Leadership, March, 1992, p. 15.)

83. "It seemed to me then, and it does now, that a lot of what I learned in school was totally unconnected to any purpose I've had outside of school. I think it's a great mistake to construct a curriculum like that. All kids would learn a whole lot better if there was constant interplay between learning the content and applying it. Academic and vocational--from kindergarten on up. Learn it and apply it. That's how I've learned everything of value to me since I got out of school."
(O'Neil, J. "On Education and the Economy: A Conversation with Marc Tucker." Educational Leadership, March 1992, p. 22.)

84. "A growing number of our best and brightest students enroll in higher education institutions outside of South Carolina. Last year, nearly half of the students who scored 1200 or better on the SAT left the state." (Note: And while our educational system continues to devote much of its attention and resources to the "best and the brightest," many of those students leave us to pursue higher education and, it is logical to assume, many will stay out-of-state to work after college. All the more reason to invest in South Carolina's future workers, many of whom will come from the Tech Prep programs now being implemented across the state.)
(DiGiorgio, A. "What University Designation for College Will Mean to State" [editorial], The Greenville News, March 15, 1992, p. 3.)

85. "In the twenty-first century, sustainable competitive advantage will come not from new-product technologies but from new-process technologies--those that enable industries to produce goods and services faster, cheaper, and better...When the route to success is inventing new products, the education of the smartest 25 percent of the labor force is critical: Someone in that top group can be counted on to invent the new products of tomorrow. But when success depends on being the cheapest and best producer of products, the education of the bottom 50 percent of the population becomes a priority. This is the part of the population that must operate those new processes. If the bottom 50 percent cannot learn what must be learned, new high-tech processes cannot be employed."
("The New Economics of High Technology." Harper's Magazine, March 1992, pp. 15-17.)

86. "...The writing most often taught in school are essays, book reports, and literary criticism. Working with the business community, [a wide variety of writing was found in the workplace]--reports, brochures, letters, memos, and instructions--but very little demand for literary criticism. (University educators even said that being good at writing literary criticism isn't all that helpful for most academic disciplines.)"
(Packer, A. H. Taking Action on the SCANS Report. Educational Leadership, March 1992, p. 28.)

87. "While most high school teachers are quite familiar with the entrance requirements for [four-year] college, few know what is needed to succeed at work."
(Packer, A. H. Taking Action on the SCANS Report. Educational Leadership, March 1992, p. 28.)

88. "The most effective way to teach skills is in the context of real-life situations and real problems. Students should not be filled with abstract data to be recalled for a test and forgotten, but, rather, they should begin by applying their knowledge."
(Packer, A. H. Taking Action on the SCANS Report. Educational Leadership, March 1992, p. 30.)

89. "By some estimates, by the time a child born in the early '90s is ready to head off to college, four years of education at a public university will cost about $100,000."
(Newborns College Bound. Anderson-Independent Mail, April 19, 1992, p. 2-D.)

90. "Relative to their respective sizes, for every dollar of taxpayer's money invested in the education of the non-college bound, fifty-five dollars is spent subsidizing those going to college--a ratio that is neither fair nor efficient. Other nations' governments invest heavily in the postsecondary skills of the non-college bound. Britain, France and Spain spend more than twice as much as the United States; Germany, more than three times as much; and Sweden, almost six times as much." (Thurow, L.C. Head to Head: The Coming Economic Battle Among Japan, Europe, and America. New York, NY: William Morrow and Company, 1992, p. 275.)

91. "The demands of flexible high-tech manufacturing require an agile new breed of skilled worker--one who can write a memo to the company's engineering division as swiftly as she can adjust a numerically controlled machine tool." (Dentzer, S. How to Train Workers for the 21st Century. U.S. News & World Report, September 21, 1992, p. 73.)

92. A national study on the college graduating class of 1986 shows 27% of graduates were not employed full-time, and 57% of those who were employed, were employed in fields unrelated to their degrees. Twenty-five percent were in jobs not generally requiring a four-year college degree. (Amirault, T. Labor Market Trends for New College Graduates. Occupational Outlook Quarterly, Fall 1990, p. 10, 15.)

93. "In 1995, some 20-24 million robots will be doing work once done by people. Even the fast-food chains are working toward automation, eliminating $5-per-hour jobs and creating $20-per-hour jobs for technicians to tend the laser cooking system." (MDC, Inc. Greater Expectations: The South's Workforce is the South's Future. Chapel Hill, NC: MDC, Inc., 1992, p. 12.)

94. "As more demanding jobs devalue the high school diploma, market forces will hasten the day when a community college associate degree will be the new entry-level standard for a decent career." (MDC, Inc. Greater Expectations: The South's Workforce is the South's Future. Chapel Hill, NC: MDC, Inc., 1992, p. 31.)

95. "The highway from high school to the university has always been smooth and clearly marked. Secondary schools, however, have failed a big chunk of those young men and women who do not pursue a four-year degree." (MDC, Inc. Greater Expectations: The South's Workforce is the South's Future. Chapel Hill, NC: MDC, Inc., 1992, p. 33.)

96. "Tech Prep, attractive to employers and students alike, is catching on fast...In little more than five years, Tech Prep has moved from demonstration to implementation, and the Tech Prep systems in the Carolinas have become national models." (MDC, Inc. Greater Expectations: The South's Workforce is the South's Future. Chapel Hill, NC: MDC, Inc., 1992, p. 34.)

97. "...more and more Americans have been going to (four-year) college, and the expected (and advertised) benefits haven't fully materialized...just because you've got a (four-year) college degree doesn't mean you can get a good job...about one-fifth of college graduates go into jobs--store sales workers, for instance--that don't usually require a degree. If more people had gone to (four-year) college in the 1980s...they would have competed mostly for lower wage jobs..."
(Samuelson, R.J. The Value of College. Newsweek, August 31, 1992, p. 75.)

98. According to the 1990 census, almost one-third (31.7%) of adult South Carolinians aged 25 years and older, have less than a high school diploma.
(South Carolina Budget & Control Board/Division of Research & Statistical Services, South Carolina Selected Social Characteristics: 1990., State Budget & Control Board Newsletter, Summer 1992.)

99. According to one study, 26% of those graduating from college in 1991 accepted jobs that they could have obtained with only a high school diploma.
(Bracey, G.W. The Condition of Public Education. Phi Delta Kappan, October, 1992, p. 114.)

100. "Roughly 75 to 80 percent of all jobs may still not require a worker to have a baccalaureate degree in the year 2005."
("What's Going on in the College Labor Market? (An Editor's Note)," Occupational Outlook Quarterly, Summer 1991, p. 3.)

101. "Employment projections for the 1990-2005 period indicate that the average annual openings in jobs requiring a (four-year) degree will number fewer than during the 1984-90 period...demand due to growth will fall off roughly 32% in the coming decade and a half."
(Shelley, K.J. More College Graduates May Be Chasing Fewer Jobs. Occupational Outlook Quarterly, Summer 1991, p. 5, 8.)

102. According to the National Bureau of Economic Research, each year of additional schooling increases a person's wages by 16 percent.
(Wall Street Journal, January 26, 1993.)

103. A report in the Department of Labor's Occupational Outlook Quarterly states that, "Employment projections for the 1990-2005 period indicate that the average annual openings in jobs requiring a (four-year college) degree will number fewer than during the 1984-1990 period." As a result, underemployment for college graduates is expected to reach 30% by the year 2005.
(Too Many Graduates, Too Few Jobs. The Futurist, March/April 1993, p. 57 and Technical Education Resource Monitor, vol. 1, 1992, p. 1.)

104. According to the 1990 census report, among adults age 25 years and older, 76.9 percent have completed high school and 21.1 percent have completed four or more years of college.
(Education and Work. Career Opportunities News, January/February 1993, p. 4.)

105. In Anderson County, 36% of adults have less than a high school diploma while 13% have completed at least a bachelor's degree; in Oconee County, 37% of adults have less than a high school diploma and 13% have a bachelor's degree or more; and in Pickens County, 35% of adults have not graduated from high school while 17% have completed a bachelor's degree or higher.
(1992 Economic Profiles for Anderson, Oconee, and Pickens Counties, S.C. Appalachian Council of Governments, Greenville, SC.)

106. According to the 1990 census, high school graduates earn an average of $1077 per month compared to $1672 for associate degree graduates and $2116 for bachelor's degree graduates. The 1990 census also shows that only 21% of adult Americans have completed four or more years of college.
(Technical Education Resource Monitor, January/February 1993, p. 9; Career Opportunities News, January/February 1993, p. 4.)

107. 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 [special education section], May 17, 1993.)

108. 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."
(National Alliance for Business. What is Youth Apprenticeship? Washington, D.C., June 1993.)

109. Recent analysis of vocational education research conducted over the past decade showed the following results: 1) over 60 percent of vocational students pursue postsecondary education; 2) these students have higher rates of employment and earnings after high school than their peers without vocational coursework; c) investments in vocational education pay off significantly by reducing future social costs.
(Stone, J. Debunking the Myths: Research Offers Ammunition to Fight Misperceptions of Voc Ed. Vocational Education Journal, January 1993, pp. 26-27, 56.)

110. "For the 400,000 high school dropouts during the 1991-92 school year, the unemployment rate was 39.1%, about double the rate for high school graduates."
(Labor Letter, The Wall Street Journal, May 18, 1993.)

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(revised: 10/11/93; replaces 9/29/92 edition.)

What Employers Want: A Summary

Once upon a time, bank tellers counted out cash, deposited checks, and made sure the balance sheet added up at quitting time.

The typical bank teller these days must also be able to advise customers on a wide range of financial services, make "spot" decisions, and use a wealth of database information previously available only to managers.

The transformation of the teller's role, argues a report issued jointly by the American Society for Training and Development and the U.S. Department of Labor, is indicative of the extraordinary changes in the workplace—changes with important consequences for the education of students in grades K-12. "To be effective in the workplace, the new bank teller may not need to have the same degree of skills in a narrow area of expertise, but instead must have a good knowledge of a wide range of skills," the report argues.

As part of a major research project examining the skills needed for work, the report, *Workplace Basics: The Skills Employers Want*, identifies seven skills groups. They are:

Learning to Learn.

Employers are more frequently shifting employees between jobs and responsibilities, "putting a premium on the ability to absorb, process, and apply new information quickly and effectively."

Listening and Oral Communication.

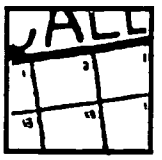
Fifty-five percent of time spent in communication is spent listening, but schools offer "scant instruction" in oral communication or listening.

Competence in Reading, Writing, and Computation

"Most employers today cannot compete successfully without a workforce that has sound basic academic skills." Although schools frequently teach isolated reading, writing, or computational skills, use of these skills on the job will require additional proficiency in summarizing information, monitoring one's own work, and using analytical and critical thinking skills.

Adaptability: Creative Thinking and Problem Solving.

An organization's ability to succeed depends on using creative thinking to solve problems and overcome barriers, thus placing a premium on workers who develop such skills.



Personal Management: Self-Esteem, Goal Setting/ Motivation, and Personal/ Career Development.

Taking pride in work accomplished, setting goals and meeting them, and enhancing job skills to meet new challenges are necessary characteristics of employees. "Unfortunately, the educational system provides little formal training" to develop such attributes.

Group Effectiveness: Interpersonal Skills, Negotiation, and Teamwork.

The ability to work cooperatively in teams is increasingly important for workplace success.

Organizational Effectiveness and Leadership.

Employers want employees to "have some sense of where the organization is headed and what they must do to make a contribution...and who can assume responsibility and motivate co-workers."

Source: *Workplace Basics: The Skills Employers Want*, American Society for Training and Development and U.S. Department of Labor, Employment and Training Administration, 1988.

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GLOSSARY

AA — Abbreviation for "Associate of Arts" degree, a degree that is designed to transfer to a four-year college or university.

AAS — Abbreviation for "Associate of Applied Science" degree; a degree that is designed to be prepare graduates for career entry or job advancement after two years of college study. AAS degrees may transfer in whole, or in part, to selected four-year colleges. AAS degrees may also be known by occupational specific titles such as Associate in Engineering Technology, Associate in Business, etc.

ADVANCED PLACEMENT — Occurs when a student is allowed to skip over a course, or enter on a higher level than is normally required upon entering a college program.

AP — An abbreviation for "Advanced Placement," usually used when referring to the College Board's AP program. AP credit is accepted by many two- and four-year colleges throughout the country(most colleges require specific scores on AP exams in order to receive credit).

AS — Abbreviation for "Associate of Science" degree, a degree that is designed to transfer to a four-year college or university.

ASSOCIATE DEGREE — A degree awarded by a two-year community, junior or technical college indicating that the graduate has completed a program of study with a broad base in general education and a concentration in a specific area. The degree may be in an occupational area (such as Electronics) or in liberal arts (such as an associate degree in science or arts). Occupational associate degrees, often called Associate of Applied Science degrees, are now preferred by many employers for mid-level technology positions. The liberal arts associate degree is widely accepted for transfer into bachelor's degree programs throughout the country.

EXEMPTION CREDIT — Credit awarded for a college course which exempts or "releases" the student from taking the course on the college campus. Exemption credit appears on the student's transcript, is calculated into the total earned credit hours, but does not affect the grade point average (GPA).

MID-LEVEL TECHNOLOGY CAREERS	Careers requiring a high school diploma with occupational training up to and including an applied associate degree, either to enter the job field or to qualify for advancement. These careers are in many different fields, offer good salaries and opportunities for advancement, and are growing rapidly throughout South Carolina and the nation.
OCCUPATIONAL DEGREE PROGRAM	A program at a two-year college designed to prepare students to enter the workforce immediately following graduation. While some occupational degree courses and/or programs transfer to four-year colleges, their primary function is career preparation. Occupational degree programs may also be referred to as "applied" degree programs.
SCHOOL-TO-WORK	Activities and programs, available to **all** students, that link classroom and work-based learning for career exploration and work experience. Options include shadowing, co-op, internship, service learning and youth apprenticeship.
TAP	The abbreviation for Technical Advanced Placement, one component of area Tech Prep programs. TAP is a term used by Tri-County Technical College; other area two-year/technical colleges may use other names to describe similar types of programs. (TAP functions like a local version of AP for students wishing to complete degree programs at Tri-County Technical College.)
TAP EXAM	An examination required as one of the procedures to earn credit for certain courses at Tri-County Technical College. (There is no charge to take a TAP exam at TCTC; specific passing scores are required to earn TAP credit.)
TAP PROCEDURES	The list of steps a student must complete successfully to earn Tri-County Technical College credit. Each program area at Tri-County offering TAP credit has a page in the Student TAP Handbook listing the procedures or steps to follow. (Student Handbooks may be obtained free of charge by contacting the PACE Office.)
TECH PREP	A program linking high school and community college programs and combining academic and occupational study to PREPare students for mid-level TECHnology careers in industrial/engineering technologies, business technologies, health technologies and public service technologies.

TECHNICAL ADVANCED PLACEMENT (TAP)	Part of area Tech Prep programs enabling qualified students to earn Tri-County Technical College credit based on successful completion of specified high school courses and procedures. (Similar opportunities are available at other area two-year/ technical colleges.)
TRANSFER	Term used when a student has course credit accepted from one college to another. Can also be the name of a two-year college program ("University Transfer" or AA/AS) where the student can earn up to the first two years of a bachelor's degree.
WORK-BASED LEARNING	A component of school-to-work programs where students combine classroom instruction with structured work experiences. Work-based learning is an important part of Youth Apprenticeship, cooperative education and other STW options.

(PACE, October 1995)

Conducting a Successful Workshop: Ideas and Materials

"It is so difficult to get parents to attend school functions!" While that may sound familiar, there **are** ways to encourage greater parent participation--even when it comes to attending a workshop! Effective planning and making parents feel truly welcome are the two most important elements in running a successful, well-attended workshop.

This document contains a planning checklist, a promotional flier, and an evaluation form. As you begin planning, you might want to pilot-test the workshop with a group of parents who are easy to contact and who are already involved with the school such as members of a school improvement council or booster club. Another option would be to pilot-test the workshop on a group of teachers. After all, teachers are parents too! (This approach might also be a good way to familiarize people on campus with the content of the parent workshop.)

Planning Checklist

Contained below is a sample checklist to help you address all the details associated with running a successful workshop. (Please read through this list carefully, eliminate steps you believe are unnecessary, and add items where needed.)

___ 1. Set the date, time (start/finish), and location for the workshop. (Have you tried to avoid any obvious schedule conflicts with other school or community functions?) Also, try to select a room location that is easy to find, and that is well-lighted, comfortable, and where tables seating about six people each can be used.

___ 2. Determine who will facilitate the workshop and how many participants you can accommodate.

___ 3. Send an informational flier or letter inviting parents to attend. (A flier that you can complete and send is included in this section; also included is a completed sample so you can see how your workshop information could be described.) You may want to have parents sign up ahead of time to be sure you don't get too many participants, or so you can notify parents who plan to attend of any unavoidable schedule changes.

___ 4. Determine how you will handle call-in registrations. Will several people be responsible? How will the activity be coordinated so that the maximum number of participants is not exceeded?

___ 5. Inform key people on campus of the dates, time, location, and registration procedures for the workshop. (Key people might include whoever answers the school phone, the guidance secretary, and others whom you feel might need to know.)

___ 6. As parents call in to register, send a follow-up postcard or letter acknowledging their interest and telling them you look forward to seeing them at the workshop.

___ 7. The week of the workshop:
- be sure the room is still available
- make directional signs so parents can find the room easily
- ensure that all the necessary audiovisual equipment is available and in GOOD working order
- duplicate the proper number of handouts and prepare resource packets (See the last page of Topic IV for a listing of what should be in participants' packets.)
- prepare a box with "supplies" (blank paper, pencils/pens, masking tape, etc.)
- finalize plans for refreshments

___ 8. An hour or so before the workshop:
- set up and test all AV equipment
- arrange refreshments
- organize other support materials as described in each section of the Facilitator's Guide
- set up a table outside the workshop room with name tags and magic markers (parents could write their own names on the tags and, if you wish, add their child's name underneath. If you decide to encourage parents to attend **with** their children then, obviously, everyone would need a separate name tag!)
- arrange directional signs and include a "Welcome" sign right outside the workshop room
- arrange tables and chairs in the room so participants can work in small groups (5-6 individuals per group); having people work in small groups will create a more relaxed atmosphere than a traditional classroom arrangement would provide
- if you wish, place some materials at each place so as parents arrive and take their seats they have something to read

___ 9. As participants arrive, have them fill out name tags and help themselves to refreshments.

___ 10. As you begin the workshop and welcome parents, ask each participant to introduce him/herself to the group. (And be sure that you do the same!!)

___ 11. Just before the workshop concludes, ask participants to complete an evaluation form so that you can make improvements for future workshops.

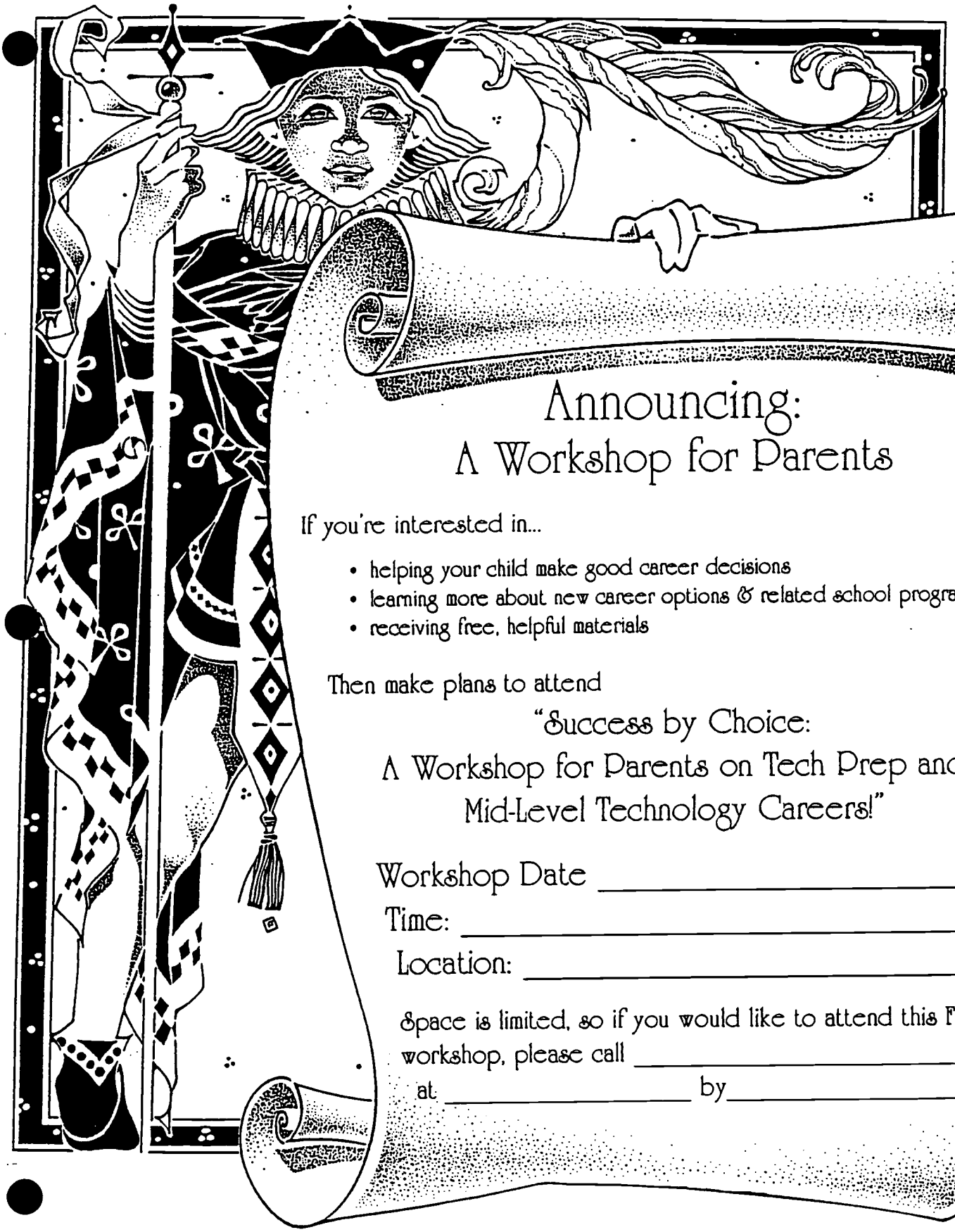
___ 12. After the workshop, keep your eye out for any parent(s) who might be willing to help you clean up!

___ 13. _____

_____

___ 14. _____

_____



Announcing:
A Workshop for Parents

If you're interested in...

- helping your child make good career decisions
- learning more about new career options & related school programs
- receiving free, helpful materials

Then make plans to attend

"Success by Choice:
A Workshop for Parents on Tech Prep and
Mid-Level Technology Careers!"

Workshop Date _____

Time: _____

Location: _____

Space is limited, so if you would like to attend this FREE workshop, please call _____ at _____ by _____.

LIST OF WORKS CITED

This section contains a list of publications not previously referenced in the text of the Facilitator's Guide. (NOTE: Many of the materials used in this workshop were developed by PACE staff, which is why some documents show no references to other sources. However, in cases where other sources were used but the references were too lengthy to include on the document, as was the case with several transparencies, the reference information is included in this section.)

Topic I - "Success by Choice: An Introduction"

Transparency I-B: Shoffner, Sarah M. and Klemer, Richard H. Parent Education for the Parental Role in Children's Vocational Choices. **The Family Coordinator**, October 1973, 22, pp. 419-427; and Haller, Archibald O. and Portes, A. Status Attainment Process. **Sociology of Education**, Winter 1973, 46, pp. 51-91.

Topic II - "The Changing Workplace"

Transparency II-F: "According to recent research at Cornell University..." based on research of Stephen R. Barley, School of Industrial and Labor Relations at Cornell University ("The New Crafts: The Rise of the Technical Labor Force and its Implication for the Organization of Work," 1992; "What Do Technicians Do?," 1993; "In the Backrooms of Science: The Work of Technicians in Science Labs," 1994—all works published by the National Center on the Educational Quality of the Workforce at the University of Pennsylvania.)

Topic III - "Tech Prep: The OTHER Right Choice"

(p. 10): "Sixty-five percent of the jobs of the future will require education beyond high school." (American Society for Training and Development. **Training America: Learning to Work for the 21st Century**. Alexandria, VA: ASTD, 1989.)

"Success by Choice: A Workshop for Parents on Tech Prep and Mid-Level Technology Careers"

EVALUATION FORM

Date(s) of Workshop: _____ Facilitator's Name: _____

For each of the items listed below, please circle the response that **BEST** reflects your opinion:

1. Content

too complex about right too simple

2. Usefulness

very useful somewhat useful not at all useful

3. Length

too long about right too short

4. Overall Program

very satisfied somewhat satisfied dissatisfied

5. Which topics or materials did you find MOST helpful? Why?

_____

_____

_____

6. Which topics or materials did you find LEAST helpful? Why?

_____

_____

_____

7. Please describe one way that this workshop could be improved:

_____

_____

_____

8. Please provide any other comments or suggestions you may have concerning this workshop:

_____

_____

_____

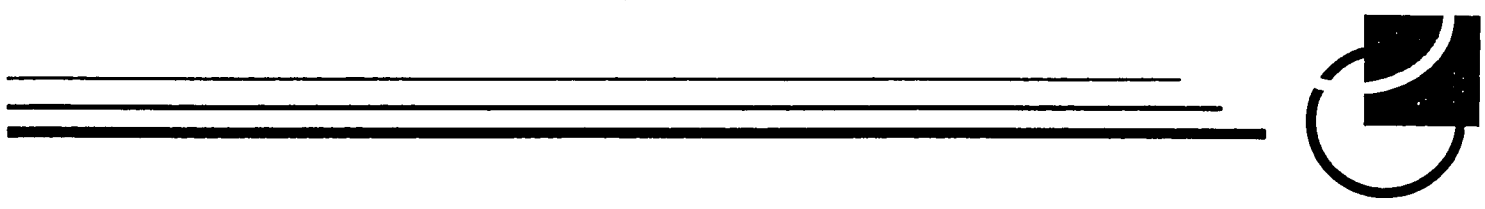
Technology's Effect on Education and Employment

In the past...

- A high school diploma was enough to get a good job at the local factory; a college degree virtually guaranteed life's luxuries. (Source: Del Valle, C. From High Schools to High Skills. **Business Week,** April 26, 1993, p. 110.)

- Security was based primarily on "doing a good job." (Source: Berger, L. South Carolina: In Pursuit of Total Quality. **South Carolina Business Review,** volume 11, 1991, p. 13.)

- Advancement was based on seniority. (Source: Kiechel, W. How We Will Work in the Year 2000. **Fortune,** May 17, 1993.)



In the future...

- The average job in the Southeast will require almost 14 years of formal education. (Source: United States Department of Labor. **The Southeast's 21st Challenge**. Atlanta, GA: U.S. Department of Labor, Employment and Training Administration, 1990, p. 2.)

- Job security will be based on skills diversity and the ability to adapt to change. (Source: Hines, A. Transferable Skills Land Future Jobs. **HRMagazine,** April 1993, p. 56.)

- Advancement will be determined by one's ability to absorb, process, and apply new information quickly and effectively. (Source: Hines, A. Transferable Skills Land Future Jobs. **HRMagazine,** April 1993, p. 56.)

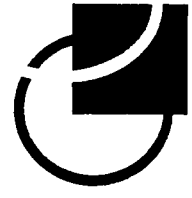
T: II-C

Six Trends Reshaping the Workplace...

1. Most companies are employing fewer people due to increased automation (Source: Kiechel, W. How We Will Work in the Year 2000. **Fortune,** May 17, 1993.)

2. Emphasis is shifting from top-down management to self-directed work teams (Source: Kiechel, W. How We Will Work in the Year 2000. **Fortune,** May 17, 1993.)

3. Technology is playing an increasingly important role in work, and technology will change faster every year
   (Source: Cetron, M. "American Renaissance", as reported in a special supplement to **The Futurist,** March-April 1994, p. 2-11.)



Six Trends Reshaping the Workplace...

4. More companies are emphasizing lifelong learning and cross-training in order to remain competitive (Source: Kiechel, W. How We Will Work in the Year 2000. **Fortune**, May 17, 1993; and Outlook '94. **The Futurist,** November-December, 1993, p. 6.)

5. More emphasis is placed on **high** quality goods and services delivered to customer specifications (Source: Berryman, S. and Bailey, T. **The Double Helix of Education & the Economy**. New York, NY: The Institute on Education and the Economy/Columbia University, 1992, p. 11, 12.)

6. More companies compete in a global marketplace, which influences the manufacturing, marketing and delivery of products (Source: Berryman, S. and Bailey, T. **The Double Helix of Education & the Economy**. New York, NY: The Institute on Education and the Economy/Columbia University, 1992, p. 11, 12.)

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